

Methodology of Music Research

10

Bengt Edlund

Analytical Variations – Eight Critical Essays on Applied Music Theory



PETER LANG

This book gives a critical account of various methods used in music analysis. In the first chapter, a number of current approaches such as semiotics, musical implications, Schenkerian analysis, and generative theory are demonstrated on Mozart's K. 331 theme. Five essays deal with important concepts in music analysis: ambiguity, formal proportions, and similarity within and between works. A further chapter provides a discussion of probability, kinship, and influence – decisive criteria when judging musical plagiarism. The last essay, studying a piece by Schubert, sifts the prospects of deciphering a composer's sexual leanings from his music.

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Preface

The name of the present book derives from the title of its first chapter, the monograph-size essay “Analytical variations on a theme by Mozart”. Just as the intention of the initial chapter is to subject the well-known first-movement theme of the Piano Sonata K. 331 to a number of diverging analytical approaches – applications devised to shed light on both the music and the methods – the other chapters of the volume are devoted to critical investigations of various analytic issues.

If a music work of some complexity is penetratingly studied, it tends to emerge as structurally ambiguous. Such an outcome may either be regarded as a hallmark of analytic sensitivity or as indicating a failure of the theory applied to the music. The first stance is adopted in the chapter “In defence of musical ambiguity”.

The Golden Section is often taken to be tantamount to an aesthetically perfect set of proportions, and this concept has of course also been brought to bear on music. But as argued in “Mozart out of proportions” the quest for the golden section is, at least as far as formal proportions are concerned, a quite precarious undertaking.

‘Similarity’ is no doubt a key concept in a great many studies from a wide variety of musicological fields. What are the implications and value of the Schenkerian notion of ‘hidden repetitions’ when it comes to the study of musical structure? Turning to “recurring musical ideas” in a more general sense, do they make up a productive point of departure when dealing with a composer’s output or with a particular work, and what insights in terms of musical content might be gained? Works of Beethoven and Schumann serve as specimens.

‘Originality’, ‘similarity’, and ‘influence’ are crucial criteria if you want to arrive at a well-grounded verdict in cases of alleged musical plagiarism. In a thorough discussion of a recent Swedish lawsuit, it is shown that suppression of penetrating music analysis may lead to a questionable verdict.

The chapter “Schubert’s promising note”, finally, deals critically with the prospects of interpreting musical structure in order to reach valid conclusions as to the content of instrumental music, and particularly as to the composer’s sexual orientation.

The chapters of the book are addressed to readers taking an interest in basic problems in music theory and analysis, but the first and the last but one of the eight texts are also intended to be of broader instructional value. To make them more accessible to the general public, they are provided with explanations that may be superfluous for expert readers.

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1 Analytical Variations on a theme by Mozart

Introduction; apologies and commitments

Why does anyone write once more about the first-movement theme of Mozart's A-major Piano Sonata K. 331? Isn't that too small a subject for a large essay, hasn't everything worth saying about this tiny piece already been said, isn't the tradition of Western art music at a too late and too troubled stage for such a futile exercise? Anticipating such incredulous questions, I will start by arguing that what follows may after all be worthwhile.

Mozart's theme is certainly short, and the music is not very complex – or so it may seem at a cursory glance, so it may appear when listening superficially. But this simplicity is deceptive. On closer examination, when attending to the music with keen ears, these eighteen bars reveal a most delicate balance between order and freedom, and barely beyond the surface there is a wealth of ingenious patterns and relationships to be discovered. A masterpiece cannot very well be too small a subject for a large essay; indeed, it is doubtful whether the following observations – or any other discussion of this music – will be exhaustive.

Mozart's A-major theme may be the most frequently used piece in the restricted stock of works or passages that music theorists constantly resort to when demonstrating their methods or training their students, or when just illustrating a certain analytic point. One reason for this preference is of course that the theme is very handy: brief, (seemingly) simple, and easy to read and play – at least at the modest level required for making analytical points. Furthermore, since it belongs to the aural fixtures of most people taking an interest in Classical music, it is quite well-known. But it is above all the structural richness of the K. 331 theme that explains why its properties have been described over and over again, and why it has proved capable of serving a wide variety of analytic purposes.

The fact that the theme of Mozart's set of variations has already been repeatedly and often penetratingly analysed is an asset as well as a problem for the present study. All these analyses – undertaken from diverse theoretical perspectives and having different aims – provide abundant material for a critical assessment of both the music and the methods used to describe

it, but on the other hand they leave but little scope for fresh observations. Hence, the present contribution will necessarily be one in terms of synthesis, comparison, and critical reflection, although some presumably new insights and approaches might perhaps turn up along the route.

Qualifications like “presumably” and “perhaps” have to modify the connotations of originality associated with words like “fresh” and “new”. Since the K. 331 theme has been commented upon in countless writings, it is virtually impossible to know, when it comes to what seems to be an observation of my own, whether it is common intellectual property or a finding attributable to a certain analyst, unknown to me, who should be given due credit. The notion of complete references belongs to an (non-) ideal world – a perfectly cumulative, but also somewhat uneasy, scholarly world with less scope for creativity and enthusiasm than the one we actually inhabit. Discovery is inextricably linked with the belief that you may, after all, now and then come up with something new.

It cannot be denied that the times are a-changin’. Classical music no longer occupies the natural, let alone official, position of being the model and standard for other kinds of music. It has in fact largely given in to the forces inherent in the current ideology that music is but one of many commodities offered by an all-embracing and all-decisive market, and it has quietly made itself at home in the niche so far tolerantly allotted to it, a niche that may be diminishing. But Classical music must be written about because verbal discourse is no less important for an endangered musical species than are dedicated playing and keen listening. Dealing scholarly with this once venerated and culturally dominating music is not to be equated with the care that we owe the aged and ill, but should rather be thought of as the grooming that is essential for any survival. Otherwise put, the eventual demise of Classical music deserves some verbal celebration; indeed, the situation calls for thorough dialectic understanding including an element of recalcitrance.

Turning from defence to declaration of contents, the above *raison d'être* suggest the aims of this monograph-size essay. As its quasi-Subotnikian title *Analytic Variations* indicates, the main purpose is to expose a number of quite different analytic methods. The word “expose” carries an unfortunate ring of hostility, but what is meant is only that the theories and analytic approaches will be described, explained, characterized, and evaluated – a neutral intention that does not preclude adverse observations when called for. The comparative

and critical undertaking is greatly facilitated by the fact that the various methods are applied to the same piece of music. The differences between the analytic approaches, their advantages as well as drawbacks, are likely to stand out clearly when brought back to a common, everything-else-equal condition.

The text is intended for a variety of readers: laymen seriously interested in musical structure, students of music and musicology, and music theorists. This wide range of addressees cannot but influence the text. Some space will be allotted to presentations of the various methods; on the other hand, theoretical complexities and analytic subtleties will not be avoided. Being an amalgamation of scholarly essay and textbook, *Analytic variations on a theme by Mozart* requires some patience on the part of the readership: expert readers will have to put up with some elementary and unnecessary information, lay readers with passages of overly sophisticated discussions. As always when boredom impends, merely scanning uncomfortable portions of the text is a possible way out.

Most of the essay will be devoted to influential twentieth-century analytic methods. This means that present-day polarities within music theory will be brought into focus, but (needless to say) these controversies cannot be fully accounted for, let alone be settled once and for all.

We will also discuss the traditional approaches to music analysis – approaches based on theories and terminologies of long standing, but still widely favoured. If carefully and persistently applied with a keen sense for the interrelationships between the musical elements, these methods are in fact quite powerful and productive analytic tools. Indeed, they may partly yield the same insights as the more recent methods. But in order to avoid duplications the chapters on the traditional approaches will be rather brief.

The twentieth-century methods as well as the traditional ones, rooted in the instructional practices of the nineteenth century, are no doubt to various extent anachronistic with respect to the K. 331 theme. As long as we keep this in mind and do not believe that we have any “authentic” access to the music, this element of anachronism is not necessarily a great worry since it may be assumed that we have incorporated elements of period musical thinking into our own, present-day ways of conceiving music. And whereas thoughtless anachronism may be likened to a colonization of the past, inverted colonialism, letting past ways of thinking dominate the present, is no better. Based on what we know today, it would have been possible to

include a chapter describing the theme as it might have been understood by Mozart's contemporaries. But this idea was abandoned, and we must put up with the suspicion that Mozart might have laughed at some of the analytic ideas to be presented.

There is a strong and reciprocal relationship between analysis and interpretation. Each and every analytical observation is of course not pertinent for interpretation but some of them may be quite productive. What you find in the score often confirms that your musical intuition has led you on the right track, and analyses may make you see and hear things that you were unaware of. On the other hand, and whether you think of it or not, interpretation sets the limits for your analysis – it is hard to discover or accept things lying beyond how you think that the music should be performed. The analytic observations to be advanced will therefore be complemented by some remarks on the interpretation of the music.

This brief account of the contents may give the misleading impression that the entire essay will be devoted to the theme's "structure" and to analytic methods devised to study musical structure. It is true that analyses most often deal with structure in a narrow sense, but the readings to be proposed sometimes open up perspectives towards musical understanding in a more comprehensive sense. Musical "structure" is in fact imbued with musical meanings of various kinds, and the step from such meanings to "extra-musical content" may sometimes be both indiscernible and irresistible – as well as legitimate. But this is far from saying that any hermeneutic proposal goes. Quite to the contrary, verbal interpretations of musical content that enjoy solid structural support are worlds apart from unwarranted and self-indulgent impositions, however exciting and fantastic, culturally refined, or politically deserving these "critical readings" may otherwise be.

Music is accessible in three ways. We experience it with our ears, of course, but also by means of our eyes and our proprioceptive sense, i.e. music is also felt in our muscles and joints when we play it. Unfortunately, the latter source of information and delight is often neglected in music analysis. This way of encountering music is not accessible to everyone, one might argue, but reading music is also a skill that is not possessed by all people interested in music. Indeed, some theorists are prepared to maintain that people cannot even listen (properly). The present study will pay some attention

to aspects deriving from the fact that the Mozart theme is something that you play.

Listening to music is a temporal activity – the events turn up in immutable succession – that releases the dynamic aspect of music, whereas reading music from a score *may* proceed in due temporal order and *may* be realistic enough to recreate the sonic gestures out of the notated substrate. On the other hand, music reading makes it possible to compare widely separate passages in whatever sequence you want. Speaking generally, the visual approach to music encourages you to disregard its inherent dynamic aspect and to conceive of it as a static structure. And even when it comes to music as an aural experience, the ongoing process may after many hearings transform into a fixed virtual object.

These facts cannot but have repercussions on music analysis. It seems that most analysts have favoured the permanent objects and relationships established in the score rather than the evanescent phenomena of music as heard. This choice or propensity is as understandable as it is regrettable: music reading and music analysis without “*tönend bewegte Formen*” is like swimming out of the water. It is important to stress that if you want to arrive at a penetrating description of a piece of music, the aural stream of events is as important as, indeed more decisive than, the visual facts to be gathered from the score. These two avenues to musical understanding are complementary in a way that must be exploited in order to gain full insight: you can see more than you are able to hear, and many of the things you hear are invisible. Hence, when trying to do analytic justice to the K. 331 theme, both the visual/static and the aural/dynamic aspects of the music will be paid close attention.

But presenting and comparing theories and analytic methods is not the sole purpose of this essay. Since as a matter of principle the music studied is always to be held superior to whatever analytic observations or methods it gives rise to – this principle may allow of a few exceptions in the form of penetrating remarks on trite pieces – and since it happens all too often that compositions are degraded into objects of analytic exercises or vehicles for devising or proving theories, the K. 331 theme itself makes up the other focus of the text. Mozart’s music will serve as the ultimate touchstone of the various analytic approaches, and at the same time the various – and not always consonant – analytic efforts to grasp the elusive essence of this short

piece will hopefully add up to a many-faceted description that does justice to its subtle secrets. This aim is not to be regarded as a misguided ambition to erect a monument of insights to a piece of music that is non-monumental, but as an attempt to give analytic substance to the aesthetic claim that this seemingly inconsiderable theme is quite extraordinary.¹

Striking finally a personal note in this introduction, this essay may be understood as a way of adopting the theme in the same non-possessive sense that you adopt a child. As its self-appointed parent I will feel responsible for it and lovingly embrace it, promoting its qualities and guarding it against misunderstandings. In other words, I will assume the attitude that is not only appropriate, but mandatory, for any musician that endeavours to play a piece of music.

1 Two literary associations spring to my mind. The theme is perfectly described by the title of a novel by Milan Kundera, *The Unbearable Lightness of Being*. A formulation in Sara Lidman's novel *Bära mistel* most aptly pinpoints the importance of the theme's composer: "one of the few who has improved the reputation of mankind".

Traditional approaches: melody

To most people melody is the foremost musical element, and yet it has arguably been the stepchild of theory. Melody is often thought of as the very core of musical creativity, and although this view is contestable – inspired melodies may in fact stem from rhythmic or harmonic ideas – it may have fostered the notion that melody defies description.

The reluctance to deal specifically with melody is not without justification, however. Whereas it might be argued that all elements of music are intimately related, it seems almost impossible to divorce melody from rhythm – both elements will lose much of their meaning – and melody and harmony are often implicated in a mutual camouflage/camouflaged relationship. And yet, studying an element like melody in isolation from other aspects of the musical structure is what traditional music analysis is doing most of the time. Whether the descriptions that eventually come out of such endeavours are enlightening or not depend on whether you are able to restore the interdependencies between the various elements of the structure.

When dealing with melodies, one thing is fundamental: a melody is not a series of pitches, but a sequence of intervals.

In order not to waste too early whatever powder and shot there may be, the following observations, preparing for discussions to come, will be restricted to some basic and fairly straightforward properties.

About motifs

Dividing melodies into motifs is usually the initial, standard, and sometimes only move in melodic analysis, but this does not preclude that decisions requiring careful discrimination are involved.

Turning first to matters of definition, a ‘motif’ can be defined either as a minimal but still meaningful melodic particle that recurs more or less frequently within a piece of music, or as a short melodic idea that plays a crucial role in the music in virtue of its conspicuous qualities, location, and/or function, although it may occur just once. But “motif” can also be used

to denote the lowest, sub-phrase, unit in the hierarchy of “morphological lengths” to be found in more or less regular, “periodic” music.²

Motifs of the first kind are pertinent when discussing matters of thematic construction and thematic relationships, and they may imbue the music with a sense of unity, whereas motifs of the third sort belong to the domain of musical metre and make for a sense of order and clarity. One and the same configuration of notes may of course serve both constructive and metric functions – as is the case in the K. 331 theme.

Obviously, when it comes to analytic practice some words in these definitions (“short”, “meaningful”, “recur”, “conspicuous”, “regular”) call for further clarification.

Given the phenomenally close connection between melody and rhythm, should a certain motif be understood as a compound unit made up of two elements, or should the melodic and rhythmic components be divorced from each other, giving rise to two motifs, one in each domain? This is largely an *ad hoc* matter; as we will see, dealing separately with the pitch sequence and the rhythmic configuration may sometimes be heuristically productive.

The identification of motifs tends to involve delicate decisions with respect to similarity: when is a difference between two melodic fragments great enough to amount to a difference that counts, that makes for a categorical distinction? What deviations from the model – if a model can be established – can be accepted when we talk of variants of a certain motif, and how many deviations can a formulation take before it should be dismissed, although it may still have some affinity with the model? From the listener’s perspective it seems reasonable to adopt different criteria of similarity depending on whether it is a matter of juxtaposed quasi-iterations, say units within a continuous melodic development, or involves recurrences turning up only after some intervening material has been heard, i.e. associative relationships requiring long-term memory. Still another situation obtains when it comes to reminiscences between different works.

It is tempting to extend the search for recurring motivic material by taking account of similarities that only present themselves if one looks/hears beyond

2 “Morphological length” is an apposite term; cf. chapter 6 in Grosvenor Cooper and Leonard B. Meyer, *The Rhythmic Structure of Music*; Chicago University Press 1960.

the surface. Taking away or adding notes may reveal what is reasonably to be regarded as a hidden recurrence of a certain musical idea. As the study of the Mozart theme will eventually show, a cautious, piecemeal approach to reduction may disclose subsurface motivic relationships of great interest.

The motivic structure of the theme

Leaving this methodological ado for some analytical work, what is the motivic structure of the A-major theme cf. ex. 1? The asterisk* at the slur refers to the fact that it is hard to determine with certainty whether Mozart wanted two-note or three-note slurs in m. 1 and in other comparable bars. The two-note option is chosen since it appears preferable.

The five notes forming the treble melody in m. 1 do not qualify as a motif: this formulation does recur several times, but it cannot very well be called minimal. These five notes are rather to be understood as making up a short phrase, a phrase with motivic functions. [M] Recurring at predictable places and being one bar long – it is in fact crucial for defining the length of the bar – it lends both unity and hierarchic transparency to the music.

The smallest building block of the melody is its very first three notes, an upper neighbour-note motion characterized by its dotted rhythm, a quite common tonal cliché and yet a motif of some individuality. [m1] It turns up in mm. 1, 2, 5, 6, 9, 13, and 14, and all listeners will agree that the similarity is patent although the neighbour-note interval is sometimes a minor, sometimes a major second. Irrespective of the exact size of this interval, then, the motivic identity remains intact; since the tune is heard within a diatonic context, the neighbour-note relationship is not affected. Had the difference been categorical, had an otherwise similar three-note configuration occurred, featuring (say) a minor third instead of a minor or major second, the situation would have been less clear-cut.³ If the rhythm had been the same and the metric position comparable, such a configuration would

3 The categorical difference between seconds and thirds is borne out in empirical research: diatonicism appears to be an implicit norm. In the psychological laboratory listeners will perceive variants of melodic fragments as closely similar (or indeed as identical) as long as the interval categories are preserved, whereas variants featuring semitone changes giving rise to another interval category tend to be heard as different.

probably have been accepted as a variant of the motif in m. 1; otherwise it would merely have been thought of as a formulation exhibiting a certain affinity with it. (We will return to the fact that the m1 motifs in the first two bars are different in another respect.)

The m1 motif is always followed by a quarter-note and a repeating eighth-note. This is certainly a quite common and most inconspicuous configuration, but it turns up regularly in the theme; hence it might be understood as a self-contained motif. [m2] But if the study of motifs is extended to include subsurface similarities, this second motif will emerge as a variant of the first. The upper-neighbour sixteenth-note constituent of m1 is simply absent in m2, but the basic, long-short rhythmic pattern persists, laying bare the element of repeated notes in m1.

When inspecting the score the affinity between m1 and m2 presents itself readily, whereas when listening to the music it may be less obvious. It is partly for this reason that two-note slurs seem preferable when playing the m1 motifs. The last note of m1 becomes detached just as the last note of m2 must necessarily be when playing the piano – the similarity in terms of articulation underscores the shared note-repeating essence and makes for motivic integration.

It is the fixed combination m1+m2 that makes up the recurring one-bar phrase M, turning up seven times in the theme and being, many listeners would say, “the theme within the theme”. But its fifth occurrence in m. 9 differs crucially from the others. The fact that there is now a major-second skip between the two motifs, instead of a minor-third one, does not affect the status of m. 9 as a variant of the initial phrase, but this categorical difference as regards an interval within M makes for a substantial musical change.

The five-note ideas appearing in m. 1 and m. 9 are both open-ended, but the initial phrase invites to be repeated – or to be repeated from another note in the scale, which is what happens in m. 2. The contracted variant in m. 9, on the other hand, has an ongoing quality demanding expansion and development, an urge that is immediately satisfied. It should be observed that rhythmic essence of m. 9 seems to be preserved in m. 10 – the two slurred eighth-notes in m. 10 simulate the effect of a quarter-note. Indeed, if we leave the pitch element (and the grace-notes) out of account, it becomes evident that m. 10 reproduces the rhythmic element of the m1+m2 compound in m. 9. Furthermore, the melody in m. 10 may emerge as a free inversion of

the $e^2-f\sharp^2$ motion inherent in m. 9; the excursion to the top note a^2 , musically important as it is, conceals the beyond-the-surface return from $f\sharp^2$ to e^2 .

Although it starts from the note a^1 as could be expected, m. 3 breaks the descending sequence of iterated phrases by bringing two m^2 motifs in rising succession, and this is what listeners hearing the theme for the first time think will happen in m. 7 as well. But now the habit of repeating notes is replaced by a rising motion, and only the long-short rhythmic element of $m2$ persists. [m2r] One might say that this unexpected turn of events reveals that there are (were) two components within $m2$, one melodic and one rhythmic. Alternatively, given the subsurface rhythmic similarity between $m1$ and $m2$, it may be argued that $m2r$ permeates the whole theme, excepting mm. 9–12 and particularly mm. 11–12.

In retrospect, m. 7 and then m. 15 can be understood as furtively introducing a new, constructive melodic motif. [m3] The seemingly fresh, rising idea that demonstratively turns up in m. 17 may emerge as a transposition of the ascending three-plus-one-note $m3$ compound heard in m. 15. Since the $a^1-b^1-c\sharp^2-d^2$ initiative ended so abortively in m. 16, the $c\sharp^2-d^2-e^2-f\sharp^2$ attempt in m. 17, raised in pitch and to be played *forte*, has a sense of determined resumption.

For analysts and listeners so disposed, the swift motions $f\sharp^2-g\sharp^2-a^2$ in m. 10 and m. 17 may be identified as variants of an independent idea. [m4] For rhythmic and metric reasons the similarity is not likely to be immediately recognized, but the kinship emerges as structurally meaningful since it makes for an associative link between the two culminations within the theme.

In Classical music, formal units tend to be rounded off in conventional ways, and therefore the melodic motifs appearing in cadences tend to be neglected. But it is pertinent to observe that m. 4 and m. 12 end with formulations that are identical not only melodically, but rhythmically and harmonically as well. [cad1] Listeners paying attention to this similarity will get an impression of being transferred back to the close of the first four bars of the theme. For those who have missed this hint, m. 15 provides a second chance of orientation – or rather re-orientation since this bar does not turn out as they might have guessed, namely in the same way as m. 3, but seems to issue into the full cadence known from mm. 7–8. [cad2] Bar 16 is on the verge of closing as did m. 8, but the taken-for-granted final note

a¹ is replaced by the rising appoggiatura b¹-c^{#2}, not by a falling b¹-a¹ motion as convention bids. This unexpected formulation links most strongly to what follows, and it is made even more startling by the expected, and yet “wrong”, bass note A in the middle of the bar. The last bar brings a full cadence, associating back to m. 4 in virtue of the appoggiatura motif. [app]

The melody of the theme is characterized by its parsimony; two motifs (or indeed only one) account for the continuity and growth of the melodic process as well as for its sense of unity and order. Adding the correspondences between the cadence motifs to the picture, one might liken the melody of the theme to a poem with regular rhymes and amply provided with alliterations.

Only mm. 11–12 escape the regime of this germinal motif: the middle section of the theme eventually issues into a series of falling triadic motions, whose regular rhythm is introduced already in the second half of m. 10. [m5] Retrospectively – and this is probably something that you are more likely to see than to hear – the less conspicuous rising triads of the accompaniment in mm. 9–10 may emerge as prefiguring inversions. [m5i]. Indeed, this correspondence makes for a sense of mirroring symmetry between mm. 9–10 and 11–12.

All motifs identified so far have started from (relatively) accented notes, and this is of course an important rhythmic property of the melody. But there are two exceptions, the quick, falling upbeat embellishing the otherwise different cadences in m. 4 and m. 18.

Melodic contours; elements of counterpoint

The first thing you will notice when you listen to a melody is whether it rises or falls. Obviously, there is a falling-then-rising contour in mm. 1–4 and another one, having a different balance, in mm. 5–7. Bar 17 unexpectedly brings a steeply rising motion, a most prominent culminating trait in the theme. The rising-then-quickly-falling gesture in mm. 9–10 may perhaps be understood as a free inversion of the slow-descent-then-faster-ascent motions in mm. 1–3 and 5–7. The middle section clings to e², a note that repeatedly serves as a point of departure, and that introduces a pitch level that cannot but emerge as conspicuously raised in relation to that of the surrounding parts of the theme, having c^{#2} as their note of departure and

return. Any performance of the K. 331 theme that fails to make the shift up to e^2 prominent borders to a serious artistic mistake.

The melodic motions are predominantly stepwise, the exceptions being mm. 11–12 and mm. 17/18. The latter passage brings a falling octave, which is particularly conspicuous since a^1 is likely to be understood as turning up instead of a^2 , the expected strong-beat goal of the ascending melody in m. 17. How the a^1 is heard depends (at least to some extent) on how it sounds, i.e. on whether or not the performance makes for continuity across the bar-line.

In this context it should be mentioned that there are editions of K. 331 in which a *piano* or [*piano*] indication has been added in m. 18. Suddenly hushed dynamics may perhaps appear to be the “natural” response to the a^1 -instead-of- a^2 situation after the bar-line, but Mozart apparently preferred a less fragmented rendering of mm. 17–18, preferred melodic continuity in spite of the falling octave.

We must of course also take account of the polyphonic properties of this seemingly homophonic piece. In the outer parts of the theme, the melody is faithfully duplicated a tenth below so as to form a melodically conceived bass line. However patent and musically important this accompanying shadow is, it is a feature of the musical design to which most listeners are not likely to pay much attention.⁴

The melodic contour of the middle section is vaguely reflected in the interior voices of the left-hand accompaniment, the interval of duplication being first a tenth, then a sixth. But in addition – if you remove the transparent figleaf of strict underlying counterpoint – you will find indecent consecutive octaves throughout the middle section. In mm. 11–12 this awkward suspicion might be swept under the carpet if you link the right hand with the bass voice, i.e. if you assume that contrary rather parallel motion prevails. When rushing up to a^2 in m. 10, the melody for a short moment

4 As listeners we are prone to give priority to the top voice, a fact that is partly explained by the ear's greater sensitivity to high frequencies and partly derives from cultural conditioning – it pays to listen in this way. It is also a fact that musicians tend to play upper lines louder than, and often also slightly ahead of, lower ones.

leaves its shadow behind; or perhaps it is the left-hand anchor that is unable to hold the soaring melody back.

This is also what happens at the very end of m. 17, where the bass, otherwise supporting the treble by octaves bringing rising parallel tenths, cannot follow the swiftly ascending melody. The last bar is contrapuntally complex. Concurrently with the appoggiatura of the soprano – just as in m. 4 it bears a sense of a new voice entering from above – there is an unusual rising resolution in the tenor voice running in contrary motion to the falling resolution in the alto. (Cf. Ex. 42b, showing a number of actual and virtual linear connections tightly joining the seemingly appended last bar to its predecessor.)

Finally, we must pay attention to the voice leading in mm. 7–9. The right-hand block chords may seem somewhat surprising, but the passage is normalized if one realizes that the left-hand drone has at last left its e^1 and joined the melody, doubling it in sixths. In order to prepare for this shift, the pianist may suggest the voice leading by playing already the last eighth-note e^1 in m. 7 with the right hand. If the parallel sixths are rendered slightly prominent in this cadence, the listener is led to pay attention to the $c\sharp^1$ of the left-hand accompaniment in m. 9, and will appreciate that the parallel tenths shadowing the melody are resumed after the double-bar. Furthermore, if the tenor voice perceptibly closes at the third-degree $c\sharp^1$ in m. 8, this will help to bring out the fact that the treble melody of the middle section deviates from that of the preceding sections by issuing from the fifth-degree e^2 .

Improvisation

A keyboard player worth his/her salt in Mozart's days was expected to be able to vary recurring passages; playing repeats without any improvisational interferences was tantamount to a lack of creativity. This once decreed duty of varying repeats is well-known today, but at least when it comes to mainstream playing of Classical music it is seldom observed, a neglect that cannot but result in performances that are out of style, strictly speaking.

Turning to the K. 331 theme, its repeats are virtually never varied nowadays. But before dressing in sackcloth and ashes, we should look for possible explanations, and two arguments excusing present-day pianists may be adduced.

You may hold that it is a bad idea to embellish, and particularly to make substantial changes in, a piece that in turn serves as the theme for a set of variations. It should be left to the composer to vary the theme, and by strictly keeping to the theme as it is written, it becomes clearly demarcated from the variations to come. Furthermore, the listeners are likely to understand the variations better, and enjoy them more, if they have first had the opportunity to hear the theme played straightforwardly without any ornaments or other improvisational devices in the repeats. In short, you should not meddle with the model.

Other people justly claim that the theme is perfect as it is, and hence that all and any additions or interferences are bound to be changes for the worse. However unyielding this position may seem, it can be tested since the claim implies that it is impossible, or at least very difficult, to come up with ideas of your own that do not harm the music. So, how can the repeats of the theme be varied? Are there any good ideas?

Considering first conventional ornamentation, a number of embellishments may be tried. (That some ornaments will be proposed does not mean that they are to be used at every opportunity – or at all – when playing the repeats.)

The initial dotted note in m. 1, 5, or 13 might be ornamented by a three-note shake so as to underscore the accent on the first beat, but in addition to pre-empting the following neighbour-note this would affect the delicate metric balance between the two halves of the bar. Playing (or just imagining) a mordent at the first quarter-note in m. 3, 7, or 15 will strengthen the sense of a downbeat – if this is what you want. Otherwise – if you are bent to let the preceding eighth-notes emerge as furtive upbeats (to some suitable, unobtrusive degree) – such emphases are counterproductive. Marking the arrival at $c\sharp^2$ in m. 4, 7, or 15 with a three-note shake seems quite overdone, whereas playing an appoggiatura e^2-d^2 on the last chord in m. 7 or 15 is possible – but it merely replicates what Mozart already came up with in m. 4.

Let's also consider some free ornaments, but again we must take care not to overdo things.

Playing swift linking motions ($d^2-c\sharp^2$ and $c\sharp^2-b^1$) to fill in the falling fourths at the bar-lines in mm. 1/2 and 2/3 is of course completely out of the question. Such connecting motions would anticipate Mozart's own

appoggiatura ornament in m. 4 in a most unfortunate way, and (even worse) they would give rise to patent upbeat rhythms ruining the rhythmic character of the theme. These descending fourths are primarily to be understood and played as “dead” intervals keeping the phrases separate, and hence they should remain descending fourths. A far better idea is to add dotted visits to the lower neighbour-notes when playing m. 3 the second time; this is a substantial variant and also a meaningful one since inversed m1 motifs would retrospectively bring out the kinship between the m1 and m2 motifs; cf. Ex. 2. On the other hand, adding a dotted upper neighbour-note when starting m. 3 is a bad idea, not only since it would anticipate the following motion to b^1 , but since it would ruin the turning point of Mozart’s melody by playing an m1 motif at a place where many listeners unawares are likely to expect it “by default”.

Turning to the second part of the theme, it appears that there are four non-trivial variants that do not appreciably harm the music, and that may make the listener discover latent aspects of the music. When repeating m. 12 you can play the sixteenth-notes $d^1-d^{\sharp 1}$ as a chromatic passing motion in the tenor voice; cf. Ex. 3. Turning to m. 17, you may change the chords the second time so as to let the m1 motif appear as it did in m. 1; cf. Ex. 4. But it is arguably better, less pedantic, to let the listeners have the delight of retroactively discovering this concealed recurrence within the theme on their own when contemplating the variations; cf. Ex. 23 a/g. When playing m. 18 the second time, one might introduce a *subito piano* effect.

A more controversial intervention is to transfer the alto voice to a position above the soprano in m. 18; cf. Ex. 5. This re-inversion of the (perhaps) inverted counterpoint may appear questionable in as far as nothing of that kind happens at the end of the following variations – you have to wait until the very last bars of the movement’s coda to get a clearly exposed motion from the fifth to the eighth degree; cf. Ex. 23g. At any rate, you cannot make this rearrangement when playing m. 18 the first time since it would rob m. 9 of much of its effect – after an accented a^2 the second-time e^2 would no longer suggest an expanded tonal space. It may furthermore be argued that it would be quite unwise to disclose a structural secret of the theme in such a crude way; cf. chapters to follow.

Improvising in more free manners around the melody of the theme would mean that whatever you do will be compared with what Mozart once did in his variations, a competition that you had better avoid. Indeed, whether you choose to interfere with the theme at all is ultimately a matter of what you think of scores and their normative authority with respect to interpretation.⁵

5 Cf. Bengt Edlund, *Loyal disobedience. When is it OK not to play as written?*

Traditional approaches: harmony

While theorists have paid comparatively little attention to melody, the harmonic element in music has been a favourite object of systematization. Initially the purpose of the harmonic designations was to meet the demands of musical practice by telling the musicians what chords to play; only later on, and more or less successfully, were these symbols adapted to analytic description. But none of the systems manages to do full justice to both the vertical/simultaneous and the horizontal/successive aspect of the harmonic structure.

There is necessarily a reciprocal dependence between theory/analysis and musical style, everchanging as the latter is, and this is particularly obvious when it comes to harmony. No matter which esoteric ultimate principles that have been adduced, harmonic theories boil down to a number of generalizations extracted from studies of a certain, more or less restricted repertory: these are the acknowledged chords (in this kind of music), and this is how they (normally) work. Consequently, when using a harmonic theory for analytic purposes, it is wise to apply it to music that is (reasonably) similar to the music that once served as its empirical basis. If you ignore this rule, the results are likely to be misleading or meagre.

A broad empirical basis goes with wide applicability but also with less sensitivity, i.e. with less penetrating analyses. Conversely, if a theory has a narrow empirical frame, it means that it can be productively applied only to a small segment of music. One might think that the best, indeed the only scholarly acceptable, way out of this dilemma is to adopt wholesale the very theory that was valid when and where the work to be analysed was composed. But such a policy would result in hermetic knowledge; in order to be understandable beyond the experts, the insights must be translated, and a true fusion of different horizons of understanding is not easily achieved. Evidently, this is a situation calling for compromises.

Studying the harmony of the K. 311 theme by means of a theory of a later date is not necessarily unfair, and it may very well yield an interesting outcome as long as Mozart's music (by and large) belongs to the empirical basis of the theory, and as long as we keep in mind that we are observing the music through our own glasses, not Mozart's. We have inherited his theme, but we are free to understand it on our own terms.

Some general remarks on harmony

That harmonic theory is derived from a body of music with certain stylistic characteristics is illustrated by the fact that virtually all systems used for harmonic analysis tacitly take it for granted that all “chords” derive from triads, i.e. that all theoretically acknowledged harmonic entities essentially consist of two thirds piled up on each other. These thirds may be supplemented by one or two additional stacked thirds and/or by a few other, specified notes, and the chords may also be subjected to certain alterations. The resulting configurations are accepted as more or less harmonically stable. All remaining interval combinations, and there are quite many of them, are described as temporary clashes either between chords or between a chord and certain “non-harmonic” notes; as a last resort they may simply be put aside as non-analysable events, extraneous to the system.

Similarly, in traditional harmonic theory some progressions are singled out as harmonic phenomena whereas other sequences of chords are understood as products of the voice leading – an explanation that is often quite to the point but entails the risk of suppressing the harmonic effect of the sonorities.

Hence, traditional theory is fundamentally biased towards triadic harmonies and tonal harmonic progressions, and this is quite all right as long as you are dealing with music in which these restrictions apply.

It is also necessary to realize that harmonic theory/analysis is quite abstracting. When taking down chord symbols, we disregard the register of the chord notes – the exact way in which they are spread and stacked – and whether they occur several times or just once. And whereas we in various ways do account for the root and the lowest note of the chords, the top note is usually not specified in our chord designations although this aspect may be quite important.

Furthermore, it is often considered appropriate to ignore the fact that a note belonging to the stack of thirds is missing as well as to add a virtual note in order to arrive at a plausible harmonic designation. Indeed, even the harmonic root, which is essential for the harmonic interpretation of a certain combination of notes, may sometimes be assumed to be present – a warranted procedure as long as the hypothetical root agrees with how we hear the sonority and apprehend the passage.

It is often held that worthwhile harmonic analysis is selective; however correct the students' ambitious attempts at exhaustive, from-chord-to-chord harmonic descriptions may be, their efforts are often dismissed as naïve. Those who think that they know better may of course have access to privileged insights, but it is important to realize that analyses have quite different aims. Delving into harmonic details is no less legitimate than, say, studying broad harmonic outlines or finding out the structural function of certain chords.

The essential thing to understand is that there are harmonic "shifts" of different magnitude. Changes between a root-position chord and an inversion of the same chord, or changes between various inversions of the same chord, may often be ignored since they tend to pass beyond notice when you listen. Shifts between different chords should as a rule be accounted for, but it may be reasonable to attach greater importance to changes involving chords in root position – such shifts sound more decisive. But this is not to say that all chord shifts of the latter kind are equally important; quite to the contrary, the analyst should study their function within the passage and be able to present a harmonic analysis that brings out the relative importance of the various chord shifts. Finally, for some analytic purposes and when dealing with large works or sections, it is sufficient or indeed necessary to single out just a few harmonic events in virtue of their tonal or formal importance.

A similar gradation of magnitude must apply to modulations, to shifts of key. One must allow of internal cadences (with or without concomitant formal demarcations), i.e. take account of the fact that a group of chords lead up to and derive their tonal meaning from a forthcoming chord, as well as of the fact that this local tonic, this temporary point of harmonic reference, may then act as an anchor for some further chords. On the other hand, one should not unthinkingly adopt the view, held by some Schenkerian analysts, that tonally integrated pieces of music as a matter of principle lack modulations altogether. This exaggerated stance derives from a strongly normative idea of tonal unity, and it does not agree with how we experience music. Disregarding the deeds of determined and mis-directed listening athletes, allegedly being able to swim hundreds of metres under the water, the rest of us are content with noticing and enjoying when non-transient shifts of tonal centre occur, *and* with knowing how to make room for such events within a larger context. Savouring modulations is

an important aspect of understanding music, and therefore shifts of key should not be suppressed in harmonic (or any) analysis, however “tonal” it wants to be.⁶

Most often harmonic analysis amounts to establishing what the chords actually “are” after the passage in question has completed its course. But this static view of the harmonic process as a sequence of facts, as a series of chords whose functions are unequivocal because all relevant future events are known, must be complemented by efforts to find out what prospective meanings the chords may have from moment to moment. Uncertainty is a characteristic feature of many passages, and the more a harmonic analysis brings out inherent ambiguities, the more valuable it is.⁷

Three systems of harmonic analysis

Three types of designation systems are in current use, and they are different in two crucial respects: the extent to which the chord symbols refer to the tonic of the music and how they indicate the root of the chords. The more a certain symbol specifies the chord’s relationship with the tonic, the more narrow is its frame of application – the music or passage in question must have a tonic that can be considered to govern the harmonic process.

The symbols used in jazz and popular music to indicate the chords to be played or improvised on do not refer to any ruling tonic at all; they simply label each chord by stating the note that is the root of the triad. The abbreviation “mi” after the capital letter indicates minor triads, and to specify added notes the designations include interval numerals/names in relation to the root. If the chord is not in root position, the bass note is written after a slash.

These chord symbols offer a zero level of description with respect to the sense of a central key, and for this very reason they might be just what you need. You can resort to such chord symbols when dealing with triadic music

6 These remarks are included for the sake of completeness. There are neither modulations, nor applied cadences governed by auxiliary tonics in Mozart’s theme.

7 This point may be generalized. To reveal ambiguities, whether transient or permanent, is a laudable ambition also when dealing with melody, rhythm, and form; cf. Bengt Edlund, “In defence of musical ambiguity”, ch. 2 in this volume.

that lacks, or seems to lack, a ruling tonic, and they are also quite handy when you just want to have a rough outline of a work's harmonic course.

In "Roman numeral analysis" the root of the triad is identified as the lowest note when the chord is arranged so as to form a pile of thirds. These roots (if roots they are, see below) are then designated by Roman numerals in accordance with their degree in the scale underlying the music/passage. Inversions of the triads, as well as seventh-chords and their inversions, are indicated by means of Arabic numerals added after the Roman ones.

Just as in the Baroque thorough-bass designations from which they stem, these Arabic numerals are *not* interval numerals/names in relation to the root, but interval *distances* above the actual *bass* note of the chord. (In the case of root-position chords the interval distance above the bass is of course the same as the interval numeral/name; hence terms like seventh-chord and ninth-chord.) Tradition bids that these Arabic designations are not always complete, and this applies also to the names of the chord inversions (six-four chord, but just sixth-chord, etc.). If the root or any other note of the chord is altered in relation to the reference scale, this is specified by adding an accidental before the Roman or after the Arabic numeral, respectively. A survey of designations relevant to the K. 331 theme is to be found in Ex. 6.

In this kind of harmonic analysis, then, the triads are indirectly related to the tonic by means of the Roman numerals referring to the root's position in the reference scale, whereas the "Arabic" notes of the chords are related to the bass note of the chord and (secondarily) to the reference scale. This means that the designations as such do not specify the exact interval content of the chords – in order to know exactly how a chord sounds you have to consult the reference scale. In a major context you will, for instance, find that I, IV, and V are major triads whereas II, III, and VI are minor ones; VII is a diminished triad.⁸

The designations do not state anything about the harmonic function of the chords, a fact that does not preclude that you may think of your analysis in functional terms, giving the chords built on the various degrees

8 Sometimes lower-case "Roman numerals" are used to distinguish minor from major triads.

functional names off the record, as it were. There is, for instance, no reason to keep it a secret that you know that V chords tend to act as dominants. And nothing prevents you from working out your analysis so as to reflect functional relationships in the music – as far as the Roman numeral system allows; see below.

The nominal character of Roman numeral analysis is both an asset and a drawback. Since its designations are not inherently functional, the system is useful when describing the harmonic process in music that does not yet, or that does not any longer, operate according to the principles of functional harmony. When it comes to music that is clearly functional, on the other hand, using this system means that you are less explicit than you could have been, and sometimes the rules of the system force you to designate chords in ways that do not agree with their functions, with how you hear them.

The cause of the latter, quite serious shortcoming is that the post-Rameau sense of chord roots sometimes clashes with the pre-Rameau, thorough-bass Arabic numerals used to designate chord inversions by taking down the interval distances from the bass note. This procedure presupposes that the root of the chord turns up as the lowest note when the notes of the chord are arranged so as to produce a pile of thirds. But for some chords this thorough-bass method of identifying the root fails because the bass note is heard as the chord's root – bass notes are often quite decisive for the aural impression and hence for the harmonic function of a sonority.⁹ But this harmonic intuition, however strong it may be, is not always compatible with the thorough-bass designations for inversions, deriving from thinking in terms of stacked thirds. Two of the most awkward consequences of this dilemma turn up in K. 331 theme.

The Roman numeral system forces you to describe the dominantic “six/four-to-five/three” cadential cliché as $I^{64}-V$, i.e. as a shift between a second-inversion tonic chord (which it is nominally speaking, but not in functional

9 It is a well-known phenomenon that the lowest note of six-four chords (second-inversion triads) tends to emerge as the root of the chord, relegating the two other notes to falling appoggiatura dissonances. Indeed, even sixth-chords (first-inversion triads) are somewhat unstable: particularly if the lowest note is doubled, the sixth tends to gravitate downwards, settling as a fifth over the bass note which emerges as the root of the chord.

terms) and a root-position dominant chord (which it certainly is, but as far as one can hear, the dominant root has already been presented). It is very tempting to designate the first of these chords as a dominant chord made up of the root together with a dissonant sixth and a dissonant fourth (which is functionally true because you are apt to hear a double appoggiatura on the dominant), but unfortunately the intuitively apposite label V^{64} refers to an altogether different chord, namely the second inversion of the dominant triad; cf. Ex 6.

Rameau realized that just as the dominant is often characterized by an added, mildly dissonant seventh, the subdominant may have such a characteristic dissonance as well, the “*sixte ajoutée*”. But since this sixth falls outside the stack of thirds above the subdominant root, the notes of such chords must be rearranged until they form a pile of thirds. In this case we get a seventh-chord on the second degree, and the crucial added sixth turns up as, and must be taken down as, the chord’s root. This is quite absurd since it means that even patent root-position major subdominants with an added sixth must, no matter how they sound, be designated as minor first-inversion seventh-chords built on the second degree: II^{65} . Again, the functionally correct, intuitive label IV^{65} cannot be used since according to the logic of the system, it refers to a first-inversion subdominant seventh-chord that is not to be found in the music. A similar dilemma is met with when dealing with subdominant sixth-chords, lacking the fifth; cf. Ex 6.

Functional analysis, mainly to be found in Germany and Scandinavia, does not suffer from these fundamental contradictions, and it may be argued that it corresponds better with modern harmonic understanding.¹⁰ Since the point of it is to take down what we hear, the roots are identified aurally, instead of nominally by means of the piling-thirds procedure. The triads are given letters/names indicating the functions of the chords; capital and lower-case letters are used to distinguish major from minor triads. Chord inversions are designated by writing the interval numeral/name of the bass note below the functional letter designations, and these interval names always relate to the *root*. It is also possible to add an interval numeral/

10 The remarkable thing is perhaps not why functional analysis is so rare, but why Roman numeral analysis is still so widely spread.

name above the functional letter to indicate the topmost note of the chord. Root-related interval numerals/names for added non-triad notes are written after the letter designations, and this is often done in a way that describes the exact interval content of the chord, no matter the prevailing scale: +/– signs for major/minor and </> symbols for augmented/diminished intervals can be used to this end.

Since the designations are inherently functional, a functional interpretation of the music is not optional, but mandatory. The main chords in addition to the tonic are the dominant and the subdominant, and together with the tonic chord these fifth-related triads, having one note in common with the tonic triad, make up the basic harmonic functions. But each of these three triads has an even more closely associated chord, a third-related “parallel” triad that may act as a stand-in for its main chord or as a non-conspicuous “neighbour” harmony. A parallel chord – if the music is in a major key, the parallels are always minor chords (and the other way around) – has two notes in common with its reference chord. It is easy to realize that there is bound to be another third-related chord, a “counter-parallel” that may have similar functions; acknowledging counter-parallels makes for a more flexible analysis.¹¹

Functional analysis should not be applied to music that, by and large, is non-functional. Being ultimately a matter of what you hear, it can be used to indicate alternative harmonic interpretations and to describe situations involving harmonic ambiguity. But the very sensitivity of functional analysis means that the system may be difficult to use properly; since the designations are explicitly functional, they cannot be used thoughtlessly as just chord labels – you might impose functions that are not present in the music.

Unfortunately, functional harmonic theory has come down in a bewildering variety of forms, many of which are heavily overloaded with strange

11 The term “parallel” for (closely) third-related chords makes for confusion since in English this word refers to a chord that has the same root but another third: in English the “parallel” of C major is C minor whereas the “functional parallel” of C major is A minor. The English term for “functional parallel” is “relative”, but you may also speak of (sub)mediants and (super)mediants; the (sub)mediant, “relative” chord of C major is A minor.

designations, motivated by dubious theoretical speculations of little or no use when studying actual musical phenomena. It is preferable to choose a modest variety of functional analysis and to apply it with discrimination, instead of giving oneself up to unwarranted and abstruse interpretations dictated by the access to overly sophisticated concepts, rather than by what there is to be heard in the music. For a survey of designations, the reader is referred to Ex. 6.

Harmonic analysis of the theme

Mozart's theme will now be analyzed using the three designation systems just presented; cf. Ex 7. The non-relational chord symbols are to be found between the staves; the Roman numeral reading in terms of scale degrees and the explicitly functional harmonic analysis are given above and below the music, respectively.

The chord analysis is merely used to get a harmonic synopsis, which in this case readily discloses the formal layout. The theme consists of five sections: all of them start from root-position A-major chords, and they close either in E major or A major. The harmonic end-point of the fourth section is complex: the accented middle-of-the-bar constellation in m. 16 features an A-major root in the left hand while the right hand plays a root-position E-major chord. The very last event of m. 16 then brings a quite unstable rising resolution to an unanimous A-major chord.

An important harmonic property is confirmed by the chord symbols: each section (excepting the final one featuring just two bars) brings us from the initial chord to a "goal" harmony, to a less stable place within the A-major tonal space. It appears that the goal chords, the chords at the farthest remove, are the root-position $F\sharp$ -minor seventh-chords in m. 3, 7, and 15, and the second-inversion D-major chord in mm. 9–10. The prominent altered sonority in m. 12 belongs to the local cadence, and it is not heard as the goal of any harmonic excursion.

The $F\sharp$ -minor chords emerge as harmonic positions that are achieved with some effort. The music is descending, which *per se* should rather be perceived as a relaxing motion, but due to the harmonic progression from A major to $F\sharp$ minor and the increasing dissonance there is a sense akin to that of pressing a piece of cork under the water; then the music and

its listeners return upwards along the same route.¹² The impression of an increasing tension when the bass approaches and then arrives at $f\sharp$ involves a paradox since the actual cause of the dissonance is e^1 , the middle-register drone giving rise to a minor seventh. Furthermore, it is not quite true that the sense of discord increases when approaching the $F\sharp$ -minor sonority in m. 3 (7). This chord may perhaps sound somewhat more dissonant than the immediately preceding second-position dominant seventh-chord, but when considering the entire E-major complex of m. 2 (6), the transparent root-position $F\sharp$ -minor seventh-chord rather emerges as less dissonant. On the other hand, when returning upwards in m. 3 (7) the first-position dominant chord is heard as more consonant – the minor seventh disappears.

One might ask why the second sonority in m. 4 and the last chord in m. 7 (15) are not selected as the most distant, goal events within their sections. The answer is that these chords are heard as introducing, indeed as belonging to, the cadences.

At this point adherents of Schenkerian theory are likely to file a protest, claiming that the E-major chord ending m. 4 is the chord that the first section heads for and eventually arrives at, and that this chord is therefore the crucial non-tonic sonority within the first section. Likewise, they would hold that the E-major seventh-chord in m. 8 represents the harmonic turning point of the second section. But it seems that this objection is due to a misunderstanding of the musical intuition aimed at here: the “goal” chords, the “target” chords, at issue are the “farthest-remove” chords, i.e. the harmonic events that are associated with the greatest tension. The final root-position E-major resolution chord in m. 4 lacks the tension required to be the harmonic target of the first section. The $F\sharp$ -minor seventh-chord in m. 3, on the other hand, is literally beyond E major, which is passed in m. 2, whereas the E major chord in m. 4 is too conventional and too close to the A-major tonic to be able to compete with the visit to $F\sharp$ minor. The only thing that this E-major chord “wants” is to return to A major, and a tonic chord is promptly delivered in m. 5. In music as in life, the meaning

12 If this metaphor is accepted, it emerges as quite natural that the melody touches d^2 in mm. 4 and 7 (15) – popping up above the surface for a moment is what corks do when pressed down and then released.

of a journey – what made it worth undertaking – is something else than its termination.

In other words, the Schenkerian “structural dominant” in m. 4 is too disappointing to be a target chord. Only if the first section is rewritten so as to do away with its harmonic competitor – only if the F \sharp -minor chord is avoided along with the chord featuring d in the bass (to be on the safe side) – does the sense of a harmonic target agree with the Schenkerian notion of a structural goal; cf. Ex. 8. In Mozart’s arguably more exciting initial four bars something happens on the way. A less radical way to boost the Schenkerian dominant is also shown in Ex. 8: the E-major chord is given more metric weight than Mozart affords and emerges more like a goal.

Similar arguments apply to mm. 5–8 and to the middle section. The harmonic event that quite perceptibly acts as the harmonic focus of mm. 9–12 is neither the last-moment E-major resolution, however much this chord may be the tonal end-point of the section, nor the alien chord featuring d \sharp ¹ (which as already pointed out belongs to the cadence), but the quite exposed D-major second-inversion chord. It might be objected that it retains the bass note of the preceding A-major chord, but the way the other voices bulge upwards from the anchor-note explains its sense of tension. This becomes evident if Mozart’s formulation is compared with a re-composition featuring a root-position D-major chord: the harmonic shift becomes more patent but the tension is decreased – and yet, even now this is the moment of the greatest harmonic expansion in the middle section; cf. Ex. 9. Another source of tension in mm. 9–10 is the fact that the music is faintly polytonal. The g \sharp ²’s are dissonant in relation to the left hand; the melody keeps to A major, paying no attention to the second-inversion D-major chord in the accompaniment.

Roman-numeral vs. functional analysis

In order to bring out the differences, the analysis in terms of degrees and the functional analysis will be discussed concurrently. Bold, normal, and small-size characters are used in Ex. 7 to indicate the relative importance of the harmonic events, a crucial aspect of any harmonic analysis.

The harmonic changes within mm. 1 and 2 are of little relevance for the harmonic analysis: you barely notice these shifts of chord position, and the harmonic function is not affected. The same applies of course to the

apoggiatura ornaments in mm. 4 and 18. In functional analysis it would be possible to take down these quick motions without causing any confusion, but they are melodic phenomena and it is therefore superfluous to account for them in a harmonic analysis.

Yet there is one detail that should be noticed although we tend to miss it when we listen: from a harmonic point of view the two “neighbour-note” motifs in mm. 1–2 are dissimilar. The d^2 in m. 1, clashing with the tonic chord, does introduce a dissonance, whereas the shift to $c\sharp^2$ in m. 2 produces a consonant A-major sonority between two slightly dissonant first-position dominant chords. We are not aware of this difference since the figuration in the first bar emerges as a model for the one in the second bar. In other words: the short, metrically weak $c\sharp^2$ in m. 2 is not a true neighbour-note since it brings a pseudo-dissonance.

In voice-leading terms, the highly dissonant clash in m. 16 may be described as the result of a double rising apoggiatura, but it is also an important harmonic event. Roman-numeral analysis is not fit to cope with such a complication in a satisfactory way whereas functional analysis offers two different designations. If you consider the bass fundament to be most important, the voice leading within the tonic chord can be shown by interval numerals. But if you want to bring out the bold and quite unexpected simultaneous exposure of E major over A major, you are free to do so by taking down two contradictory functions, of which the upper, dominant one then gives in to the lower tonic one.

The functionally inadequate Roman-numeral designation of the dominant six-four apoggiatura chord can be seen in mm. 4, 8, 12, 16, and 18. In functional analysis, this harmonic cliché is aptly treated as a voice-leading affair within the dominant, whereas the label I^{64} misleadingly suggests that a harmonic shift between tonic and dominant is involved. A functionally correct analysis in the Roman numeral system would include an incorrect V^{64} designation, referring to a second-inversion dominant chord (b-e-g#) which does not occur in these passages.

Our ears, as well the functional analysis, tell us that the second chord in m. 4 and the fourth chord in m. 7 (15) are root-position subdominants with added sixths and deleted fifths (S^6), not first-inversion subdominant “parallels” ($Sp/3$) – a quite far-fetched reading. The bass note d determines the

harmonic function, and these chords certainly sound more as D-major than as B-minor sonorities. Nor do the chords suggest that they act as stand-ins for the subdominant in the cadence, as would have been the case if there had been a B-minor chord or a B-minor seventh-chord in root position; cf. Ex. 10. And yet the thorough-bass logic of the Roman analysis-by-degree system assigns the label II⁶ to these chords, a dubious designation issuing from a “relative-minor” root that one cannot hear because it shows up as a sixth added above the patent, harmonically decisive bass note d. The Roman-numeral analysis suggests that these passages feature II–V(–I) cadences, but what we actually hear, since this is what the bass notes clearly spell out, are IV–V(–I), i.e. root-position S–D(–T), cadences.

Which harmonic designation should be given to the second chord in m. 12, the only chord featuring a chromatically altered note? The chord consists of three notes, and it appears to be a “diminished triad”, i.e. a pile of two minor thirds, characterized by its diminished-fifth frame. This is also how we are to describe this chord in Roman-numeral analysis. The lowest note in the virtual stack of thirds is d_♯, and therefore the chord in m. 12 must be analyzed as a first-inversion chord: $\sharp\text{IV}^{6(4)}$, i.e. as a triad built on the raised fourth degree.¹³

Turning to functional analysis, there are four ways to deal with this sonority. One of these readings must be discarded at once because it does not fit in with the K. 331 theme – while often appropriate in Romantic music, this interpretation of the diminished triad is rarely applicable in Mozart. The reading to be dismissed involves regarding such triads as incomplete dominant seventh-chords – the root that would have made this harmonic function manifest is absent. Whether this hypothetical interpretation is correct or not in m. 12 can readily be tested by adding the note supposed to be left out. If the resulting chord works as a substitution for the original sonority, the harmonic interpretation is warranted; otherwise it must be rejected. If a B is added under the crucial chord, we get an unacceptable, out-of-style dominant-of-the-dominant B-major seventh-chord; cf. Ex. 11. Hence, the designation ($\text{D}^7/5$) is functionally incorrect.

13 For another possibility, see below.

The second reading departs from the observation that the subdominant degree of the scale is sometimes sharpened so as to make for a smooth connection between the roots of the subdominant and the dominant, a chromatic mediation that may take place either in the bass or in some upper voice, as might be the case in m. 12. This interpretation is also hypothetical since there is no natural fourth degree in the passage, but again the description can be tested. Exchanging $d\sharp^1$ for d^1 in m. 12 gives rise to a first-inversion D-major subdominant chord. It must be admitted that it sounds a bit odd, but this may partly be due to the fact that we know Mozart's theme too well to accept the new sonority. Therefore we cannot immediately conclude that the subdominant function is out of the question. If we insert a swift $d^1-d\sharp^1$ motion, the glimpse of D major is not offensive at all: a middle-voice passing-note motion has been introduced that demonstrates the alteration of the subdominant root *in vivo*, as it were: cf. Ex. 12. Thus, the designation $S^1\swarrow_3$ is acceptable, and apart from being functionally explicit, it agrees with the $\sharp IV^{(6)}$ label to be used in Roman numeral analysis.¹⁴

But there is a problem with this designation: after all, the chord does not really sound as a first-inversion chord, but as a root-position one. It rather emerges as an $F\sharp$ -minor chord without its fifth but with an added and raised, i.e. major, sixth. To test this third interpretation the missing fifth can be added, an interference causing a barely perceptible difference; cf. Ex. 13. Hence, the sonority in m. 12 might be a "parallel" chord, but which is its reference chord? Straightforwardly, $F\sharp$ minor makes up the "parallel" (the relative minor) of the A-major tonic, which means that the designation should be Tp^{6+} .¹⁵

But does this chord really emerge as a qualitatively changed extension of the preceding tonic? No, it rather presents itself as a quite prominent, starting member of the cadence, as a substituting "counter-parallel" of the

14 But the ways of arriving at these designations are quite different. In Roman numeral analysis it is a matter of re-piling Mozart's sonority until the lowest note of the stack reveals the raised root of the chord; in functional analysis a sense of subdominant is heard in the altered chord, which is then identified as a first-inversion triad featuring a raised root in the middle voice.

15 Unlike in the designation $S^1\swarrow_3$, indicating a remarkable sharpening alteration of the subdominant root, the designation Tp^{6+} just points out that the added sixth is a major one, not a minor sixth as the A-major environment bids.

subdominant. This interpretation derives additional support from the fact that it suggests a kinship between m. 12 and m. 4, understood as featuring an S^6 function before the dominant. Hence, the designation for the chord should be (let's say) Scp^{6+} .

If the Scp^{6+} interpretation of the chord, presupposing the addition of a virtual fifth to go with the major sixth above the root $f\sharp$ in the bass, would enter the mind of a Roman-numeral analyst, the chord must be designated as the first inversion of an incomplete seventh-chord piled up over the raised fourth degree. The designation would be $\sharp IV^{6(4)}_{(5)}$, an inadequate label because it does not do justice to the impression that the chord derives from an $F\sharp$ -minor (vi) sonority in root position.

What about the root-position $F\sharp$ -minor seventh-chords in mm. 3, 7, and 15? The non-functional Roman-numeral designation VI^7 is unproblematic whereas the functional interpretation Tp^7 is less evident. $F\sharp$ minor does not emerge as a substitution for A major, nor is there a direct shift between the tonic chord and its "parallel". The motion from A major to $F\sharp$ minor and back again is mediated by dominant harmonies; the attenuated function of $F\sharp$ minor as a "parallel" to the tonic comes more to the fore if these intervening chords are removed; cf. Ex. 14. On the other hand, if the first section of the theme is re-written so as to suggest a motion away from the initial A-major chord, it turns less appropriate to interpret the $F\sharp$ -minor chord as a "parallel"; cf. Ex. 15. In this case, an analysis in terms of voice leading – notice the sequence of descending parallel tenths – emerges as a necessary complement to the harmonic analysis.

Turning to the quasi-subdominant episode in the middle section, it must be described as involving a chord shift in Roman-numeral analysis: $I-IV^{64}-I$. The functional analysis $T^{(53)}-T^{64}-T^{(53)}$ is preferable since it suppresses the aspect of chord shift and brings out the tension inherent in the passage. The corresponding Roman-numeral designation $I-I^{64}-I$ would be nonsense, and can be understood correctly only if you ignore the designation rules of the system and consult the score.

It is an important harmonic property of the theme that the middle section starts from e^2 whereas in the surrounding sections the melody issues from $c\sharp^2$. This fact can be indicated in functional analysis by adding the interval numerals/names for the third and the fifth above the letters for the tonic.

The discussion has disclosed some grave problems with harmonic analysis in terms of scale degrees. Due to its constitutive principles, Roman numeral analysis is less flexible if you want to do justice to your harmonic intuitions and to passages involving harmonic ambiguities, and sometimes it is bound to be downright misleading.¹⁶

16 Adopting the ideas in Nelson B. Goodman's *Languages of Art* (Minneapolis 1968, pp. 150–152), the problem with the Roman numeral system, when it is extended contrary to its thorough-bass nature in order to capture functional relationships, is that it does not qualify as a “notational system”. It lacks “semantic disjointness”: the same “character” may refer to more than one harmonic configuration, and the same harmonic configuration may be designated by more than one character.

Traditional approaches rhythm

The first problem to discuss, and then to quickly put aside as impossible and also unnecessary to solve, is the relationship between rhythm and metre. Which is the primary element, the metre or the rhythm? Which comes first, the hen or the egg?

Is the metric framework there from the start like a blank form to be filled in, to be specified by suitable rhythms? Yes, it is possible that Mozart one day in 1778 decided to compose a set of variations on a Siciliano-like theme, and therefore only rhythms appropriate for a Siciliano entered his mind. Or is metre the sense of layered regularity that is inherent in any rhythm (of ordinary, regular kind), is it a phenomenal property that we derive from rhythms? Yes, it is possible that Mozart one day in 1778 came up with a promising melodic phrase, with an idea whose rhythm, as he immediately found out, had the metric peculiarities of a Siciliano.

Anyway, the second of these perspectives will be adopted because it seems more productive. The initial rhythm of Mozart's theme simply has a metre as part and parcel of its nature, a metre which the rest of the theme then keeps to and specifies. But it is essential to realize that the relationship between rhythm and metre is reciprocal: the metre, whether read or heard, affects our musical thinking and influences the phenomenal properties of the rhythm.

The metre of the K. 331 theme is not simply 6/8 time, as we readily can establish when taking a look in the score. It must be kept in mind that musical metre is not only a low-level affair, regulating bars and beats. The make-up of larger musical units, for instance the way in which bars are brought together to form "periods" of various kinds, is also a matter of metrics, of high-level metrics.

According to a widely spread notion, rhythm consists of a sequence of durations or, speaking in terms of notation, a sequence of note values. It is very convenient to talk of "rhythms" in this way, referring to nothing more than the temporal distances between the notes, but it must be clear that this usage of the word derives from a quite crude and altogether inadequate idea of rhythm. It not only leaves the metre, i.e. the hierarchic framework of accents and the layered division into metric units, out of account, but it also severs the temporal aspect of the music from its other elements.

Rhythm as we experience it in music is an extremely many-faceted phenomenon, dependent on all and any properties of the music, whether they are temporal, tonal, dynamic, or reside in its structure. In addition, rhythm is clearly the element in music that is most readily affected by the way the music is performed.

Rhythmic properties of the theme

The “rhythm” of the first eight bars of the K. 331 theme is quite uniform, but this does not mean that its 6/8 time is immediately evident if you just listen to the music. Apart from the obvious fact that you can never positively establish the denominator of the time signature from the sound alone, the theme might also have been notated in 12/8 time – given the fairly fast tempo, we may exclude 3/8 bars as being too short. There are two factors making for 6/8 time: the regularly occurring harmonic shifts in mm. 1–3 and the character of the music which competent listeners are likely to associate with a Siciliano.¹⁷

It can readily be both seen and heard that the same uneven, quarter-note plus eighth-note pattern permeates the theme. But the Siciliano character is gradually abandoned in the middle section when regular and non-dotted motions begin to appear and eventually take over the music, filling in the so far silent second and fifth pulses of the 6/8 time. Thus, the contrast within the theme is not only a matter of motivic content: a new rhythmic quality is introduced in m. 9 and dominates in mm. 11–12.

Turning to the very beginning of the theme, the location of the bar-line is quite interesting. If the right-hand part of m. 1 is considered alone, the melodic/rhythmic idea rather suggests that the first three notes make up an active upbeat leading up to and transferring the main accent to the quarter-note; cf. Ex. 16. But the left hand, featuring (virtually) the same melody and rhythm a tenth below, and effecting a change from a root-position to a first-inversion A-major chord, works as a counterbalance: in virtue of its

17 According to whichever music dictionary you consult, a Siciliano is a stylized dance in 6/8 (or 12/8) time and moderate tempo. It was common in the 17th and 18th centuries, it is characterized by gently rocking dotted rhythms, and it carried pastoral connotations.

quality as a stable tonic note the initial, dotted eighth-note carries the main accent. Taking account of both hands – and when listening to a performance – the upbeat tendency of the top-line melody is checked; the $c\sharp^2$ seems to bring a primary accent as well.

Turning to the notation, the positions of the bar-lines decisively tip the situation over in favour of the left-hand metric interpretation – when it comes to the crunch, as it does here, metric notation is normative. The soprano melody is forced to begin at a downbeat, but the sense of a middle-of-the-bar main accent is still there as a latent, subversive tendency. The beginning of the theme is subtly ambiguous; one might say that it is slightly “bi-metric”.

In a penetrating rhythmic analysis it is necessary to consider the different “weights” of the metric accents. What is, for instance, the accentual relationship between $c\sharp^2$ and e^2 in m. 1 as compared to that obtaining between e^2 and $f\sharp^2$ in m. 9? It seems that the rhythm of the first bar is characterized by its sense of approximate metric equilibrium due to the opposing right- vs. left-hand accentuation patterns, whereas the accent on the first beat in m. 9 emerges as strengthened because it has to counterbalance the expressive emphasis associated with the second part of the bar.

It is essential to make a distinction between metric units and rhythmic groups. Metric units conform to the demarcations and formats at the lower, fundamental levels of the metric hierarchy, such as the beat and the bar: by definition metric units start from downbeats/accents, and this is what the notation (the bar-lines and the beams) virtually always shows. Rhythmic groups, on the other hand, may extend across metric demarcations such as bar-lines, and the musical effect of rhythmic groups that conform to the metric units is quite different from that of non-conformant rhythmic groups, i.e. groups beginning with one or several weak events. It seems that mm. 1–2 and 5–6 feature rhythmic groups that agree with the metric units at the half-bar level. But in m. 3 and especially in m. 7 a competing tendency towards non-conformant rhythmic groups makes itself heard. The eighth-notes “want” to go with the following quarter-notes, giving rise to more or less latent groups straddling the metric demarcations. In order to avoid oversimplification it must be admitted that this tendency is present also in mm. 1 and 2, whose last eighth-notes also “sit on the fence” – there is a subtle afterbeat/upbeat ambiguity in the theme that we will return to.

Harmonic rhythm

Finally, the concept of “harmonic rhythm” will be explained and applied to the K. 331 theme. Harmonic rhythm provides a very good example of the intimate relationships between the various elements of the musical structure, and it refers to the fact that the pacing of the chord shifts gives rise to an extra “channel” of rhythmic information, to an inherent and yet separable aspect within musical rhythm as an inclusive phenomenon.

In order to establish the harmonic rhythm you must be sensitive to whether the chord shifts are decisive enough to cause a perceptible rhythmic impulse. It seems, for instance, that the shifts within the tonic and dominant harmonies in mm. 1 and 2 do not contribute significantly to the harmonic rhythm of the first section. Generally, the harmonic rhythm tends to follow the bass rather than to reflect upper-voice events, even when they have implications for the harmony. Thus, the last-moment resolution to the dominant in m. 4 is not sufficient for turning this final event into a member of the harmonic rhythm – the decisive impulse derives from the preceding six-four chord.

The harmonic rhythm of the theme is indicated by “•” signs between the staves in Ex. 16. It can often be observed that the harmonic rhythm gives rise to waves keeping the formal units together, and this generalization is confirmed by the K. 331 theme. By and large, the harmonic rhythm of the sections starts slowly, accelerates midway, and recedes slightly towards the end. This pattern emerges quite clearly in the first, second, and fourth sections, in which the chord shifts eventually link in with the melodic events. But it can also be seen in the middle section where the quasi-subdominant sonority makes for a dragging syncopation extending over the bar-line mm. 9/10. The short final section brings an exception to the rule since it starts with a quite dense series of distinct chord shifts accompanying the upward thrust of the melody.

Rhythm and performance

So far we have discussed various aspects of rhythm in terms of what we can see and understand when studying the score. But it is also of great interest to learn something about how the K. 331 theme is in fact played.

Fortunately, there is an empirical investigation addressing exactly this question.¹⁸ In short, the first eight bars of the theme as played in five recordings by professional pianists were measured with respect to internote durations, articulation silences between the notes, and loudness relationships – variables reflecting the rhythmic properties of the performances.

Turning first to the internote patterning within the neighbour-note motifs – and using the exact proportions specified by the notation as a norm – the sixteenth-note was generally shortened whereas especially the following eighth-note and to some extent the preceding dotted eighth-note were lengthened. As regards the note-repeating motifs, the quarter-note was shorter and the eighth-note longer than their “fair share” according to notation – this tendency was particularly pronounced in mm. 3–4 and 7–8. Each half-period was started somewhat slowly; the cadences were signalled by final retards.

Generally, the performances were characterized by *legato* articulation, but “pianist D” sometimes inserted a moment of silence before the second note of the note-repeating motifs.

The dynamic patterns of the neighbour-note motifs most often featured prominent eighth-notes, but pianist D tended to stress the dotted eighth-notes. Turning to the repeated-note motif, pianist D again stood out by sometimes playing the eighth-notes loud; the other recordings generally exhibited soft eighth-notes. As to the dynamic profiles for the half-periods, they featured loudness peaks in m. 3 and particularly in m. 7.

Gabrielsson’s discussion brings in hypotheses advanced by L. B. Meyer and Lerdahl & Jackendoff to provide a background for the findings. Meyer, while generally maintaining that one should play so as to preserve the sense of afterbeat/upbeat ambiguity, nevertheless advises pianists not to stress the weak beats and not to shorten their effective duration by inserting short

18 Alf Gabrielsson, “Once Again: The Theme from Mozart’s Piano Sonata in A major (K. 331)”, pp. 81–103 in *Action and Perception in Rhythm and Music*, Papers given at a symposium in the Third International Conference on Event Perception and Action, Publications issued by the Royal Academy of Music, No. 55, Stockholm 1987. The “once again” of the title refers to an earlier paper, comparing melody-only renditions of the theme played on the piano, the flute, and the clarinet; cf. Alf Gabrielsson *et al*, “Performance of Musical Rhythm in 3/4 and 6/8 Meter”, *Scandinavian Journal of Psychology* 24, 1983, 193–213.

silences after them – apparently an instruction for playing afterbeats rather than upbeats. L&J recommend non-stressed eighth-notes with shortened effective durations if one wants to suggest afterbeats, and the other way around when playing upbeats. They also hypothesize that one may play afterbeat and upbeat notes somewhat early and late, respectively.

By and large, these hypotheses were confirmed: the second notes of the repeated-notes motifs were played somewhat early and also softer. Since *legato* articulation prevailed in the recordings, the idea of shortened effective durations for afterbeats could not be substantiated. The fact that pianist D tended to stress the crucial eighth-notes and sometimes inserted articulation silences preceding them can be explained if one assumes that he intended to play these notes as upbeats. Perhaps he had used the widely spread, but corrupt old Peters edition with slurs starting from the last eighth-notes in mm. 1 and 2.

In a personal communication Eugene Narmour has suggested that the tendency to slow down in m. 4 may partly be explained by the fact that one feels an urge to boost the structural significance of the out-of-the-way dominant chord. Being a weak-beat resolution of a six-four appoggiatura chord, it cannot very well be stressed, but it can be somewhat delayed so as to give a hint that it occurs on an accented position.

To conclude this short account of performance characteristics, two further, possible but non-realized empirical studies will be proposed.

In the K. 331 theme both hands by and large feature the same notated rhythm, which means that the internote patterning of the melody is free. What would happen to this freedom of rhythmic expression if the melody were combined with a regular, *Alberti*-type accompaniment as shown in Ex. 17? Alternatively, what would happen to the regularity of the accompaniment? Or perhaps the performances would exhibit elements of asynchrony? And what would the result be if another pianist played the accompaniment?

Understanding musical rhythm is largely a matter of categorical perception. No matter the variable durational relationships typically present in real musical performances, we conceive of rhythm in terms of the note-value proportions inferred from the metric properties of the music. Conversely, we may speak of “categorical production” when it comes to performing music. In the domain of rhythm, we respond to the notational symbols by

producing internote durations that are compatible with, but not strictly regulated by, the notation.

What would happen to the rhythmic diction of the neighbour-note and repeated-note motifs of the K. 331 theme, if they were embedded into different metric environments? Performances of the original, triple-metre theme could, for instance, be compared with renderings of the duple-metre variant shown in Ex. 18. Which differences with respect to internote duration, relative stress, and articulation would come to the fore?

Traditional approaches: form

Studying musical structure is a comprehensive undertaking. And so it should be since in current parlance the “structure” of a piece of music as a matter of principle includes virtually everything there is to say about its constituents, big and small, and their interrelationships. The observations may concern any aspect you can think of, and delving into details is as appropriate as dealing with large-scale properties and functions or disclosing sub-surface connections and distant associations.

Describing the musical form of a piece is a more restricted task. “Form” is generally understood as a matter of dividing the music into sections or shorter units and of discovering the underlying order within the composition. Taking account of such things as the distribution of thematic material and the location of decisive cadences is most often unproblematic. But a further goal beyond merely establishing the “form” of a piece is to study the functional relationships between its sections and to account for the transitions between them – sometimes a far from trivial task.

When describing musical form it is customary to pay attention to the temporal proportions within the sequence of formal units. These proportions give rise to a kind of macro-rhythm or – which seems more to the point when dealing with regular music such as the K. 331 theme – make up a high-level, beyond-the-bar, metre.

Some remarks on the study of form

There are a few concepts referring to various options of continuation that emerge as fundamental when studying musical form: repetition, recurrence (i.e. repetition after an intervening formal unit), variation, development, and contrast. But these seemingly simple categories are not pigeonholes and require a keen sense of discrimination if they are to be applied in a productive way. When should a certain formal unit be understood as quasi-identical with a previous unit, and when is it to be considered as significantly different? How is variation to be distinguished from repetition? What characterizes a development? Isn't contrast always a relative matter?

If a more fine-grained description is wanted, you may resort to further categories of continuation, to concepts such as response, complement, addition, balancing unit, etc. It makes a subtle difference if a repetition is

conceived of as a response, a complement, an addition, or a matter of balance. As these more precise concepts show, the study of form cannot, and should not, escape from questions of function. What roles do the formal units play in the form?

Establishing the form of a piece of music necessarily entails a number of sometimes quite delicate decisions. For each formal demarcation you must assess the character of the change involved (if any). Formal shifts tend to involve persisting as well as new traits, and you will typically find that some elements in the music exhibit similarity while others introduce differences, suddenly or gradually as the case may be. Sometimes the differences add up to a change of texture, i.e. to a more or less radical kind of contrast.

The study of form also includes a careful assessment of the mixture of openness and closure obtaining at the demarcations, big or small. In music – and in musical performance – there are many ways to indicate closure and various hints suggesting that a formal unit is starting.

Finally, the analysis of musical form must account for how the shifts between the formal units happen. The units may be disjunct, which implies that a unit ends before the following one starts, and that separate cues for ending and starting make for a very clear formal demarcation. Turning to conjunct shifts there are three possibilities; all of them blur the demarcations, but they are associated with quite distinct musical qualities. The two formal units involved may share the very event of junction – the phenomenon is called elision and makes for a most intimate connection. But the second unit may also intrude upon its predecessor by (actually or seemingly) robbing it of its closing event, which is re-functioned into a starting event. The opposite situation may of course also occur; the closing event of the first formal unit dominates the impression at the expense of the start of the second – that the latter unit has started is understood only in retrospect.

It turns out, then, that the analysis of musical form is far from a summary exercise, and this is even truer if you do not confine yourself to study musical form as a fixed property. When listening to a piece of music its form develops before your ears, and the process of discovery may be associated with expectations and re-evaluations, experiences that should be integrated into any analysis of form undertaken with the ambition to do full justice to the music.

Formal analysis of the theme

The formal analysis of the Mozart theme will begin with the small constituents. How do the short formal units combine to make up sections? (Ex. 19)

The basic formal unit is readily identified at the very beginning of the music – the five-note phrases coincide with the 6/8 bars – and the [(1+1)+2] bar construction of mm. 1–4 emerges quite clearly. That the core phrase is repeated at the next lower step in the scale is obvious, and hence mm. 1 and 2 belong together as a pair.¹⁹ The connection to m. 3 is smooth, but enough contrast is brought in to start a new formal unit at the two-bar level – there is no sense of formal demarcation between mm. 3 and 4, and m. 4 does not immediately disclose that it will turn into a cadence.

By and large, these observations apply also to the following four bars, but m. 7 offers more contrast than did m. 3, and mm. 7–8 are even more tightly fused than mm. 3–4. The formal make-up is again [(1+1)+2], but the second section of the theme appears to be somewhat shorter than the first one: the complementary restatement of mm. 1–4 involves a sense of contraction.

The formal configuration of the middle section is different. The one-bar metric level is clearly suspended in favour of a [2+2] organization, and this change is part of what makes mm. 9–12 stand out as a contrast within the theme. The sense of a shift at the bar-line mm. 10/11 is unmistakable – the register transfer and inversion of the eighth-note accompaniment brings a contrast within the contrast. But on the other hand the cohesion within each two-bar unit is very strong: m. 10 releases the melodic expansion started in m. 9, and m. 12 pursues and rounds off the motion introduced in m. 11.

Up to its very last events, the fourth section is identical with the second. (For a formal twist, see below.) The end of m. 16 connects very tightly and in a quite forced way to m. 17, but the contrast after the bar-line is strong enough to make for a new section. Hence, the theme is not finished by a six-bar formal unit, but rounded off by a two-bar one.

¹⁹ The descending pair of phrases, the model/copy relationship, is best mediated from the right hand to the pianist's mind – and then to the listeners – if he/she uses the fingering 2-3-2-4-4 in both bars.

This sense of fragmentation is pursued within the last two bars: although m. 18 closes the harmonic process started in m. 17, it offers a stark contrast in terms of texture and register making for a [1+1] internal configuration within the last section. But in a way the point of demarcation seems to precede the bar-line since the final unit may also be heard as starting at the sixth beat of m. 17, where the block-chord structure disappears and the forthcoming cadence is signalled by the subdominant.

Proceeding to higher-level metrics, to the formal make-up in current sense, the theme consists of five sections with the temporal proportioning 4+4+4+4+2 bars. But what about the organization of these large units? Do they exhibit a quasi-hierarchical order? Yes, they do, and it is accessible not only when studying the music top/down but also when adopting a bottom/up perspective.

By taking account of such features as the distribution of motivic content, the harmonic process at large, and the shifts involving (relative) contrast, we will find that the sections make up a [(4+4)+4+(4+2)] configuration. Adopting the letters customarily used to outline form, and disregarding the repeat signs, we will agree that the “form” of the theme is

AA¹ B A¹c

where the two-bar unit “c” quite suitably stands for “coda” – this short section both rounds off the theme and brings a late culmination. But hyper-opic analysts might prefer the succinct scheme

A B A1

This top/down analysis of the theme’s form is of course facilitated by things that we may know about form in music such as Mozart’s. It should be stressed that there is nothing illegitimate in using such insights as an additional input. Our inferences from what we hear (or from what we see in the score) are always assisted by what we know about music, and as long as this general knowledge applies to the music in question it is just fine.

In fact, we have already tacitly introduced such information when assessing the low-level formal properties, dealing first with mm. 1–4, then with mm. 5–8, and so on. The conclusion that Mozart’s theme starts with a [4+4] bar high-level formal constituent partly derives from the assumption

that it is very likely that the music begins with a “period”, i.e. with a somehow balanced compound unit made up of two parts, the “antecedent” and the “consequent”, of which the former issues into the dominant and the latter leads to the tonic. And this very qualified guess is duly confirmed by the first part of the theme; even the number of bars agrees with the paradigmatic idea of the “eight-bar period”. After the weak-beat resolution to the dominant in m. 4, a complementary formal unit is required to restore tonal balance by finally returning to the tonic, and this is also what the section mm. 5–8, starting again from the tonic and using the same melodic material, comes up with.

A bottom/up perspective of the form

But adopting from now on a bottom/up perspective, this restatement is not just a balancing complement. From m. 7 on the consequent emerges as a development of the antecedent model, a development resulting in a peculiar metric contraction. The tonic chord in m. 7 seems to arrive too early and so does the closing tonic in m. 8, a fact that slightly, but perceptibly upsets the sense of metric equilibrium and stability. The variant shown in Ex. 20 suggests that the latter effect is less a matter of when the final tonic arrives than of the preceding hastening of the musical pace. The difference between the antecedent and the consequent is no doubt great enough to warrant different designations (A and A¹) in the formal synopsis.

The last-moment occurrence of the dominant in m. 4 makes for a close connection: a tonic chord is strongly expected as well as promptly delivered. Yet the antecedent and consequent emerge as disjunct formal entities, a fact that is compatible with a faint sense of curtailment/intrusion at the first beat of m. 5. The formal shift at the bar-line between m. 12 and m. 13 is essentially of the same kind.

But the situation at the demarcation (if any) between m. 16 and m. 17 has altogether other qualities. Superficially, the shift simply involves an elision – the two sections share the same loud and accented A-major chord, and due to the unstable rising double appoggiatura the section mm. 13–16 cannot do without this emphatic downbeat. However, on second bottom/up thoughts it appears that the connection is even closer than just an ordinary elision. The rising escape from the harmonic clash in m. 16 may be heard as an

anticipation of the following chord – the preceding section invites the *forte* intrusion of its successor, as it were. In effect, then, two events are shared.

But even this is not the whole story since a sense of curtailment is inherent already in the rising gesture beginning at the clashing b^1 . When hearing this note, the (first-time) listener cannot know that there will be a rising resolution – unless the pianist, knowing what is going to happen, plays in a way that suggests this unusual outcome. In other words, there is a kind of intrusion before the intrusion associated with the anticipated start of the coda; the coda may seem to curtail the preceding formal unit half a bar before the loud chord at the beginning of m. 17. The two intrusions combine to produce a very strong sense of continuity, mediated by the rising resolution – a continuity pitted against the strong sense of contrast brought by m. 17.

Hence, the last formal demarcation is quite complex, and it might be described as an elision involving two moments of curtailment/intrusion, of which the first one is drastically premature.

The B section is clearly set off from the AA¹ part of the theme. The left hand features a conventional accompaniment figuration of even eighth-notes, and the melody starts from the fifth degree. For a short moment the new formal unit may be understood as a kind of variation of the A material, but very soon the listener is prone to think that it will make up a development. Finally, after the internal formal shift in m. 11, where the accompaniment is transferred to the right hand, it becomes evident that the two sub-sections in fact bring a contrast within the theme.

One might of course say right away that the B section offers a contrast – after all, contrast is what B sections in tripartite forms (such as this theme) are supposed to provide – but one must keep in mind that the sense of contrast is introduced gradually. If you study the theme's form a bottom/up perspective, i.e. as it evolves when you listen to it, this observation is essential. But barely beyond the musical surface there is also a sense of continuity. The idea of a melodic strand shadowing the soprano melody a tenth below, characterizing the A parts, is pursued within the left-hand accompaniment in mm. 9–10, and in mm. 11–12 the right-hand figurations are shadowed, or perhaps opposed, by the left-hand chords.

Turning to the two-bar coda, it certainly breaks in as a contrast, and yet m. 17 may seem to allude to the rising gesture heard in m. 15; the music

seems to be resumed after the distorted cadence in m. 16. We will have more to say about m. 17 and this allusion in the chapter on semiotics.

The fourth section has been called A¹, and this is what it eventually turns out to be – the last-moment dissonant clash and the rising resolution in m. 16 are not sufficient to warrant a new label (A²). But from a bottom/up perspective one must take account of the sense of deceit involved in this formal recurrence. For listeners having noticed the similarity between the cadences in m. 12 and m. 4, the reappearance of the A¹ section is not very surprising, but other listeners – they probably make up the happy majority – will rather suspect that the music is going to exhibit a regular tripartite form. In other words, they are likely to anticipate that the first part of the theme, featuring a complete [4+4] recurrence of mm. 1–8, is about to turn up. But after two bars they will notice that they were mistaken, and that they must re-evaluate what they have just heard: it was in fact not the A section, but the A¹ section that started in m. 13.

When listening to the repeat of the second part of the theme, this ambiguity of the formal design is gone, of course, but we must be grateful to Mozart for suggesting this subtlety once; besides, as can be readily tested at the keyboard, a complete AA¹ recurrence after the B section would have been quite tedious. And a theme closing with just the four-bar A section followed by the coda would be the creation of a lesser composer than Mozart – given that this composer could at all come up with the K. 331 theme.

In order to capture the formal ambiguity inherent in the second part of the theme, i.e. to do justice to the sense of deceit and concomitant re-evaluation caused by the A-then-A¹ recurrence, a bottom/up outline of the formal process might look like this

AA1 B(A)

A1c

Rhetoric and interpunctuation

For centuries music has been compared to speech – terms like “sentence” and “period” are shared between linguistics and music theory – and if this analogy holds true, this theme is a short and most well-formed utterance that allows of being punctuated. Punctuating music has a long tradition

as an aid to understand the relationships between formal constituents, to grasp the nature of the continuity between formal units despite the demarcations. In fact, it amounts to a simple, and yet quite revealing, method of formal analysis.

So, given the four common punctuation marks (full stop, comma, colon, and semicolon), what is the form of the theme, understood as a short quasi-linguistic utterance?²⁰ We may not agree altogether – our musical understanding (including how we want to play the theme) as well as our habits of using punctuation marks are involved in the task – but its “rhetoric form” is likely to come out as follows

A,A1. B; A1:c.

The comma signals the separation as well as the closeness of the two clauses making up the initial sentence (period), and the semicolon does justice to the sense of urgency and necessity associated with the recurrence of A¹ after the open-ended B section. The colon is appropriate before the coda due to the emphatic way its entry is announced and to its sense of a final summary of the theme; cf. the chapter on semiotics.

There is an alternative to this reading, however.²¹ One may highlight the fact that the middle section can be heard as demonstratively issuing into the recurrence of A¹ by using a colon at this point, and the sense of an immediate, almost precipitate continuation in m. 17 can be suggested by a comma. A comma is also appropriate if the last two bars are understood as a variation rather than as a coda; cf. again the next chapter.

A,A1. B:A1,c.

Your choice of punctuation marks reflects how you use to play the theme and, reversing the perspective, such marks will influence how will play it.

20 Lately, there has been a heated debate in France and other places on the *raison d'être* of the semicolon. It would be a pity if this punctuation mark, this “full-stop-light”, were abandoned since it is useful both in literature and, as we shall see, in music. What is gained by denying oneself access to signs specifying syntactical relationships?

21 For once the word “reading”, unfortunately and all too often used as synonymous with analysis in musical parlance, is appropriate.

Repeats and recurrences; symmetry

The theme features double repeats, and this fact cannot but have implications for its form.

Obvious repetitions of sections tend to underscore the aspect of form-as-fact at the expense of form-as-process. When a section (or a group of sections) is immediately and exactly repeated, the music turns more static, object-like, “architectonic”, and this effect is enhanced if the music is subdivided into sections exhibiting symmetry and balance as is the case in the K. 331 theme. Generally, since repeats amount to mechanical duplications imposed on the music, they make up obstacles if you want to play the music in a way that suggests a sense of development or motion towards a goal.

But this does not imply that the other aspect of form, form-as-process, is non-operative; no matter if sections are repeated, we still listen bottom/up, from beginning to end. There are no exact repeats (or recurrences) in music, phenomenally speaking, since repeats mean that already heard sections of the music are bound to undergo some change, perceptible or subliminal as the case may be, as to their function or musical significance. In addition, repeats offer opportunities for interpretational differences and elements of improvisation.

A most instructive example of this has been presented above: the sense of formal deceit inherent in the A-then-A¹ section, when heard the first time, cannot very well be enjoyed the second time. Likewise, the sense of opening-up associated with the focus on e² in mm. 9–12 and the feeling of break-out associated with the emphatic entry of the coda in m. 17 are bound to emerge as less conspicuous when the second part of the theme is repeated. Unless the pianist introduces some changes infusing a renewed interest, the effect will be one of confirmation.

The K. 331 theme illustrates the subtle ways in which duplication and recurrence may give rise to symmetries. The five-note motif of the first bar is immediately reiterated one step lower along the scale, bringing a second, less exposed replica. But this pair, or rather pair-perhaps-to-be is not closed. The next bar might have supplied the third unit of a descending sequence, or it might have come up with a clear-cut change demarcating the preceding units and retrospectively turning them into a pair. Both alternatives come true: while proceeding along the scale the immediately preceding two-note

motif is replicated, and doubling the pace m. 3 brings the melody back to its point of departure. An ordered motion, symmetric as to pitch direction but asymmetric in terms of temporal proportion, binds together the melodic process. In the consequent, the return back to $c\sharp^2$ is even more hastened, making for a drastic temporal disproportion between the downward and upward motions. At the level of the period there is a pair at the 4+4 bar level, but a pair in which the second unit seems shorter than the first.

Semiotic analysis and motivic structure

It would have been desirable to start this chapter by presenting an authoritative definition of semiotics, but the field is quite disparate with a number of different approaches and a partly bewildering terminology. Providing a definition is therefore a formidable task that will be avoided; since we have just a specific application in mind, a general presentation of semiotics may suffice.

The object of semiotics is signs and sign systems, but it must be observed that the study does not only comprise artefacts devised to send and receive messages – music may be regarded as a means of communication – but also various phenomena that are not (intentionally) invented or (actually) used in order to mediate messages, phenomena that may nevertheless be interpreted as signs. Social systems and cultural behaviours, for instance, can be studied in order to disclose what information they bring; semiotics of this brand has much in common with certain varieties of structuralism.

Semiotic approaches may be divided into two broad categories. Some scholars take a primary interest in the relationships between signs and what they refer to. But the “signifier” and the “signified” do not exist in a vacuum. There must be somebody entertaining the connection as well as someone observing the signification process, which always takes place within a social and cultural context. Other scholars prefer to study the sign systems, the “codes”, devoting themselves to describing how the individual signs are joined to form complex messages. Thus, one might distinguish between what we may call “external” and “internal” semiotics. The present chapter will deal with semiotics of the latter kind; topics relating to external semiotics are saved until the last chapter.

Semiotic analysis according to Nattiez

There are several varieties of internal music semiotics – and it is to some extent a matter of definition or preference which analytic methods you choose to put under the large umbrella of semiotics – but the one to be applied here is associated with music analysts like Nicolas Ruwet and Jean-Jacques Nattiez.²² It may be described as a strict method to identify minimal

22 Nicholas Ruwet, *Language, musique, poésie*, Paris 1972, Seuil; Jean-Jacques Nattiez, *Fondements d'une sémiologie de la musique*, Paris 1975, Union générale

musical constituents and establish the patterns that they give rise to. Since any (melodic) motif is an amalgamation of a pitch sequence and a durational sequence, these two elements of the musical structure are of particular importance, but nothing prevents the analyst from paying attention to harmonic features or to matters of register, dynamics, and articulation.

The procedure is straightforward. You start from the beginning of the piece (or section) to be studied, and you write down its first motivic idea (let's call it m1) on a sheet of music-paper. If the second idea is considered to be identical with or closely similar to m1, you take it down on the next stave under the first idea, which means that it is categorized as belonging to the class of m1 motifs. If, on the other hand, the second idea emerges as significantly different from m1, you enter it after the first idea on the top stave as the first member of the family of m2 motifs. Proceeding to the third idea, it may either be similar to m1 or m2, or present itself as yet another motif, m3. In the former cases you put it under its predecessors, adding to the m1 or m2 columns; in the latter case you let it start an m3 column by inscribing it after the m2 motif on the top stave. If the fourth idea is (say) associated with m1, and if there have been (say) two intervening representatives of m2, it is taken down on the third stave, below the entry of m1 on the first stave. And so on.²³

When you have reached the end of the piece/section, you have distinguished the various constituents of the melodic process: excepting solitary, once-in-the-piece ideas, the motifs and their variants have formed columns. This stage of the semiotic analysis is called "paradigmatic" since what the columns show are motivic paradigms, i.e. they show different variants of a certain motif.

But the analysis is not finished – the "syntagmatic" part of it remains. If you take a look at your arrangement of motifs, peculiar patterns might come to the fore, sequences and combinations of sequences which you are

des éditions, and *Music and Discourse. Toward a Semiology of Music*, Princeton University Press 1990 (a translation by Caroline Abbate of Nattiez's *Musicologie générale et sémiologie*)

23 If all this seems abstract and entangled, the procedure will be quite clear as we turn to the analysis of the K. 331 theme.

to describe in a succinct way: the goal of the semiotic analysis is to capture the motivic aspect of the piece's form. For instance, you may establish that (beginning with the first section of a certain piece) an $m1m1m2m3$ motivic sequence underlies every other section whereas the intervening sections feature $m1m2m1m3$ sequences.

Many readers will no doubt think that this method amounts to much ado about little, at least when it comes to a short piece like Mozart's A-major theme. After all, haven't we already and quite successfully described its motivic layout in the chapter on traditional melodic analysis? It is true that semiotic analysis of this sort is most valuable, perhaps indispensable, when dealing with music having a bewildering, seemingly impenetrable motivic construction, music that eludes understanding by means of the traditional method. But on the other hand, and as will soon become evident, a semiotic approach to the K. 331 theme (which is not as plain and easy as it sounds) may yield insights that are hard to gain when using current motivic analysis.

Nattiez claims that, if properly undertaken, semiotic analyses attain a neutral level of musical description, or otherwise put, that the observer is neither disturbed by considerations stemming from the process of composition (*poïesis*), nor influenced by his/her responses as a listener or musician (*esthesis*) – a view that has met with some criticism. It must be admitted that the semiotic procedure just described renders the analytic process transparent, and that this is a great asset. On the other hand, it is doubtful whether it is possible to keep especially the *esthesis* away from the analytic decisions. Whereas knowledge, or hypotheses, pertaining to the compositional process can (and should) be barred out, it may be argued that the reception side of the musical communication cannot be altogether excluded. Indeed, the semiotic study might even benefit from being contaminated by the analyst's (carefully controlled) musical sensitivity.

We have used expressions like “closely similar” and “significantly different” when describing the paradigmatic stage of the analysis. This indicates that there is an inevitable problem involved even in the most neutral attempt at a semiotic analysis. When deciding to include a certain musical idea in a motivic category, at what height should the bar for sufficient similarity be placed? If you have been too liberal, you will need a very tall music-paper to accommodate a few columns stuffed with a hard-to-grasp mess of more or less similar variants. Conversely, if you have been very strict when accepting

formulations as variants of the same idea, you will end up with a few, but very long rows, which more or less just list the motivic constituents in order of appearance. In either case, you have not achieved much of an analysis.²⁴

The basic methodological rule is to state explicitly why some motivic formulations are admitted into an already existing column while others are relegated to start a new one, and then to keep strictly to these criteria. If you are unlucky and have arrived at a paradigmatic analysis with too tall columns or too long rows to yield syntagmatic insights of any value, you simply have to put your analysis aside. The next step is to adjust your similarity criteria in some appropriate way – the useless analysis might have given you some hints as to what to change – and start a new paradigmatic reading of the music.

Most often it is not very difficult to find productive criteria of similarity, criteria that make sense of the musical process. The desirable neutrality of the semiotic enterprise does not entail that you must engage with the music like an earthworm eating its way through the ground; you may begin by taking a bird's-eye view of what happens in the piece and then proceed according to your preliminary understanding. Eagles are no less neutral than earthworms, they just have another, broader access to information.

In other words, the demand that semiotic analyses are to be “neutral” should not amount to a rejection of pre-understanding. Analysts always have, and must have, a point-of-departure notion of the piece to be studied, and (if properly controlled) this overall idea is a prerequisite for doing a good semiotic job, not an illegitimate advantage that you should try to circumvent or deny.

Two semiotic analyses of the K. 311 theme will be presented. The first of them observes the rules of the game by strictly keeping to the original similarity criteria and by maintaining the demarcations between the motivic columns. The second analysis adapts the paradigmatic categorization process so as to record and benefit from some emerging syntagmatic insights. The original similarity criteria and the initially established demarcations

24 But it isn't necessarily your fault. Few and tall columns may also indicate that the music is characterized by motivic parsimony and/or subtly differentiated motivic variants, whereas few and long rows tend to be associated with rhapsodic pieces.

between the columns are gradually abandoned – adjustments occasioned by conclusions drawn along the route. The point of transcending strict semiotic analysis in this way is to demonstrate and release the heuristic potential inherent in the semiotic approach. The second analysis may be taken to model what goes on in the mind of the analyst (or listener) when gradually grasping the motivic kinships within the theme.

The first attempt at a semiotic analysis

The methodologically orthodox semiotic analysis is shown in Ex. 21. The staves are numbered for quick reference.

Two motifs (m1 and m2) are identified on row (1). The fact that they are kept separate means that the sub-surface element of repeated notes in m1, making for a rhythmic similarity between m1 and m2, is ignored: m2 is not taken to be a bare-bone, no-neighbour-note variant of m1 but is allowed to start a new column. As is apparent from row (4), the bass progression in m. 4 leads to the decision to regard this unit as a cadence formula leading to the dominant (cD); as becomes a closing motion it is placed to the far right of the row.

The quarter-note + eighth-note rhythmic pattern persists in m. 7, but the fact that the note-repeating melodic idea is abandoned counts for more; hence, a new column and a new motif (m3) turns up on row (7).²⁵ This motif is immediately repeated as is shown on row (8), but a cadence to the tonic (cT) breaks in, using the last emphasized eighth-note of the m3 motif for its subdominant.

After the solitary ideas mx, my, and mz, the triadic motions finishing off the middle section obviously come up with a new idea, and being immediately repeated they are readily understood as variants of the same motif (m4) despite the difference as to pitch; cf. the new column appearing on rows (9–11). Since the harmonic element is included in this semiotic reading, the

25 If you attach greater significance to the persisting rhythm than to the pitch content, an alternative paradigmatic reading presents itself, an analysis in which all specimens of this uneven rhythm are placed under each other in the same column, irrespective of whether the notes are repeated or not.

analyst associates what happens in m. 12 with the cD paradigm introduced back in m. 4, the altered chord notwithstanding; cf. row (12).

The unusual formulation in m. 16 calls for a deviation from the normal paradigmatic procedure. In order to indicate the motivic significance of the rising resolution $b^1-c\sharp^2$, which thwarts the expected cT cadence, this motion appears also on row (16), now in the m3 column.

At this late point in the analysis, the coda does not present any problem. Despite the differences, two further m3 motifs and then a curtailing, back-to-normal-register cT cadence are readily identified.

Using the labels introduced in the paradigmatic arrangement, the motivic *design* of the theme can be summarized as follows

m1m2 m1m2 m2m2 cD
m1m2 m1m2 m3m3-cT
m1m2 mxmymz m4m4m4-cD
m1m2 m1m2 m3m3-cT/(m3)
m3m3-cT

This syntagmatic conclusion essentially agrees with the insight arrived at in the traditional motivic analysis; cf. Ex. 1. But two things stand out more clearly due to the paradigmatic analysis of the motivic content: the fact that all sections but the last start with the combination m1m2 – indeed, m1 never appears without m2 – and the fact that the second of the m3 motifs is always curtailed by the cadences closing the sections.

According to this analysis the form of the theme can be summarized as
AA1 B A1c

The second attempt at a semiotic analysis

The crucial thing about the analysis just presented is that some of the decisions involved give rise to further analytic reflection. The choice not to include m2 into the m1 paradigm (or rather the other way around since the second idea is a more basic formulation), and the policy to take account of the pitch difference rather than the persisting rhythmic pattern when letting m3 start a new column, may be questioned. Such decision cannot but make you think of an alternative paradigmatic analysis with more

permissive criteria of similarity, a reading drawing on the sense of kinship between the three motifs.

An analysis of this kind would result in a paradigmatic arrangement featuring few, but very tall columns, and therefore it is preferable to present it as a heuristic process, showing when and why the emerging paradigmatic similarities turn into syntagmatic insights. Such an unorthodox semiotic analysis is to be found in Ex. 22.

Turning to rows (1) and (2), it would have been possible to immediately put the m2 motifs in the m1 column since they have the same sub-surface note-repeating rhythm. But for reasons that will become apparent, this option is not yet chosen.

At the beginning of the second section, rows (5–6), it becomes clear that m1 and m2 tend to go together, and it is therefore decided to fuse them into the composite motif M1/2. The discontinuation of the m2 column is temporary, however, since the rhythmic similarity is now accepted as a sufficient ground for taking down the two-note rising motions in m. 7 as variants of m2; cf. m2v on rows (6–7).

The first bar of the middle section forms an M1/2 motif despite the fact that the interval between the particles is not a third but just a major second. After the solitary motifs, the falling triadic figures in mm. 11–12 make for an m3 column. The last motif in m. 10 (mz) is not included in the m3 family; the rhythm and articulation are similar but the motion is stepwise. (There is a kinship but it is likely to emerge only in retrospect.)

When the outer part of the theme returns in m. 13, another conclusion can be drawn. Already in mm. 5–7 the observation could be made that m2v – if allowed to include the next note $c\sharp^2$ – corresponds to the rising thirds that are inherent in the two preceding M1/2 motifs; cf. rows (5–7). For this reason it now seems warranted to suspend the m2v column and transfer its notes leftwards, aligning them under the M1/2 motifs as M1/2v; cf. row (13). At this point it can also be noticed that a further note, d^2 , awaits its inclusion.

After the rising-resolution m2 motif, the coda enters emphatically on row (15) with a four-note ascending gesture that includes $f\sharp^2$, corresponding to d^2 on row (13): another fusion has occurred that we may call M1/2+. At this point it is interesting to take a look at what happens in the bass. As usual, it shadows the melody a tenth below, but now it includes an additional

fifth note in its rising gesture. No matter the deviating rhythmic and metric properties, the final swift motion in m. 17 recalls a possible predecessor at the beginning of m. 10; cf. motif *mx* on row (8).

The syntagmatic summary of the motivic *process* of the theme – not its design this time since the aim of the second semiotic analysis is to reflect the piecemeal discoveries made during the semiotic work, or indeed to describe what may happen in the mind of a perceptive listener – looks like this

m1m2 m1m2 m2m2–cD
M1/2 M1/2 m2vm2v–cT
M1/2 mxmymz m3m3m3–cD
M1/2 M1/2 M1/2v–cT/(m2v)
M1/2+–cT

The most conspicuous feature in the second paradigmatic synopsis is how first *m2* and then *m2v* migrate leftwards into the *m1* column, giving rise first to the composite *M1/2* phrase on row (5) and then to the ascending gesture *M1/2+*, emerging first on row (13) and appearing manifestly on row (15), at the start of the coda. Indeed, even the tiny motivic fragment *mx* obeys this urge to join the starting *m1* column. In m. 10 it rushes up to the climactic and accented note *a*² whereas in m. 17 it points towards a second culmination at this note, but the motion is curtailed – there is no accented *a*² in m. 18.

The nature and status of the “coda”

The last two bars of the theme certainly emerge as a coda in virtue of the change in texture and the dynamic contrast in m. 17. And the fact that this bar absorbs all motivic material in the theme except *m3* cannot but add to the closing effect of mm. 17–18. But m. 17 is not only a summarizing formulation: the unorthodox semiotic analysis also suggests that the closing two-bar section, which so far has been called the “coda”, is ambiguous in a most astounding way.

The forcefully rising gesture *M1/2+* in m. 17 is preceded by the melodic ascent in m. 15, still categorized as *M1/2v* in the paradigmatic analysis; cf. rows (13) and (15). The relationship is simply a matter of transposition by a third upwards, and it is mediated by the rising resolution (*m2v*) starting

from the note b^1 in m. 16. In this light, the “coda” emerges as a closely attached continuation of the preceding four-bar section. Indeed, turning to the *esthesis* of this passage, one may understand the “coda” as a “third-time-lucky” construction in which the second unit prematurely issuing from b^1 is emphatically curtailed when m. 17 breaks in.

Turning to an alternative or concurrent interpretation, the fact that the M1/2+ motif (disregarding for now its quick $g\sharp^2-a^2$ tail) is inscribed in the M1/2 (formerly m1m2) column suggests that the starting gesture in m. 17 may be understood as a variant of the initial phrase. This is confirmed by the parallel tenths in the left hand, and the close relationship comes clearly to the fore if the rising stepwise gesture in m. 17 is exchanged for a forceful version of m. 1; cf. Ex. 4. This re-composition suggests that m. 1 and m. 17 are equivalent in subsurface terms – the outbreak $c\sharp^2-d^2-e^2$ in m. 17 is covertly prefigured in m. 1. Mozart has already introduced an element of variation within the theme, and the “coda” might be written as

M1/2v/cT or (m1m2)v/cT

In this light the “coda” emerges as a drastically shortened unit, consisting of a variant of the initial phrase merged with a cadence. This finding cannot but influence the description of the theme’s form which now comes out as

AA1 B A1A2

The discovery that the “coda” might be regarded as an additional, “short-circuited” variation of the theme’s main idea is confirmed if one transcends the “neutrality” of semiotic analysis by citing poëtic evidence – the only thing you have to do is to look beyond the theme at the following set of six variations. In Ex. 23 a/g are shown the starting bar of the first, second, and final sections of each variation of the movement. All variations (except the fourth) feature an element of variation within the variation: the second (mm. 5–8) and final (mm. 17–18) sections (i.e. the “coda”/A² sections) bring highly similar formulations and also more or less strong contrasts to the first (mm. 1–4) sections in terms of texture and dynamics – just as the “coda” did in the theme. It appears that Mozart conceived of the “coda” of the theme as a variant of its initial idea, and by introducing this element of variation already when closing the theme, he prepared his listeners for the “variation-within-the-variation” construction of the ensuing variations.

The semiotic approach has disclosed an important and subtle ambiguity in the theme's form. But it must be admitted that the third-time-lucky as well as the variation aspect of the summarizing "coda" could also have been discovered by means of a musically sensitive motivic analysis.

Melodic implications

Whereas the semiotic analysis of music is a matter of studying melody as a patchwork of motifs, Leonard B. Meyer's "theory of implications" aims at capturing the nature of melodic continuity and especially the role of melodic expectation.²⁶

Expectations and implications

The working principle of Meyer's analytic method derives from the observation that listeners are often able to anticipate the future course of a musical passage. He conceives of musical style as a system of probabilities, and this holds for any individual work of music as well. Once a piece has started, it applies the musical habits that make up its style. Concurrently, it imprints its own material and structural peculiarities as a set of given constants, establishing a probabilistic sub-system of its own. If someone has internalized the probabilities of a certain style – and this is an important prerequisite for understanding music at all – and listens attentively to a certain piece of music so as to adjust these general probabilities to the particular emerging context, he/she will to an appreciable extent be able to predict what is going to happen next.

These predictions do not always come true – sometimes the music proceeds in less probable, unexpected ways – but this does not mean that the expectations were unwarranted or insignificant. Meyer does not claim that listeners are constantly engaged in anticipating the future course of the music. Quite to the contrary, the expectations are latent most of the time; only when the music perceptibly deviates from its most probable, seemingly given path, do we entertain conscious expectations.

This faculty of anticipation can easily be tested. Listen carefully to an unknown piece of music in a familiar style and turn off the recording – the cessation of the music will activate your expectations, mostly latent as they would otherwise be. Try then to guess what the next few events will bring.

26 Meyer's analytic approach is first sketched in *Emotion and Meaning in Music* (Chicago University Press 1956) and then fully developed in *Explaining Music. Essays and Explorations* (Chicago University Press 1973); read in due sequence, these two books give an idea of how his thinking and terminology have changed.

We tend to be fairly correct, but the success depends on the character of the passage and even on the exact point of interruption.²⁷

An analytic system based on anticipations/expectations may seem precarious, and when compared to the neutral character (or at least to the neutral ambition) of semiotic analysis, Meyer's approach leans towards the esthetic side, but the conclusion that his method is seriously compromised for this reason is exaggerated. Expectation is of paramount importance in music – being a temporal art – and hence a phenomenon that merits to be taken into account when analysing music. But on the other hand it must be admitted that our musical expectations to some extent are bound to be a matter of our subjective, although not necessarily very idiosyncratic, experiences as listeners. One has to accept this state of affairs or to leave vital aspects of music out of analysis, which would be quite detrimental. After all, Meyer's basic and quite plausible claim is that music hangs together because prior events invite you to anticipate forthcoming events, as well as the other way around – some events make you recall past events.²⁸

In his later writings Meyer abandoned the notion of expectation for the concept of “implication”, a word carrying more objective connotations. This move rests on the, again quite plausible, assumption that listeners with adequate musical experience, code-competent listeners, tend to entertain the same or quite similar expectations, i.e. they are likely to grasp a certain musical situation in virtually the same way and to envisage the same future events.²⁹ It may be held, then, that shared “implications” have a

27 We have a similar internalized access to the probabilities regulating our language, and we are therefore quite good at completing interrupted sentences. But sometimes, and especially when it comes to literary language, the sentences are ingenious in ways that make it difficult to exactly predict how they are to continue. (The analogy between music and language is imperfect, of course, since sentences also have a semantic meaning that may guide our expectations.)

28 Meyer's theory may be understood as a variety of “internal” semiosis. Adopting a semiotic terminology, Meyer's fundamental claim amounts to the idea that certain signs in the message refer to, point at, forthcoming signs (and the other way around), and that (an important part of) the intra-musical meaning of music resides in this particular kind of reciprocal signifier/signified relationship.

29 Plausibility is one thing, but claims about how people listen should also be subjected to empirical tests. Studying music listening is quite difficult since

quasi-objective status as facts inherent in the musical structure, and that they can be dealt with accordingly; a skilled analyst can readily identify implications by just reading the score. This is not to deny that some implications may be rooted in our individual musical sensitivity, or that they may depend on how we imagine that the music should be played. Nor should it be denied that reading scores involves a risk of proposing implicational relationships that transcend what we are likely to hear when listening under standard conditions.

‘Implication’ is a logical concept adapted for musical purposes. The word “implication” is used to refer to an operator within propositional logic, regulating the truth conditions for two statements forming a conclusion: “if X ... then Y”. We certainly do not experience music as a series of conclusions, but most often we find that it proceeds in a consequential way: events seem to cause or bring forth ensuing events, and an “implication” as used in Meyer’s theory denotes a link in such a chain of events. The supply of events that may be heard as consequences of prior events is not always smooth and undisturbed, however – various twists, giving rise to states of uncertainty may occur, which (within limits) is all the better for the music.

The “if X” member of the pair of events involved in a musical implication is called the “generative event” since, for a competent and attentive listener, it has the inherent quality of giving rise to the idea that some more or less distinct future event will occur, since it evokes expectations, active or merely latent as the case may be. Sooner or later, and somehow, generative events tend to be satisfied; the music delivers the “then Y” member of the implication, the “realization”.

It happens that the realization that actually turns up is not exactly – or not at all – the one that the generative event made you envisage. You may have misunderstood the prospective significance of the generative event, or you were perhaps mistaken already when identifying it as generative – but it is in the nature of expectations that they cannot be withdrawn. And composers sometimes plant a proximate but imperfect, provisional realization before the “proper” one, being postponed to a more remote

the experimental procedures tend to interfere with the mental processes to be studied, but it appears that Meyer’s ideas do have some support.

future. Situations involving provisional realizations sometimes mean that the second event of the non-consummate implicational pair refers back to the first, causing event, which in turn may be re-evaluated as being the generative event of another implication discovered only in retrospect, i.e. the listener discovers that the generative event also held out the prospect of another, less probable realization.

It seems, then, that the psychological basis of Meyer's theory never entirely disappears, however much he prefers to talk about implications. When determining which implications there may be in a passage, you need to consult your own experience of the music in order to identify generative events and evaluate their subsequent realizations. But this dependence on musical introspection is not necessarily a weakness. What is lost in objectivity is gained in sensitivity, and if two observers arrive at different readings due to their different attentiveness or their varying experience as listeners, this means that the analysis is open for discussion – an asset rather than a deficiency of a theory dealing with artistic products. You must not accept the claim that a certain event is generative if you are unable to find any implicative quality in it; if you think that a proposed realization is abstruse beyond credibility, you can simply dismiss it, deny that it occurs as a consequence of a certain preceding event.

Although melody is at the core of Meyer's theory, the implications are not restricted to the melodic domain. Metric accents and formats as well rhythmic patterns evoke distinct ideas as to when a certain event (or just something) is likely to happen. Harmonic progressions, and cadences in particular, tell you where the music is going, and specific chords may have implicative force. In virtue of its dissonance a dominant seventh-chord, for instance, suggests its tonic, and expecting that the tonic will turn up is the proper response to this truly generative harmony even when the ensuing chord turns out to be deceptive. (Unless, of course, the style of the music is such that the implicative power of dominant chords is undermined.)

Deviations and implications

Meyer holds that there are three types of deviations that may activate or boost the listeners' expectations.

The realization of a generative event may be delayed because other events intervene. Such “deflections” make us aware of the implication involved, and they may in turn evoke expectations of their own that must first be realized.

Composers sometimes create passages that are highly ambiguous, and as a result the listener feels uncertain and will envisage, not a specific realization, but some future event putting an end to the state of suspense.

If an unexpected event just turns up, this surprise tends to direct the listener’s attention towards the preceding event and make him/her re-evaluate its implicative potential.

The implicative structure might be hierarchic either in a strong sense, as when an entire implication serves as the generative event of an implication of higher order, or in a weak sense, as when far-reaching implications start before and reach beyond implications initiated and completed within a shorter time-span. The implications inherent in a well-wrought passage of music are likely to form a layered network made up of various implications overlapping each other.

According to Meyer the outcome of an implicative analysis is aesthetically relevant, and his aesthetics has a classicist bent in as far as he advocates a balance between continuity and disruption. The general good-making principle is that generative events evoking active expectations should not be satisfied too soon or exactly in the way envisaged. And to keep up the interest there should be a fair number of deviating formulations making the listeners anticipate future events. But it is also important that there are realizations that correspond to the generative events, and that the implications are not too obscure or too many. In order to be understandable and to provide a background for unexpected twists of implicative meaning, the music must have some redundancy, i.e. it must contain a fair number of normal, high-probability progressions giving rise to latent expectations.

There are two main structural mechanisms giving rise to melodic implications.

If we have just heard a configuration that agrees with the beginning of a familiar pattern, we are likely to expect that the music will continue in the proper, anticipated way. Some configurations emerge as familiar because they are deeply rooted in tonality and/or belong to the style of the music – cadential progressions may serve as an example – whereas others,

such as recurring phrases or motifs, are learnt while listening to a particular piece. Many implications fall within an intermediate category. We may, for instance, discover that a melody, straightforwardly or by means of sequential repetition, moves along a predictable path such as the ascending or descending scale/triad. In such cases we expect that the melody will continue this motion, and sometimes we can also anticipate how and when the process will stop.

Melodies may also skip or leap upwards or downwards in ways suggesting that one or several steps in the scale are left out. When hearing such melodic gaps we expect that the melody will fill in the omitted notes by returning stepwise towards the note opening up the gap, or at least envisage that the skipped note(s) will occur later on in a significant way as the melody continues its course. Although it is formulated as a rule in strict counterpoint – if a skip occurs in a voice, the line should proceed stepwise in the opposite direction – this expectation is not always or immediately borne out. Turning to analytic practice, what counts as a skip large enough to open up a significant gap depends on the context, and also on whether the skip is rising or falling – the former are more implicative. The style of the music, the individual piece, and the passage will tell you what counts as a gap; a rising third may be a generative event in Mozart but hardly in Wagner.

Before proceeding, a warranted question should be dealt with. What happens to the expectations when we listen to a certain piece of music the fourth or the tenth time, or indeed when we just listen to prescribed repeats as we are bound to do in the K. 331 theme? (We do not have to worry about the implications – being quasi-logical entities, they are always there.)

Without denying that music may wear down as a result of many encounters with it, Meyer adduces a number of reasons for why listeners are likely to preserve their readiness to respond to the music in much the same way as they did the first time, and even to increase their benefit from it.³⁰

30 Leonard B. Meyer, “On Rehearing Music”, *Journal of the American Musicological Society*, 14(1961) 257–267, reprinted in L. B. Meyer, *Music, the Arts, and Ideas*, Chicago University Press 1967, pp. 42–53. Meyer’s views are critically discussed by Ray Jackendoff in “Musical Parsing and Musical Affect”, *Music Perception* 8(1991) 2, 199–229.

We are prone to forget the exact course of the music, and it seems that particularly less probable passages evoking active expectations tend to be remembered as less deviant than they actually are. When gradually getting to know a piece of music, we discover relationships in it that we did not notice before, and as time goes by our general listening experience grows, which means that our way of entertaining implications is bound to change. In the listening situation we are willing to disregard what we know in order to engage in the musical process to the effect that even surprising twists may retain their vitality. And last but perhaps not least, listening to different interpretations revitalizes the music and may change its implicative content.

When taking down an implicational analysis, only the note-heads are retained – the rhythm can be indicated by spacing the notes properly – which means that stems and beams can be used to show the generative events and their realizations. In order to indicate the relationship between the two events forming an implication the beams are formed as arrows. If a realization is perceptibly delayed, the beam/arrow is temporarily discontinued. When the network of implications is complex – as it indeed is in the K. 331 theme – extra staves can be added above and/or below the main staff, showing the melody as it appears in the score.

The implicational structure of the theme is shown in Ex. 24. It must be stressed that this analysis is not made by L. B. Meyer, but by the present author following in his footsteps. To meet the demands of the discussion to follow, one sign, not used by Meyer, is introduced: two vertical strokes indicate that a generative event is blocked (or just left as inconsequential), and that there is no realization that can reasonably be said to correspond to it.

Implications that, by and large, belong to the upper layer of the melody appear on staves 1–3; the lower layer of implications is to be found on staves 4–7. Small-scale implications are shown on the staves immediately above and below Mozart's melody. The implicative connections range from latent ones to expectations that a perceptive listener will hear as fairly unobtrusive and yet essential connections informing the melodic process.

The antecedent

Although d^2 transiently occurs as an upper neighbour-note in the initial three-note motif, the first five-note phrase opens up a gap, suggests a rising third

evoking a latent expectation that the melody will eventually introduce the missing note. And after some delay – the second neighbour-note motif brings a deflection – this is also what happens; cf. staff (3). A promptly arriving d^2 would have had a different, less expansive effect than Mozart's slightly delayed d^2 ; cf. Ex. 25. A similar implicative gap then links together mm. 2–3, but the note $c\sharp^2$, being even more expected than the d^2 due to the established sequential repetition, turns up only in m. 4, bringing an even more delayed realization.

But what about the falling fourths across the bar-lines, aren't they skips that demand rising filling-in motions, and doesn't m. 2 and then mm. 3–4 come up with stepwise realizations? The short answer is in the negative since these gaps exist in the score, but (perhaps) not in our ears – the fourths straddle the phrase demarcations. Musically “dead” intervals do not function as generative gaps since they do not make us expect anything. And what kills them off is obvious: the three-note motif starting m. 2, announcing that a transposed replica of m. 1 is about to come. This very strong and immediately realized implication is grounded in the evolving form of the theme, and it wipes out of consideration the idea of a filling-in realization. And even before a note of m. 3 has been heard, the listener is fairly certain that another falling fourth will appear, and that the descending sequence of phrases will be continued – but the latter implication is not realized. The “non-implicative fourths” and their uncalled-for realizations are shown on staff (0).

But we must promptly provide a less dead-certain qualification. If you play the eighth-notes as upbeats or just in a connecting way, i.e. if you disregard the nowadays taken-for-granted rule that beginning-accented rhythmic groups are to be preferred in 18th-century music, the first of the falling fourths might suggest an implicative gap. (And so it would retrospectively have done, if Mozart had come up with a second bar that did not imitate m. 1, a bar displaying a stepwise rising realization; cf. Ex. 26.) Furthermore and no matter how you play, a stepwise rising realization is what actually and unexpectedly turns up in mm. 3–4. Hence, the mm. 2/3 fourth brings a retrospective expectation evoked by its realization; the second falling fourth gap was “dead”, but it is revived.

Another, quite important concurrent pattern presents itself in mm. 1–2. The swift neighbour-note d^2 cannot prevent you from hearing a rising sub-surface third in the first bar, and since m. 2 starts in the same way as m. 1,

you cannot but expect that the melody will present a further ascending third. As already mentioned, the five-note phrase with its inherent rising third has established itself as an “intra-opus” norm in m. 2, and its rising-third essence will in fact be realized once more in mm. 3–4, although in a different way. In addition, and as you will have envisaged, m. 3 starts at a^1 – the accented initial notes of mm. 1–2 suggest a descending scale “wanting” to be continued; cf. staff (6).

The third bar also brings a change: an ascending scale proceeding at double pace emerges, implying the note $c\sharp^2$ which turns up just when envisaged at the beginning of m. 4; cf. staff (4). Concurrently, and as already pointed out, you may be expecting still another rising third, and the melody does come up with it – but its top note, the $c\sharp^2$ starting m. 4, arrives too late; cf. staff (5). Thus, the lower layer of the melody first features a slow stepwise descent from $c\sharp^2$ (6), then a quicker return back to this note (4), but in terms of the inherent set of rising thirds the returning motion is not quick enough (5).

It should be observed that the melodic implications spread over into the metric/formal domain. The fact that the (hastened) stepwise return to $c\sharp^2$ is completed only in m. 4 means that the listener is likely to conclude that the theme is about to begin with a (1+1+2) metric unit.

The obvious reversal of the melodic motion notwithstanding, the slow descending scale has not spent all its implicative potential – a^1 in m. 3 is not harmonized as a stable note – and the final, unaccented event of the A section does come up with a consonant $g\sharp^1$. This note, very delayed by the rising deflection, brings the third of the final dominant chord, and yet it is somewhat unsatisfactory as a realization since it occurs in a middle voice; cf. staff (6).

But there is more to the descent/ascent motion along the scale. The slow falling third $c\sharp^2$ – b^1 – a^1 , followed by the quicker, rising a^1 – b^1 – $c\sharp^2$ motion, appears to be involved in a two-voice implication that explains why there is a reversal of the melodic motion and perhaps also why it is faster. While the treble melody comfortably sinks from the slight tension associated with the third degree to the tonal repose of the first degree, the bass, shadowing the melody a tenth below, moves from the tonic note down to the sixth degree, a position of considerable harmonic tension – hence the perceptible effort felt in this parallel displacement; cf. staff (Bass). Turning back to the

analogy of pressing a piece of cork under the water: it is no wonder that the melody returns, and returns quickly.

Turning to the upper melodic layer, it is crucially important to notice that the top notes of the nested gap/fill motions suggest a slow off-the-main-beat descending scale starting from e^2 – the strong-beat-realization $c\sharp^2$ in m. 4 of this implication is perceptibly delayed. The connection then seems to lead further down to b^1 ; cf. staff (2). You may even understand the motion from e^2 to $c\sharp^2$ in m. 4, shown on staff (3), as a quick replica of the preceding slow descent, reminding it of its duty to reach b^1 , as it were. This fast descent is itself strongly implied: its initial momentum derives from the ornamental appoggiatura, and as the following harmonic cliché bids, the six-four $c\sharp^2$ in turn forces the listener to expect the final b^1 .

The lower descent shown on staff (6) runs in parallel-thirds tandem with the lagging upper descent on staff (2), and these motions do not coincide until b^1 -over- $g\sharp^1$ at the very end of m. 4. Alternatively, if you prefer to take account of the returning a^1 - b^1 - $c\sharp^2$ ascent shown on staff (4), the two long-term falling motions share one note before parting company again. Both options are supported by the bass, running in parallel tenths with the lower right-hand descent: the bass returns upwards to a , but it does also, after this deflection, proceed down to e ; cf. staff (Bass). Adopting the bass as a model, the a^1 - b^1 - $c\sharp^2$ right-hand returning ascent may be regarded, and perhaps also heard, as a deflection on the overall descending route from $c\sharp^2$ towards $g\sharp^1$. The lagging upper right-hand descent is also supported by the falling-fourth a - e progression in the bass, a tandem motion producing parallel twelfths (i.e. consecutive fifths).

Before proceeding to the A^1 section of the theme, a caveat is needed: the description in terms of an upper and a lower melodic layer must not mislead the reader into thinking that there are somehow two independent melodic lines. An important point in the implicational reading being accounted for is how intimately the two layers are intertwined in order to make up one and only one melody.

There are genuine examples of melodies, or rather sequences of notes, that cannot but be heard in terms of two coexisting and yet (seemingly) independent melodic lines; some of Bach's instrumental melodies are cases in point. True melodic fission occurs when the intervals are large and/or

the tempo is fast. These conditions are not met with in the K. 331 theme, but it is likely that the sense of fission is to some extent enhanced by the stepwise motions of the upper and lower lines. In other words, the K. 331 theme may make up a borderline case between melodic fusion and fission.

The consequent and the AA¹ period

Turning to the A¹ section, the filling-in d² in m. 6 is as a matter of fact still delayed, but as listeners we have now got used to this somewhat stretched implication; cf. staff (3). The fast rising-return motion along the scale in m. 7 may include d² as an implied note, but due to the dynamic stress and the subdominant function this note concurrently or rather starts a descending motion implying the tonic note; cf. staves (4) and (3). The upper and lower slow descents issuing from e² and c_#², respectively, are now terminated on the tonic note as the preceding dominant notes b¹ and g_#¹ bid; cf. staves (2) and (6).

The crucial thing about the A¹ section is how the conspicuously quick returning motion from a¹ to c_#² in m. 7, cf. staff (4), changes the timetable for some of the implications. The fact that c_#² arrives already in the middle of m. 7, i.e. too early in comparison with the first section, has a normalizing effect. The second gap/fill implication of the upper layer is still stretched, but the realization is not more delayed than its immediate predecessor and less delayed than its model in the first section; cf. staff (3). And the last of the inherent set of rising thirds is not delayed at all since its top note turns up exactly when its immediate forerunners have made us expect it; cf. staff (5). Furthermore, the upper slow descent issuing from e² does not have to wait for its c_#²; cf. staff (2). When listening to the second section, it seems that the c_#² in m. 7 has a peculiar quality of being “right” – although it turns up as the result of a conspicuous hastening, and although it seems premature when compared with the corresponding note in the first section.

Taking account of the whole eight-bar A+A¹ period, we cannot but marvel at Mozart’s subtle strokes of temporal magic. To begin with, one should observe that all devices take place under the strict regime of the quarter-note-plus-eight-note rhythmic pattern permeating the music. If you adopt a quite natural, indeed almost inescapable, sub-surface mode of listening – while concurrently enjoying the sensuous surface qualities of the melody – you

will notice slow descents from $c\sharp^2$ and similar, lagging-behind descents from e^2 ; both motions proceed in tandem with the descending bass progression, itself an implication along the scale.

In m. 3 the lower descent is followed by a returning ascent proceeding twice as fast, a fact that is to some extent concealed by the iterated rhythmic pattern. But the hastening of the returning motion is insufficient and means that the last of the rising inherent thirds is stretched, and that the third note of the upper descent is delayed. Turning to the corresponding m. 7, the rhythmic surface pattern still persists, but the returning ascent $a^1-b^1-c\sharp^2$ is now twice as fast as the rising motion in m. 3, and four times faster than the immediately preceding $a^1-b^1-c\sharp^2$ descent in mm. 5–6. This is a quite drastic hastening of the melodic pace that no listener is likely to miss since it makes the second section seem slightly out of balance in a peculiar way when compared with the first section. But as already pointed out, the $c\sharp^2$ in the middle of m. 7 sounds “right”, although it arrives too early in a most manifest way. Yet it is exactly the premature quality of this note that brings the paradoxical effect that the delays in the first section, involving the last rising third and the upper descent, are eliminated in the second section.

The theme ticks steadily along, but the inner clockwork reveals several wheels of different size revolving at different speeds, and the antecedent and consequent emerge as strikingly different in this respect. The perceptibly hastened consequent features regularly paced realizations whereas the corresponding realizations in the antecedent are perceptibly delayed. This is already a quite odd state of affairs, but a further paradox is involved. The stretched implications of the antecedent precede the regular ones of the consequent, and yet we cannot but evaluate what happens in the consequent in the light of what we have just heard in the antecedent. This means that the regularized implicational relationships in the consequent are heard as deviations in relation to the antecedent.

Virtually all listeners are likely to hold that the consequent is somehow a little shorter than the antecedent, and they will also agree that it seems to be hastened to a point making the theme sound slightly imbalanced. And they are right since the $c\sharp^2$, recalled from the start of m. 4, appears already (i.e. “too early”) in the middle of m. 7. But it is actually the other way around: it is the antecedent that is lagging – its $c\sharp^2$ turns up “too late”. The antecedent.

i.e. the model, is arguably the deviating member of the period, but what we hear are the changes, the “deviations”, introduced in the consequent copy.

In addition, it may be argued that even the antecedent is imbalanced, that it deviates from a model, since its $a^1-b^1-c\sharp^2$ ascent is not stretched enough to match the preceding stepwise descent $c\sharp^2-b^1-a^1$. In terms of harmony and pitch motion the ascent equals the descent, but they are not commensurable in metric terms. The return to $c\sharp^2$ may be thought of as a hastened variant of the two-bar ascent of a hypothetical and completely regularized, “non-skew”, six-bar antecedent like the one shown in Ex. 27.

The middle section and beyond

The initial dotted motif in m. 9 holds out the prospect that a rising third will appear, but this implication is blocked by $f\sharp^2$, by the unexpected re-occurrence of the upper neighbour-note. A releasing $f\sharp^2-e^2$ motion, urged by the articulation of the motif ending m. 10, does show up, but only after a deflection taking the melody up to a^2 ; cf. staves (2) and (3). The very swift grace notes imply the top note a^2 , but they also open up a gap requiring a slower motion in the opposite direction; cf. staves (4) and (3).

The two triadic motions in m. 11 may be thought of as involving two nested gap/fill motions, cf. staff (4), but if the first half of m. 12 is included, the three motions also emerge as two intertwined upper neighbour-note motions, cf. staff (5). The final b^1 is implied for two reasons: it forms the resolution of the preceding six-four chord, and it fills in the conspicuous rising-third gap issuing from the dynamically prominent a^1 ; cf. staff (4).

The passage mm. 11–12 (and later on m. 17) stand out against the rest of the theme due to the fact that it comes close to a five-part chordal texture. Taking account of the additional voices in their capacity as generative events, the falling resolution of the six-four chord emerges as strongly implied. The uppermost voice does not participate, but otherwise the chord is produced in various ways by motions in the other voices: the $a^1-c\sharp^2$ gap is filled in by the b^1 , the a^1 introduced as an anticipated note is restated, the raised leading-note $d\sharp^1$ arrives at its goal, and so does the half-cadence $f\sharp-e$ motion in the bass.³¹

31 “Anticipated” is here to be understood as a purely technical term, referring to the cliché of prematurely introducing a dissonant note belonging to a following

So far staff (1) has not been commented upon since this implication extends beyond the first eight bars; indeed, it perhaps involves the entire theme. Meyer might have claimed that the melody of the first period forebodes that of the middle section. The note e^2 occurs two (or even three) times in mm. 1–8 but it merely slips downwards, and the listener may therefore feel that this note promises that it will turn up later on in a more substantial way, demonstrating that it has a melodic potential of its own. And this is exactly what happens in the middle section.

This extended implication may emerge as an unwarranted long shot, but it can be informally tested by undertaking two experiments requiring some musical introspection. Imagine that the theme had the middle section shown in Ex. 28. It sounds quite pleasant and it provides a contrast – and yet, wouldn't such a variant of the theme make for a certain dissatisfaction, for a feeling that something that should have occurred in the middle section has failed to show up?³² Or try the opposite situation: assume that mm. 1–8 of the theme had altogether avoided the note e^2 ; cf. Ex. 29. This variant turns out to be acceptable, too, but when the middle section (as Mozart

accented chord, a note that is then restated in the changed harmonic context as a consonance. Whereas “anticipations” in Meyer’s theory are prospective and refer to expectations entertained by the listener, “anticipation” in current sense refers to a note that actually turns up in the music and does so before it is due. But on second thoughts even conventional anticipations involve an element of expectation as well. The anticipation cliché in fact makes up a latent implication: we understand a certain unaccented dissonance as a generative event because we envisage the chord in which the note is presumably going to be restated as a consonance, and when the note turns up again as expected, it refers back to its dissonant origin, confirming that we understood the situation correctly. For a further discussion of the ramifications of the concept of ‘anticipation’ in music, a discussion using the K. 331 theme as the main example, cf. Bengt Edlund, “Categories and Types of Anticipation in Music. An Attempt at an Inventory” in *CASYS, International Journal of Computing Anticipatory Systems*, Vol. 4(1999), 191–208.

32 But otherwise this alternative middle section works reasonably well, perhaps because it eventually devotes itself to a^1 , a note that (excepting the solid cadence in m. 8) was just an unstable turning-point in mm. 3 and 7. In other words, this variant makes up for the fact that a^1 was not harmonized by a tonic chord in mm. 3 and 7 – also a kind of implication/realization effect, if you like.

wrote it) turns up, wouldn't it seem somewhat gratuitous, as a continuation lacking due preparation?³³

Anyway, when the theme starts from e^2 in m. 9, its tonal space opens upwards, a decisive and liberating expansive move in the music. Even if we did not consciously expect this change, it feels “right” – it is retroactively expected, even longed for – and it may make us reconsider the initial eight bars, harking back, and down, at them. The heightened re-start of the melody tries to reach the upper tonic note a^2 but fails to do so in a satisfactory way due to the unstable, second-inversion D-major harmonic support. Then three quite insistent e^2 's appear, making up a renewed and quite forceful generative event. But this effort comes to nothing; the $c\sharp^2$ – b^1 cadence in m. 12 is not a realization that matches the preceding ambition.

The implicative e^2 turns up again in m. 13; it may perhaps be heard as a provisional realization of the three insistent e^2 's in mm. 11–12 in spite of the intervening cadence. Then, as if remembering the defeat in m. 10, the “coda” again rushes upwards to reach a^2 , and again the attempt fails – this time by a hairbreadth: there is no confirming upper tonic note at the main accented position in m. 18.

The note e^2 , sometimes suggesting subtle aspirations, sometimes showing its manifest presence, might be called an implicational “drone” in the theme. The unstable subdominant a^2 in m. 10 may also be understood as a long-range, unconsummated generative event. A satisfactory tonic a^2 is demanded but it never turns up – all we get is the wrong-register final a^1 .

The concluding sections

Until the last half of m. 16, the most-likely-A-then-actually- A^1 section features the same implicational network as found in mm. 5–8, but the effect of mm. 13–16 is subtly different. The fact that A^1 has tacitly replaced A means that the hastening/regularization of the implicational pace that unexpectedly takes place in m. 15 – another “m. 3” should have turned

33 These two evaluation “experiments” are of course not conclusive – we cannot completely free ourselves from the fact that we have heard the K. 331 theme many times and have got used to the two-steps-upward relationship between the initial period and the middle section.

up – cannot be understood as a deviation from a just heard antecedent, as was m. 7 in relation to m. 3. Thus, to the sense of musical compression in m. 15 is added a sense of surprise deriving from the fact that the situation involves a formal deceit: the A¹-instead-of-A exchange of sections is discovered only after the fact.

Exemplifying Meyer's observation that deviations are most effective when occurring late in a melodic process, and especially when a melody is approaching its seemingly unavoidable end, Mozart replaces the given final note a¹ in m. 16 by a dissonant b¹ resolving upwards. This unusual resolution implies an accented c^{#2} since the eighth-note c^{#2} is concurrently heard as an unexpected resolution and as an anticipation; cf. staff (4).

Bar 17 brings a determined rise from c^{#2}, an ascent that surpasses e² and reaches a² just before the bar-line, a strongly implicative motion along the scale, incorporating the inherent rising third c^{#2}–e² from m. 1 as well as the rising second e²–f^{#2} from m. 9; cf. staff (3). But unlike the parallel implication in the bass safely reaching and bringing out e, cf. staff (Bass), the strongly expected realization of the rising ascent in the treble turns out to be provisional since it swiftly by-passes g^{#2}, and since the downbeat in m. 18 merely offers a six-four a¹. For this reason, and the following cadence to the root-supported a¹ notwithstanding, the sense of closure in m. 18 is fairly weak.

What happens in m. 17 may be described as a very bold deflection that delays – or rather permanently blocks – whatever implications that were active in m. 16. As to the first part of m. 16, b¹ of course implies the tonic note a¹, cf. staff (4) and staff (2), and so does the lower-layer g^{#1} of the slow descent, cf. staff (6). It is true that a stable a¹ does turn up closing m. 18. But is this note, being substantially delayed by two quite drastic deflections (first the rising resolution in m. 16 and then the vehement ascending melodic excursion in m. 17), really credible as a realization?

It is at any rate doubtful whether there are many listeners who are able to (or who want to) hear a continuation across these disruptions as the dashed b¹–b¹ slur on staff (2) indicates. The connection (if any) between the generative event in the first part of m. 16 and its very late realization (if any) in m. 18 seems rather to be a matter of association involving two quite dissimilar six-four clichés, as indicated by the upper dashed slur on staff (2). Alternatively, it might perhaps be argued that the implication started

from the six-four chord in m. 16 reaches its delayed realization with the inner-voice a^1 beginning m. 17 as shown on staff (6).

The idea of a radical disruption gains credibility if mm. 17–18 are taken to stand for an emphatic, curtailed variant of the first phrase of the theme rather than for a “coda”. In this light, m. 17 is not a deflection, and m. 18 does not bring a delayed realization of implications left over from the preceding A^1 section – the latter bar simply comes up with a surprising, wrong-register local cadence. This reading, leaving three possible implications unrealized, does of course not suggest that there is any last-moment imperfection in the music. Quite to the contrary, it attests to the ambiguity of mm. 16–18 and indicates that music may derive some of its most subtle effects from a clever use of discontinuity.

Considering finally the outcome of the implicational analysis at large, the tightness of the melodic construction of the theme is most striking: virtually every note of importance is engaged in at least one implication, and these connections involving expectation and realization are intricately interwoven. But however smart, few of these implications are spectacular in current sense – in fact, most of them are quite unobtrusive. Excepting the disruptive qualities associated with the “coda” and its entry, an impeccable and most ingenious continuity underlies this supple theme.

The insights gained from this study of how the network of implications works in Mozart’s melody can be generalized. Expectations together with glimpses of retrospection extend the narrow frame of the psychological present by holding out future events for our imagination and by making us remember past ones. Implication is one of the mechanisms by means of which music moulds our sense of time.

In a later chapter – after the presentation of Cooper & Meyer’s system for rhythmic analysis – we will turn back to the notion of implications when introducing Eugene Narmour’s revision and expansion of Meyer’s theory.

Rhythmic structure

The following account is based on the method for rhythmic analysis advanced by Grosvenor Cooper and Leonard B. Meyer. Their method is easy to apply, and if used sensitively it is also quite productive. *The Rhythmic Structure of Music* has been reprinted again and again,³⁴ which does not imply that their approach to musical rhythm has escaped criticism; cf. below. A particular advantage in the present context is that the K. 331 theme has been analysed by Meyer himself. Except for some additions and points of dissidence, the reading to be presented and explained conforms with his analysis.³⁵

Analysis in terms of accent and grouping

Two aspects of rhythm are crucial in C&M's system: the relative metric weight of the musical events and the way they are grouped. The accentual relationships and the rhythmic grouping are influenced by all and any element of the musical structure – durations, dynamic prominence, pitch, and articulation are important cues for rhythmic structure – and by their combined effects.

Basically, the locations and relative weights of the accents are determined by the notation. Time signatures, bar-lines, and beams indicate the metric structure – the 6/8 time of Mozart's theme, for instance, specifies that in each bar there are to be one main and one secondary accent, and six pulses subdivided into two units, each comprising three pulses. Metric signs are normative and tell us how to read and play the music. On “hypermetric” levels beyond the bar, however, the metre is not fixed, which means that the accentual relationships and the locations of the accents are influenced by the musical structure and by the interpretation.

Most often the various structural cues for accent agree with the metre as prescribed by the notation – in other words, the composer has chosen the time signature and drawn the bar-lines for very good reasons – and in such cases the metre could have done quite well without any metric indications

34 Grosvenor Cooper and L. B. Meyer, *The Rhythmic Structure of Music*, Chicago University Press 1960

35 Cf. pp. 26–43, in *Explaining Music*, Chicago University Press 1973

in the score – the inherent metre of the music has turned the notated metre more or less redundant. It sometimes happens that the structurally given accents challenge the notated ones, but once it has started, the notated metre is, and should be, quite resistant.

Even if, say, an upbeat is strongly boosted by the musical structure or brought out in the performance (which is quite common), it will not, and must not, turn into a downbeat – when called for it is the musician's duty to support the preceding (or following) strong event by suitable means. This applies, for instance, to syncopations: syncopated events are often structurally prominent as well as emphasized in performance, but no matter how prominent or emphasized, they cannot be allowed to emerge as accents. To prevent the listener from misunderstanding the metric structure, some kind of counter-emphasis must be given to the preceding event carrying the accent according to the notation.

But there are cases, for instance in the K. 331 theme, where the structure seems to gain the upper hand and should be allowed to suggest a dislocation of the accents.

Turning to the grouping of the events, it is not explicitly prescribed by the notation, which means that this aspect of rhythm to a great extent depends on how you understand and play the music.³⁶ But this does not imply that this crucially important part of the rhythmic structure is altogether subjective. C&M present a number of rules for how various properties of the musical structure are likely to affect grouping (and accent), and this means that you can most often arrive at a plausible analysis by rational means. The rules are grounded in psychological findings and common musical sense, and they can be informally corroborated by anyone who does not dismiss musical introspection. Fortunately, there is by and large a consensus when it comes to rhythmic grouping, but it cannot and should not be denied that an irreducible element of subjectivity is involved. To some extent rhythmic analysis does depend on how the analyst reads the score, which in turn is influenced by how he/she assumes that the music is to be played.

36 Contrary to what is often thought, articulation signs are not necessarily decisive for the rhythmic grouping.

Whereas metric units at lower levels, such as beats and bars, are by notational definition beginning-accented – at higher levels the main accents may also be found to “the right” in the units – there is no such restriction when it comes to rhythmic groups. This fact makes for a most important distinction, viz. that between beginning-accented groups, agreeing with the metric units, and non-conformant groups, featuring upbeats, i.e. end-accented and middle-accented groups.

In C&M’s analytic system, the core of which is to determine how the musical events are grouped, there are just five different groups. The trochee (–) and the dactyl (–) are beginning-accented, the iamb (–) and the anapaest (–) are end-accented, while the amphibrach (–) has a mid-position accent. The reason for this restriction is the dual claim that there can only be one accented event in a group, and that “groups” seemingly having more than two unaccented events can be analysed as two (or several) conjoined groups.³⁷ More or less uniform sequences of strong or weak beats do not form any groups at all.

The use of names and symbols deriving from classic literary metrics has been criticized on the ground that these designations were originally used when describing quantifying verse, i.e. verse in which the accents are strictly associated with durational emphases, with long syllables. This objection can be set aside, however. Literary metrics has for a long time employed these terms and symbols when dealing with verse having other cues for accent, complementing or replacing duration; in the prosody of many languages, accent is a matter of intensity and pitch as well as duration. This is obviously also the case in music – having even more cues for accent – and C&M make it quite clear that the causes of musical accent are multifarious.

It is essential to realize that accent, i.e. the phenomenal quality inherent in some musical events making them stand out as points of metric gravity, is not just a matter of stress (dynamic emphasis): stress is but one among several cues giving rise to a sense of accent. For this reason, the current terms “strong beat” and “weak beat” are potentially misleading.

37 The confinement to five groups is hardly an essential feature in C&M’s theory. If one does hear, say, three genuinely weak events followed by a downbeat, a (–) group is phenomenally given, and the configuration should be accepted in the analysis.

Rhythmic levels

Accentual relationships and rhythmic groups are to be found at many levels in music, and C&M's system for rhythmic analysis is hierarchic, although not in a very strict sense. As a consequence of the layered organization of rhythm, dactyls may be heard as trochees in which the final, unaccented events make up a lower-level trochee. Likewise, anapaests are sometimes dissociated into an initial lower-level trochee making up the first, unaccented part of a iamb. It should also be observed that dactyls and anapaests are somewhat unstable due to the fact that their last afterbeat and first upbeat, respectively, may be understood as members of the following and the preceding group at the same level.

The rhythmic hierarchy is limited. Groups made up of fast motions are doubtful because very short events are not rhythmically active. But short notes may still be pertinent for rhythm in virtue of their capacity of linking together rhythmically significant events. Very extended rhythmic groups are also questionable – and this upper limit is passed by C&M when they sometimes, apparently wanting to pursue their analyses to larger formats and to introduce cues of new kinds, deal with extended sections and even entire pieces.

Such huge patterns may be quite interesting, but the problem is that “rhythmic groups” spanning very large formats tend to emerge as matters of form. The study of rhythm turns into a study of formal functions, emphases, and proportions; the extended events do not really make up groups, and we are left with our often vague intuitions as to where the music may have its points of formal gravity. The appreciation of form in music engages our memory whereas rhythmic patterns, as currently understood, tend to reside in the “psychological present” – which may be considerably stretched when listening to music.

At low levels it is quite obvious that the vague term “event” refers to individual notes, but when dealing with higher rhythmic levels, it becomes less clear what the “events” are. Turning to analytic practice: where are the signs denoting accent and non-accent to be placed, and which notes do they include? Apparently, there are two options – either you keep to the notes already identified at the lower levels and treat these notes as core events representing several notes, or you think of “accentedness/non-accentedness”

as a property that can be distributed over several notes. It seems that there is no general way out of this dilemma, and the analyst has simply to follow his/her intuition. If (say) the state of accent seems extended, it is legitimate to take it down accordingly, stretching the sign or putting it at a suitable place among the pertinent notes. At very high, no-longer-rhythmic levels, this problem turns different since you will find that you are actually comparing locations of formal gravity – distinct or diffuse as the case may be – points of gravity often widely separated by intervening passages, preventing them from forming groups in any obvious way.

From a strictly hierarchical point of view, C&M's method has been criticized for including into the same group events belonging to several metric levels, or even events deriving from non-adjacent metric levels.³⁸ But this argument may be dismissed since we do in fact perceive rhythmic groups that are not strictly hierarchical. In practice as opposed to theory, then, we do not care about the metric levels of the events recruited to form a group. Hence it seems legitimate to accept hierarchically unorthodox groups when it comes to analyses that issue from, and try to describe, how rhythm is experienced.

Due to its persistently repeated "rhythm", the K. 331 theme does not give straightforward opportunities to demonstrate this alleged anomaly in C&M's system, but it may be rewritten so as to feature a group that cannot be captured by a strictly hierarchical approach. In Ex. 30 there is clearly an amphibrach group that will not be adequately described if it must be divided into two groups, properly keeping to just two adjacent metric levels. So never mind that the three events within this amphibrach belong to three different metric levels; the metrically unprivileged subdominant chord (with its mediating sixteenth-notes and its tendency to be slightly stressed) connects very tightly as an upbeat to the accented six-four chord, which in turn cannot be divorced from its weaker, afterbeat resolution.

Some music is characterized by its unequivocal and distinct rhythmic patterning; it seems to allow of only one option of grouping, and groups at different metric levels share the same points of demarcation. But quite

38 This criticism is advanced in Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music*, Cambridge, Mass. 1983, MIT Press, cf. pp. 26–27.

often the rhythmic structure turns out to be ambiguous, either because substantially different readings present themselves, or due to the fact that overlapping groups are very frequent which makes for a strong sense of rhythmic continuity. In the latter cases, it might sometimes be possible to determine the most prominent grouping option by making a distinction between dominant and latent groups.

Duration vs. emphasis

The competing influence of duration and dynamic emphasis (stress) is of particular importance in the analysis of rhythmic structure.

Firstly, we must keep in mind that dynamic emphasis is not just something that the musician adds to the music by stressing certain events: a number of structural factors also give rise to dynamic emphasis and potentially to accent. Secondly, both duration and dynamic emphasis are strong cues for metric accent: long and loud events seem accented, but a short note may emerge as accented if it is stressed (or emphasized by other means), or if it is granted a privileged position within the metric framework.

Turning to grouping and group demarcation, duration and dynamic emphasis may conflict with each other. A long note patently makes for group demarcation simply in virtue of the long temporal distance to the next note. A dynamically prominent note, on the other hand, tends to signal that a group is starting, irrespective of whether the emphasis occurs on an accented or an unaccented note. When a note is long as well as dynamically prominent, the situation becomes ambiguous: the stress seems to attract the following distant note, which would otherwise start the next group. But from case to case, which factor is the strongest: temporal distance or dynamical attraction?

This conflict brings an important consequence. Unless counteracted by dynamic emphases (whether inherent in the score or supplied by the musician), durational differentiation in the notated structure means that end-accented groups are favoured: iambs tend to dominate over trochees, and anapaests are heard at the cost of dactyls. But the musician may tip the balance over to beginning-accented groups by playing “metrically”, by bringing out the left-accented metric units so as to support trochaic and dactylic rhythmic grouping.

Since durational differentiation is a very important property of the musical structure, rhythmic grouping is intimately linked up with the prevailing time signature. Trochees and iambs are naturally at home in duple metres whereas dactyls, anapaests, and amphibrachs naturally arise in triple metres. But durational differentiation may make for patent trochees and iambs in triple metre – as is illustrated by the K. 331 theme – and the same mechanism applies when it comes to dactyls, anapaests, and amphibrachs in duple metre.

It is essential to observe that C&M's system presupposes that the analyst closely follows the course of the music; rhythmic groups, and particularly groups at higher levels, take shape gradually. This means that, in analogy with melodies, the rhythmic structure gives rise to expectations as well as re-evaluations. A fairly common situation is that an event, first taken to be metrically strong, seems to be weak when later on an even more accented event turns up. The opposite case – involving a weak event retrospectively emerging as strong since a more accented event failed to occur – is also possible.

The rhythmic structure of the K. 331 theme is shown in Ex. 31. Brackets below the – and ∪ signs show dominant groups; brackets above them indicate latent groups. The sign (˘) is used for dynamic emphases, whether prescribed by the notation, inherent in the structure, or likely to be added by the musician responding to ingrained musical conventions; the sign (˙) indicates counterbalancing stresses. The composite –/∪ sign refers to the fact that a strong event is retrospectively understood as weak.

The bulk of the analysis is to be found above the right-hand staff and, starting with the primary level, the levels are numbered 1–4. The grouping at the inferior level is given under the right-hand staff. The analysis takes account of the melody together with its harmonic support; when the rhythmic structure of the left hand is analysed separately, the symbols appear below the lower staff.

Rhythm at the inferior level

Due to the temporal proximity to the next note, the sixteenth note in m. 1 gives rise to an iamb that nobody is likely to pay attention to (unless the music is played very slowly). Yet this short note is rhythmically important

since it serves as a link between the two $c\sharp^2$'s, a link establishing a patent trochaic group at the primary level. Take the d^2 away, and you will notice how the second $c\sharp^2$ "wants" to join the next note, the temporally more proximate e^2 , suggesting a iambic group despite the demarcation caused by the melodic skip, and no matter the fact that repeated notes otherwise tend to belong to the same group.

Although it cannot be established with certainty whether Mozart wanted three-note or two-note slurs, and although the actual physical difference between the two ways of playing may be very slight, we will discuss the effect of the articulation. In either case m. 1 (and then m. 2) starts with a trochee at the primary level, but depending on the articulation it will take on a different character. A three-note slur will suggest a dactylic touch whereas if you play a two-note slur, an initial trochee within the primary-level trochee will come to the fore. The latter articulation, giving rise to a third note heard as an afterbeat, seems preferable not only since it may be stylistically more correct, but since it brings out the similarity, the shared element of repeated notes, between the two halves of the bars.

The sixteenth-note appoggiatura motions in mm. 4 and 18 make up trochees. Although they do not themselves attach to the following downbeat, they invite the pianist to add a slight dynamic emphasis when playing the first dissonant note, which gives rise to a sense of an upbeat at the primary level.

The very quick grace notes in m. 10 are of course to be played on the beat, and since the main note a^2 will be quite stressed and slightly displaced, some counter-emphasis on $f\sharp^2$ seems due. The kindred $(f\sharp^2-)g\sharp^2-a^2$ motion at the very end of m. 17 makes for an upbeat at both the inferior and the primary level, but these upbeats do not have any downbeat to connect to due to the following octave leap downwards. The wrong-register, accented a^1 will emerge as an isolated event unless the pianist, taking full account of the fact that the *forte* mark in m. 17 is not cancelled in m. 18, makes a determined connecting effort. (It should be added that closing the theme with a sudden *piano*, i.e. with a kind of parenthetical last bar, is not necessarily a bad idea, although it may run contrary to Mozart's intentions.)

The initial period

Due to the connecting sixteenth-note d^2 the theme starts with a quite stable trochee at the primary level (1), and pursuing the note-repeating essence of the initial motif, the two e^2 's tend to form a further long-short trochee. But there are several conflicting factors at work in the second part of m. 1. The repeated e^2 's make for group cohesion, i.e. for a trochee, and the preceding melodic skip $c\sharp^2-e^2$ separates the two trochees in m. 1 from each other. On the other hand, the unequal note values of the second group have two effects: the trochee becomes stretched (and hence weakened) while the temporal proximity between $c\sharp^2$ and e^2 and particularly between e^2 and b^1 suggests overlapping, more compact iambs. Two competing grouping options present themselves in m. 1 (and m. 2), but it seems most apt to say that there are dominant trochees and latent iambs.

The downward skips e^2-b^1 and then d^2-a^1 may be large enough to prevent iambs straddling the bar-lines – unless the skips are slurred as prescribed in Max Reger's orchestration of the theme, and as can be seen in corrupt editions of K. 331. The situation is very delicate, and a pianist can favour the connecting iambs either by playing the second e^2 and d^2 somewhat late or by bringing them out as active, i.e. early and emphatic, upbeats. But such connecting iambs would blur the otherwise clear demarcation between the phrases, and to some people this is likely to emerge as stylistically questionable. Turning to practice, nothing prevents the pianist from suggesting the inherent sense of rhythmic ambiguity: the strict trochees might be softened by a touch of iambic sensuality – it may be enough to connect the bars by means of late shifts of the sustaining pedal.

Despite the pairs of repeated notes in m. 3, but due to the fact that there are now rising steps instead of skips, the iambic organization may seem to take over, gradually relegating the temporally stretched trochees to latent status. It is up to the pianist to give in to the iambs or to maintain the trochees. This conversion to metrically non-conformant grouping is manifested – and concurrently undone – by the final, middle-accented amphibrach group in m. 4.

The difference between mm. 3–4 and m. 7 involves a rhythmic shift effecting a crucial change. The occurrence of $c\sharp^2$ already at the second beat of m. 7 is associated with a sense of arrival making for a quite patent

iamb leading up to this note.³⁹ The following cadence presents an extended, composite group, tightly held together by three overlapping patterns. The stressed subdominant starts a iamb closely joined with the trochee of the six-four-chord *appoggiatura*, which in turn overlaps with a dominant-to-tonic iamb.

Turning to level (2), involving the accentual relationships and the rhythmic grouping within the bars, m. 1 features a subtle sense of ambiguity. Whereas in m. 1 the shadow melody in the bass, proceeding from the stability of the root position to first-inversion instability, is clearly trochaic, the principal melody in the treble – when heard alone – is rather understood as iambic since the rhythmically active neighbour-note motif has the quality of an upbeat heading for the long and potentially accented e^2 . It seems, however, that virtually all pianists subdue this metrically displaced iamb having its accent in the middle of the bar; i.e. they adjust the melody to the trochee in the bass voice by underscoring the initial $c\sharp^2$ with a slight counter-emphasis, thus favouring the otherwise latent trochaic grouping. In m. 2, featuring only chords in inversion, this ambiguity is gone.

Bars 3 and 4 are both trochaic – the arrival at the root-position tonic chord in m. 4 seems to carry more metric weight than the cadential six-four chord.⁴⁰ The dominant harmony of the second part of m. 3 makes for a latent iambic group overlapping the demarcation between the two trochees, thus giving rise to a composite rhythmic pattern extending over two bars.

The second half of the consequent presents an altogether different picture. The too-early, emphatic arrival at $c\sharp^2$ emerges as a quite strong accent that retrospectively turns a^1 , initially heard as the main accent of m. 7, into a relatively weak event. The metric point of gravity has been dislocated; there seems to be a virtual bar-line before $c\sharp^2$ and consequently another one before the final tonic chord in m. 8 as well, an effect that the pianist had better not to counteract. Starting with the subdominant chord in m. 7, the consequent closes with an anapaest covering the composite grouping at

39 The middle-of-the-bar $c\sharp^2$ is only relatively unexpected since its early arrival does mean a deviation from what happened in the antecedent, and since, on the other hand, the immediately preceding eighth-note b^1 indicates that the tonic chord is likely to occur prematurely.

40 Otherwise put: stressing the six-four chord sounds pedantic.

the primary level. Its upbeat is stressed, and the six-four chord, nominally occupying the most accented position in m. 8, gives in to the closing root-position tonic chord. In other words, the six-four chord comes too soon after the strong accent on $c\sharp^2$ to emerge as a main accent.

The fact that m. 8 closes with a mid-bar main accent means that when playing the repeat, the music is forced to start anew with a closely juxtaposed main accent, an effect that is as peculiar as it is fresh. Unless one repeats m. 1 by giving its initial $c\sharp^2$ a firm downbeat quality as becomes the start of a level (2) trochee, the subdued displaced iamb might easily gain the upper hand – which would in a most unfortunate way change m. 1 by presenting its middle-of-the-bar e^2 as a main accent.

Indeed, there may be amateur pianists who unthinkingly and quite radically avoid the discomfort caused by the closely juxtaposed main downbeats by postponing the start of m. 1, by simply adding half-a-bar of silence after m. 8. However wrong this is, it would have sounded all right if Mozart had really made us believe that there *is* a bar-line just before the final A-major chord; cf. Ex. 32. A similar rhythmic pitfall threatens when proceeding to m. 9, but for harmonic reasons the second part of this bar is not suitable for and cannot be played as a downbeat.

At level (3) dealing with pairs of bars, m. 1 is understood as a model phrase followed by its sequenced copy, and hence mm. 1–2 make up a trochee. The two bars closing the antecedent bring a iamb, or perhaps an amphibrach with an extended, one-bar upbeat; in any case the main accent falls on the root-supported $c\sharp^2$ starting m. 4.

In the corresponding passage in the consequent the root-supported $c\sharp^2$ in m. 7 will yield to the final tonic chord; hence the two-bar iamb.

When turning to level (4), where the antecedent and the consequent make up the two units to be studied, the analysis leaves the rhythmic domain. The start from the tonic in m. 1 emerges as more important than the return to it in m. 4, and also as more important than the off-off-the-main-beat final dominant, but these widely distant events do not form a group. In mm. 5–8, the determined cadence to the tonic appears to outweigh the starting tonic (which we have heard before), an impression that may partly be due to the fact that the final tonic is highlighted by being a metrically displaced main accent.

The middle section

The contrasting B-section begins with two trochees at level (1), but this time the stepwise motion in the middle of m. 9 clearly makes for an overlapping iamb. The iambic option will probably be favoured – unlike m. 1 with its rising third, m. 9 encourages the pianist to connect the trochaic groups. Mediated by the grace-notes, a further connecting iamb leads to the top note a^2 that starts the first of two dactyls with emphasized initial notes – in m. 10 the melody adjusts to the dactylic patterning of the left-hand accompaniment figuration introduced in the preceding bar. Due to the $f\sharp^2$ – e^2 articulation slur turning the second note into an offshoot from the downbeat, the last dactyl in m. 10 may be heard as a trochee.

The sense of trochees competes with that of dactyls in mm. 11–12, but there is also a further, concurrent option: the wedges at the last eighth-notes of each metric unit suggest slight dynamic increments, making for latent upbeats. The dactyls resist this tendency until the firm dynamic emphasis associated with the altered chord turns the third event in m. 12 into the upbeat of an amphibrach – and until the rising, demarcating leap is reduced to just a third.

At level (2) both m. 9 and 10 are trochaic; the initial e^2 may need some counter-emphasis due to the expansive quality of the weak member of the group. The iterated figuration in the second part of m. 11 brings a first-position dominant chord, serving as a neighbour sonority, which makes for a trochee. The pattern in m. 12 would also have been trochaic if the emphatic arrival at the six-four chord had not outweighed the tonic chord at the main beat; this bar will retrospectively be understood as a displaced iamb. Bars 11–12 are linked by a dominant-to-tonic latent iamb. But due to the cumulative nature of mm. 11–12, it is also possible to skip level (2) in the analysis.

Level (3) is made up of two tightly integrated rhythmic structures. The culminating insistence on the second-inversion subdominant in m. 10 is quite conspicuous, and yet it does not amount to a displaced accent. This prolonged, quasi-syncopated neighbour-note chord should rather be thought of as a fusion of two afterbeats, and hence the resulting group is not a “falling paeon”, but a dactyl with a peculiarly lengthened, and eventually emphasized, first afterbeat.

Since the initial accent is retrospectively relegated to unaccented status, bars 11–12 make up an extended end-accented rhythmic structure, featuring three similar weak beats issuing into a strong accent. This passage represents a genuine exception to C&M's rule that only five different rhythmic groups are needed in rhythmic analysis; the proper designation, reflecting the sense of accumulation involved in these two bars, is a "rising paeon". Alternatively, the structure may be regarded as a iamb with a prolonged upbeat, but this is less convincing since the three triadic motifs emerge as independent rhythmic impulses.

Proceeding to level (4), it appears that the start from the tonic topped by e^2 in m. 9 is more prominent than the restated e^2 in m. 11, and also more important than the cadence to the dominant in m. 12 with its last-moment fall to b^1 . Hence, the formal (rather than rhythmic) pattern is beginning-accented.

The concluding sections

Turning to the rhythmic patterning at level (1) within the final three bars of the theme, m. 17 is strongly attached to m. 16 by a very tight chain made up of trochees overlapped by latent iambs. The afterbeat resolving upwards, being concurrently an anticipating upbeat, is likely to be emphasized in performance. On the other hand, from the subdominant chord in m. 17 on, the rhythmic structure is all the more fragmented. The would-be upbeat is precariously attached across the bar-line due to the leap downwards, and the main, first-beat accent in m. 18 is only latently connected to the following weak event, coming up with a quite odd, and quite active resolution of the six-four chord. Due to the sixteenth-notes and the penultimate dominant the coda closes with a patent iamb.

At level (2) the group beginning with the stressed subdominant in m. 15 seems to be stretched all the way to the first chord of m. 17. As a consequence of this, the group turns out to be another rising paeon. Just as in m. 8, the six-four chord beginning m. 16 is retrospectively downgraded, and when the dominant/tonic clash occurs at the second beat instead of the expected tonic, the postponed strong accent due at this moment is delayed once again until the root-position *forte* chord starting m. 17, an event that of course also serves as the initial accent

of the next group. The rising paeon may perhaps also be understood as two iambs.

The dual effect of this construction is that two prominent accents, that of the dominant/tonic clash and the tonic, are juxtaposed at the formal juncture, and that the virtual dislocation of the bar-lines in mm. 15 and 16 is drastically corrected at the start of m. 17. (No amateur pianist is likely to insert half-a-bar of extra silence after m. 18 when turning back to m. 9.) Bar 17, starting with a firm root-position tonic chord, is obviously a trochee, whereas in m. 18 the mid-bar final tonic, its inconclusive quality notwithstanding, is likely to outweigh the unstable six-four chord at the first beat – the result is a displaced iamb.

At level (3), the rising paeon on level (2) is subsumed under an extended anapaest, featuring two re-evaluated and displaced strong events as up-beats. The grouping within the “coda” is trochaic rather than iambic since the emphatic start in m. 17 outweighs the inconspicuous cadence in m. 18.

There is no level (4) in the coda, having just two bars, but in the preceding A-then-A¹ section the resuming beginning emerges as more important than the undermined cadence in m. 16.

Top-level rhythm/metre

Considering finally the highest-level metric make-up, an attempt will be made to determine the relative weights of the sections.

Taking account of endings rather than starts, the analysis on level (5) indicates that the consequent emphatically issuing into the tonic prevails over the antecedent transiently settling on the dominant. As to the three formal constituents after the double-bar, the cadence to the dominant in m. 12, and the out-of-the-way final close in the tonic emerge as subordinate to the peculiar cadence in m. 16 which, when evaluated at this distance, leads quite demonstratively to the tonic at the beginning of m. 17, an event that is both closing and starting.

Turning to the ultimate level (6) having but three constituents, it seems intuitively more pertinent to compare beginnings rather than endings. The outer parts issuing from $c\sharp^2$ outweigh the “developmental” middle part starting from e^2 , which nevertheless carries a sense of formal emphasis. The “recapitulation” part of the theme, urged by the middle section functioning

as a kind of formal upbeat, eventually claims priority at the expense of the “exposition”.

(5) A A1 B A1 c

 ~ - ~ - ~

(6) A B A1

 - ~ -
 ~ -

Concluding observations and remarks

In m. 1 there is a conflict between the treble and the bass, but it appears that the first part of m. 1 is more accented than its second part. The sense of a high-level, displaced accent at the mid-bar $c\sharp^2$ in m. 7 persists at higher levels, causing a perceptible metric disruption in the theme. In bars 9–10, the extended first afterbeat of the two-bar dactyl turns out to be more or less uniformly unaccented, no matter how emphatic the second-inversion subdominant may seem. A corresponding observation applies to the long upbeat of the following iamb – to the extent that mm. 11–12 are heard as a iamb at all, and not as a rising paeon.

In principle, beginning-accented grouping may still have been the stylistic norm in Mozart’s days, but throughout the theme the primary-level trochees are challenged by latent or even dominant iambs. This tendency comes to the fore especially in mm. 3, 7, and 15; in mm. 11–12 the otherwise quite stable dactyls almost lose their final afterbeats. As a result, the virtually all-pervading quarter-plus-eighth-note durational pattern becomes flexible and at times subtly ambiguous.

Towards the ends of the sections – when the harmonic rhythm turns more dense – overlapping rhythmic groups give rise to coherent aggregates making for composite groups that bring about large-scale points of gravity suggesting formal closure. The theme also illustrates how the location of the metric accents may shift at various rhythmic levels. In one case the shift is radical enough to cause a virtual displacement of the bar-line – what happens in m. 7 (and then in m. 15) is an effect of the ingenious manipulation of the listeners’ expectations, as described in the chapter on melodic implications.

It seems that the harmony is often a decisive factor. The impression of a more or less evenly distributed state of non-accent seems to depend on whether there is a sense of stasis. When the harmony is by and large static as in mm. 9–10, or circular as in mm. 11–12, the metric quality is prolonged as well.

The picture of the rhythmic structure in Ex. 31 is so complex that one may wonder whether anyone can really experience the music in this way when just listening to it. Probably not, but listeners are likely to be quite aware of what happens at least at the primary level. In addition, it seems that we are able to respond to some of the subtleties at higher levels as well, such as the delicate balance between the sense of trochee and iamb in m. 1, the apparent shift of bar-line position in m. 7, the intricate two-bar groups making the middle section stand out, and the boldly disruptive and yet seamlessly continuous transition to the “coda”.

Music cognition

In his two volumes on melodic cognition, Eugene Narmour issues from L. B. Meyer's theory of melodic implication, developing it into a strict and comprehensive system based on available empirical research. His I-R model accounts for how learned schemata impinge on our unmediated sensory expectations, and for how events heard as more salient than others give rise to layered implications and eventually to bottom/up melodic hierarchies.⁴¹

The sense of 'bottom/up' and 'top/down' in Narmour's thinking is at variance with how these directions of musical understanding are used in Schenkerian discourses. The particulars of the music are not adjusted to any theoretically derived, preordained structure, coming "from above" – ultimately from the laws of tonal music – and bringing imperative consequences for how the music is to be understood. According to Narmour, the expectations evoked by incoming perceptual data are immediately and constantly accommodated to the listener's prior musical experience, whether stemming from his/her encounters with similar musical situations or deriving from already heard parts of the work itself. Otherwise put, these acquired schemata provide the listener with a modifying set of expectations – stylistic expectations in a general sense. To understand Narmour's theory properly, the notions of 'bottom/up' and 'top/down', referring to the relationship between the details and the whole, must be complemented with the idea of perceptual and learned data, the two sources of the listener's input.

It is impossible in this context to present and explain Narmour's theory in all its diversity and complexity.⁴² In what follows, the main premises and workings of his "Implication-Realization Model" will be succinctly

41 Eugene Narmour, *The Analysis and Cognition of Basic Melodic Structures. The Implication-Realization Model*, University of Chicago Press, 1990, and *The Analysis and Cognition of Melodic Complexity. The Implication-Realization Model*, University of Chicago Press, 1992. Since then his I-R Model has been developed further, introducing a new set of symbols, incorporating all aspects of the music, and updating the empirical basis for the theory; cf. "Toward a Unified Theory of the I-R Model (Part I): Parametric Scales and Their Analogically Isomorphic Structures", *Music Perception* 33(2015), 32–69; Part II is forthcoming.

42 For a strict and short presentation of the basic ideas of the theory, cf. the first chapter in Narmour (1992). A reasoned introduction is to be found in "The

accounted for and then applied to Mozart's theme. I am proud to present the analysis that Professor Narmour has provided for publication in this book, a generosity for which I am deeply grateful.

Narmour's Implication-Realization (I-R) Model

Basically, our cognition of melodies – melody is here to be understood as an element that integrates all relevant aspects of the musical structure – is a matter of input in terms of three *Gestalt* laws – common direction, similarity, and proximity – laws that, being part and parcel of our perceptual apparatus, work automatically beyond voluntary control. Incoming notes are immediately “understood” as pregnant with a certain continuation: already two notes imply a third note. Unawares we anticipate the next note, we “know” its direction in relation to the preceding notes – its pitch, and often also its moment of occurrence. But it may of course happen that the next note does not turn out (quite) as expected: a *reversal* (in some respect) has taken place, and the new situation makes for a revision as to the future course of the melody.

An implied sequence of notes may emerge as a more or less closed structure, but more often than not such sequences seamlessly make up larger melodic aggregates. The final note of a sequence may concurrently be the first of the following one, or two or several notes may be shared, forming combinations or chains (when several sequences are involved).

Certain notes within the melodic flux – such as the starting or terminating notes of implicative sequences/aggregates – are to various extent preserved in our short-time memory. Depending on the degree of closure involved, these notes either give rise to *articulations* within a higher melodic layer, or are *transformed* so as to enter into relationships with other preserved notes, thus forming a higher-level implication. In this sense, then, there is an evolving bottom/up aspect in music listening, but the idea of top/down hierarchies in Schenkerian sense is alien to the I-R theory.

Melody is at the core of Narmour's approach to analysis, but it must be kept in mind that he assigns great importance to parameters other than pitch, parameters that decisively influence the melodic implications.

Top-Down and Bottom-Up Systems of Musical Implication: Building on Meyer's Theory of Emotional Syntax”, *Music Perception*, 9(1991), 1–26.

Factors such as harmony (h), consonance/dissonance (x), metric accent (b), and duration (d) are crucial for low-level as well as emerging higher-level melodic implications. Events effecting harmonic stability and/or metric accent give rise to closure and articulation/transformation, and so do shifts from short to long note values.

It should be observed that these (and many other) factors are often in conflict with each other, making for various degrees of closure – or, reversing the perspective, various degrees of continuity, i.e. implicative strength. Rising motions, in literal or transferred sense, tend to be associated with stronger implicative effects than falling ones.

It is of paramount importance to observe that in addition to presenting themselves as prospective phenomena holding out the possibility of a certain realization, I-R connections often emerge retrospectively – only the realization makes us understand prior events as implicative.

Narmour acknowledges a few “primary archetypes”. A *process* derives from (sufficient) sameness between the notes in terms of interval and direction, while a *reversal* is predicated on (sufficient) differentiation; *duplication* refers to iterated notes. Exact (or near) *registral return* amounts to a similarity relationship between the initial and the final note of a motion. The *dyad* is a two-note configuration denying implication; the *monad* is a note that does not generate any implication.

To make the picture of the I-R system complete, it should be mentioned that Narmour has subsequently extended his theory – the notion of implications has been transferred to other domains than melody in order to arrive at an integral account of music cognition.

But music is not just any stream of auditory sensations. It is a cultural artefact, and as (more or less experienced and attentive) listeners we have access to its stylistic constants – “stylistic” is to be understood in a most comprehensive sense. Whether the musical situation evokes an impression of a particular kind of tonality, makes us recognize stylistic conventions in current sense (extraopus style constants, xs), or actualizes memories of musical formulations previously imprinted while listening to a particular work (intraopus style constants, os), we are able to infer what “should” happen on the basis of prior learning. These stylistic fixtures influence the raw, *Gestalt* proto-implications incessantly presenting themselves as we

listen – inhibiting them, postponing their realizations, making for transformations to higher levels, forcing us to re-evaluate what has been heard.

Gaps followed by a filling-in-motion (i.e. reversals involving a change in direction as well as a shift from a larger interval to smaller ones) are very common melodic configurations, seemingly functioning as “raw” implications. But since we have heard gaps so often, they tend to work as stylistic constants. What counts as a melodic gap – and generally what is to be taken as a small or large interval when dealing with melodic implications – is a matter of style, but intervals exceeding a fourth usually function as large intervals.

The stylistic component of music cognition explains why a certain piece of music may give rise to different experiences. Some people have a good musical memory and/or a broad musical experience, enabling them to recognize musical formulations within the work or outside it, and they are likely to base expectations on these memories, while others possess this ability of comparative listening to a lesser degree. Such differences cannot but change the balance between the perceptual I-R input and the activated stylistic information, cannot but alter the ways in which the individual listener makes use of his/her acquired resources. To some people, the resolution of (say) a six-four chord is like an open book, to others it may still have a sense of turning a page.

As has already been made clear, Narmour is sceptical of strictly hierarchical, systematic top/down descriptions of music, and advocates stylistically controlled bottom-up derivation of higher levels. This does not mean, however, that listening emerges as a unidirectional process. The presence of large-scale registral-return motions and retrospective implications means that the I-R model allows of non-contiguous relationships, that it opens up for understanding musical structure in terms of associative networks.

Melodic implications

How the I-R model works when applied to a melody will be apparent when turning to Narmour’s analysis of the K. 331 theme; Ex. 33. The analysis and the symbols used represent the latest stage of the I-R theory.⁴³ Since

43 It is of great interest to study Narmour’s observations in an earlier essay, in which the Mozart theme serves as the main example: “Some Major Theoretical

the initial four bars are crowded with implicative symbols, some (perhaps not immediately apparent) long-term I-R connections are saved until mm. 5–8 and 13–16.

Conceiving of I-R analysis as merely a method for studying melodies is not true since Narmour has, as already mentioned, also devoted himself to incorporating other elements – harmony, rhythm, dynamics, register, timbre, etc. – into a comprehensive, multidimensional model of music cognition. Ex. 33a, comprising just the first four bars of the theme, shows how the element of harmony is brought in, but also how articulations and transformations give rise to a bottom/up quasi-hierarchical representation of the melody in terms of its retained notes.

Before presenting the I-R analysis, the implication symbols must be explained:

D = duplication, i.e. repeated notes

P = ascending process

P = descending process

PT = ascending discontinuous process

PT = descending discontinuous process

R = down/up reversal

R = up/down reversal

(Obviously, *italics* specify falling motions.)

Parentheses () signify retrospective I-R units.

o refer to same-sized intervals

~ refer to similarly-sized intervals

+ specify reversals from small to larger interval

– specify reversals from large to smaller interval

Underlined/doubly-underlined letters denote motions starting/ending with repeated notes.

The first two bars are connected by a melodic gap opened up by the falling fourth e^2-b^1 , holding out the prospect of a filling-in stepwise rise. But this implication is likely to be blocked by the immediate recognition of the

neighbour-note motif, which in turn makes us expect that the second bar will make up a transposed replica of the first. The situation is also influenced by the pianist's way of playing the first note of the skip – if the e^2 emerges as an upbeat, the listener is more likely to hear an implicative gap. Turning to the next d^2-a^1 falling fourth, it is probably not understood as implicative due to what happened after its e^2-b^1 predecessor. But this time the gap-filling reversal is unhampered, and a gap/fill implication will emerge retrospectively. The rising process leads all the way to the downbeat $c\sharp^2$, a stable, closing event in terms of both metre, duration, and harmony. In m. 4 the two falling motions are urged by their initial appoggiatura dissonances; the length of the $c\sharp^2$ would make for closure, but this effect is undermined by the six-four chord, a stylistic fixture demanding a descending resolution to b^1 . Considering the entire antecedent, the process in mm. 1–3, taking us slowly down to a^1 , is linked with a faster process returning to $c\sharp^2$.

The I-R structure of the consequent is bound to be different in some crucial respects. This is due to the fact that mm. 5–8 *are* different from mm. 1–4, of course, but also to the fact that the antecedent has just been heard. This time the listener is more likely to notice the presence of a descending process, starting from e^2 and made up of harmonically less stable second-beat notes, and proceeding in delayed tandem with the first-beat falling process issuing from $c\sharp^2$. Alternatively or concurrently the overlapping registral-return motions make for an implicative zigzag sequence. (It should be observed that this pattern will emerge irrespective of whether the falling fourths open up gaps to be filled.)

The I-R analysis sheds light on the question of whether the core passage of the theme brings a sense of bilinearity. The falling process from e^2 complementing the falling then rising process issuing from and then returning to $c\sharp^2$, as well as the sequence of overlapping registral-return motions, indicate the presence of dual structural connections. This observation is confirmed in m. 4 where an alto voice turns up, producing a counterpoint in terms of parallel thirds, and introducing a melodic line in its own (secondary) right.

The fact that mm. 9–10 bring an exact registral-return motion, $e^2-f\sharp^2-e^2$, is overridden by the articulative effect of the emphatic top note a^2 . Bars 11–12 present repeated triadic motions, and this passage can be heard both as three falling processes or as three reversals, of which the last, announced by the altered chord, issues into a six-four appoggiatura.

Whether there is a sense of melodic continuity across the bar-line in mm. 17/18 in spite of the octave leap down to a¹ (and notwithstanding the slur ending already at a²) depends on the interpretation. A sudden *piano* in m. 18 makes for interruption and a parenthetical last bar, whereas keeping to the *forte* (as the notation suggests) turns the a¹-instead-of-a² into a drastic reversal within the phrase.

What is shown in Ex. 33 is the entire I-R “machinery” of the melody, and the analysis makes up a demonstration of what might go on in the mind of an experienced and attentive first-time listener.

But we are not always and unconditionally aware of all these melodic tendencies – while making for continuity, the effect of some of them may be more or less subliminal. Very fast implicative motions tend to have a retrospective quality simply because we only manage to pick them up after the fact – the quickly rising grace-notes in m. 10 is a case in point. And as the music goes on, some motions emerge as crucially important while others are relegated to the musical undergrowth or are just dimly suspected, which does not alter the fact that they make up the necessary substrate for what we actually take account of.

The I-R structure is also flexible in the sense that the priorities within the web of constituent motions are subject to change, will undergo changes depending on the listener’s musical competence and on how many times he/she has heard the theme. The “ideal” listener (as always a phantom) is not a person who is constantly in command of the complete map in all its details, but one who knows how to intuitively navigate in an ever-changing musical landscape.

Incoming events are likely to be processed differently when the same sequence of events is heard again, and since the K. 331 theme has many iterated formulations as well as recurring passages and double repeats, some I-R connections are heard quite a few times. This redundancy of information means that some connections, that are less likely to be noticed the first time, or are only subliminally effective when first listening to a certain passage, may emerge as important at the next opportunity. Conversely, and reducing the burden on the listener’s attention, some motions initially heard as implicative are likely to recede into the background in favour of others when passages recur or sections are repeated.

Three examples may illustrate this point. Already when m. 2 turns up, the neighbour-note figuration as well as the duplicated notes have lost some of their interest, paving the way for the higher-level rising third, an inherent motion that was perhaps not in focus when listening to m. 1. In the antecedent the upper connection descending from e^2 might have escaped us, but it has a better chance to be picked up in the consequent. And when encountering mm. 1–4, we perhaps missed the extended $c\sharp^2-a^1-c\sharp^2$ registral-return motion – it is patently fed by lower-level I-R connections, but they are likely to steal some attention. Subsequently, when mm. 5–7 are presented, the short-range motions tend to emerge as less important, giving us an opportunity to appreciate the overall falling/rising tendency of the melody. Likewise, what emerges as the most important I-R connections depends on the tempo.

Imagine that the theme is played *molto adagio*. This means that the minor second starting m. 1 may attract some (undeserved) interest in virtue of beginning what seems to be a rising process, a melodic impulse that is immediately thwarted when the exact return of the neighbour-note motion is completed. The ascending $c\sharp^2-e^2$ third may be heard as well, but some of its implicative power is lost due to its slow presentation. If the tempo is raised to *lento*, the events within the first half of m. 1 tend to function as reminders helping us to understand m. 2, which (not very surprisingly) also brings a rising third, following up the one that was already noticed in m. 1.

At the other side of Mozart's *Andantino*, imagine a *quasi allegro* rendering of the theme. Now the inherent rising thirds in mm. 1–2 are likely to have waned as separate events, giving way for the zigzag pattern of intertwined registral-return motions. And the falling $c\sharp^2-a^1$ connection in mm. 1–3 plus the complementary rising $a^1-c\sharp^2$ one in mm. 3–4 now form a large-scale registral-return motion since they are presented in one breath, as it were.

These observations confirm what any competent musician knows: by adjusting the tempo (within reasonable limits) you can make your listeners pay attention to the connections that you want them to notice. Good musicians try to show their listeners what there is in the music, and the tempo is a quite powerful tool to do so. If an important I-R motion evades the listeners' attention, this may be due to the tempo being too slow or too fast.

Various details of the interpretation serve the same purpose. Playing two-note articulation slurs rather than three-note ones in mm. 1–2 brings out the sense of duplication in the neighbour-note motif, thus underscoring the similarity with the iterated-note motifs making up the second part of these bars as well as m. 3. And as has been repeatedly pointed out, the rendering of the final eighth-notes in mm. 1 and 2 determines the degree of closure at the bar-lines, determines whether we hear dividing afterbeats or connecting upbeat.

Turning to Ex. 33a we can see how the implicational hierarchy takes form. Within the descent to a^1 and the following ascent back to $c\sharp^2$, the two b^1 's emerge as internal articulations within the progressions, while $c\sharp^2$, a^1 , and $c\sharp^2$ are transformed, making up a higher-level implication. At the next stage the slightly dissonant a^1 in m. 3 is retained as an articulation within the retrospective return motion connecting the starting $c\sharp^2$ with the equally stable $c\sharp^2$ in m. 4.

The $c\sharp^2$ -versus- b^1 alternative marked by the asterisks requires some discussion. Within mm. 1–4, and in virtue of being a non-implicative and rhythmically out-of-the-way “monad”, b^1 appears as less important than the point-of-arrival $c\sharp^2$. But if we take mm. 5–8 into consideration, the sense of closure brought by the accented root-position $c\sharp^2$ in m. 4 is challenged. In the larger context of the eight-bar period the otherwise local resolution note b^1 gains in weight; cf. the horizontal arrow signifying the transfer. Since it has a dividing function – this is made quite clear by the harmonic half-cadence, signalling that the antecedent is ready to demand its formal counterpart – the relative closure of the b^1 tends to emerge as a high-level articulation within the exact return connection between the starting $c\sharp^2$'s in m. 1 and m. 5. In other words, the relative closure of the antecedent implies, makes us envisage, the consequent – or rather some consequent. While stylistic considerations strongly suggest that a four-bar constituent closely similar to mm. 1–4 is about to turn up, the theme might also have continued in some other way, starting from a^1 or from e^2 (as in m. 9). One might say that $c\sharp^2$ - b^1 is implicative in the formal domain.

The bottom/up reduction in Ex. 33a brings out the implicational structure of the antecedent, but Mozart's melody urges us to pay attention to a double message. In a most exemplary way the initial four bars show, and the analysis suggests, that structure and content are non-congruent. No matter what happens in m. 4 – the closing stability of the accented $c\sharp^2$

or the dividing articulation of the b^1 – the core of the content remains; cf. the vertical arrow. Otherwise put, the a^1 -over- $f\sharp$ event will survive in our memory: beyond implicational analysis (and beyond “tonal reduction”) it makes up the irreducible essence of the antecedent, what it is all about.

Harmonic implications

Narmour’s theory of the harmonic dimension takes into consideration many variables of the chords – properties such as tonal degree, mode, inversion, tonal function of the various notes, and consonance/dissonance – but the limited space here does not allow of a detailed account of how they concurrently contribute to the overall sense of harmonic implication produced by chords. It must suffice to give the background needed to understand the symbols entered in Ex. 33a.

Basic for the description of harmonic implications is the asymmetrical nature of the circle of fifths. The subdominant IV chord is more stable (closer to the I chord) than the dominant V chord, which incorporates the highly mobile leading-note. (This observation accounts for the impression that the authentic V–I cadence brings more closure than the plagal IV–I cadence.) Generally, Narmour’s circle of fifths is characterized by its division into two different regions, the left and the right side.

Irrespective of the side, harmonic motions down/away from the tonic mean increasing implication and a higher degree of tension/nonclosure, whereas motions up to/towards the tonic decrease the sense of implication and effect stability/closure. The vi and ii chords belong to the dominant, right side, but the latter chord may change over to the subdominant, left side if it is merged with the IV chord so as to give rise to varieties of the ii^7 -*alias*-“IV⁺⁶” chord.

Motions involving the right side and the left side make up processes, P, and reversals, R, respectively. Roman letters denote motions towards non-closure while italics refer to motions towards closure. Parentheses are used to indicate retrospective implications.

Turning to Mozart’s K. 331 theme, the harmonic I-R analysis in Ex. 33a shows how the three-bar excursion to the right side is balanced by the quick visit to the left side. Excepting the harmonic shifts occasioned by the neighbour-notes, mm. 1–2 only feature P~ symbols – all these harmonic

changes suggest various relative increments of non-closure, but the steps along the route are different. The effects of the chord-position shifts within m. 1 and m. 2 are small in comparison with those of the triad shifts at the bar-lines as well as those of the non-contiguous harmonic shifts obtaining between the main downbeats in mm. 1–3.

What happens when we listen to this passage? First-time listeners will probably focus on the harmonic changes taking place on each beat. To the extent that they pay attention to the shifts at the main beats, they are likely to be guided by the recurring melodic motifs. As to experienced listeners and to listeners having heard the theme before, they will take immediate and primary account of the higher-level, downbeat triad shifts – they listen with the sustaining pedal pressed down throughout each bar, as it were. The doubled pace of the retrograde series of triad shifts towards closure in mm. 3–4 is likely to make them even more aware of the harmonic drift in mm. 1–3.

Turning once more to the afterbeats/upbeats sitting on the fence, a complete $d^2-a^1-b^1-c\sharp^2$ gap/fill motion is actually present in mm. 2–4, but it is put in the shadow not only by the main-beat melodic and harmonic processes started back in m. 1 but also by the harmonic shift at the turning-point bar-line mm. 2/3. Although quite expected for linear reasons, the vi^7 chord is deceptive, which means that the filling-in motion is divorced from the gap: a fresh, returning ascent seems to start from a^1 .

In m. 4 there is some melodic continuity after the otherwise closing $c\sharp^2$. If the melody is heard in isolation, i.e. without any harmonic interference, the $c\sharp^2$ is followed by a small rising gap, making the e^2-d^2 reversal motion expected, “natural”. But when the harmonic cadence is added to the percept, the falling resolution of the appoggiatura turns inescapable while the connection back to the $c\sharp^2$ becomes virtually eliminated. The harmonic functions in m. 4 are clear-cut: the stable tonic chord supporting $c\sharp^2$ puts an end to the three-bar melodic excursion, and the following chords are exclusively directed forwards to produce the sealing half-cadence. The grouping of the harmonic events is reflected in the no-connection hiatus after the tonic in the chord-to-chord implication analysis.

Speaking generally, it seems that melodic I-R connections are quickly formed and easily influenced by other structural forces whereas harmonic implications, requiring more information to be processed, emerge slowly and have a greater inertia.

Tonal reduction

For two reasons “tonal reduction” comes close to a misnomer. Other varieties of reduction may also be entitled to the persuasive attribute “tonal”, and (at least) Heinrich Schenker conceived of his analytic method as the quite exclusive art of understanding pieces of tonal music, not as a recursive series of reductions, but in terms of hierarchically arranged prolongations.⁴⁴ But for the same two reasons, and since it brings a caveat, “tonal reduction” – not “Schenkerian analysis” – is chosen to head this chapter. A quite peculiar and very strong notion of “tonal” is adopted as the unyielding normative basis of Schenkerian theory, and it is a regrettable fact that the practice within the Schenkerian community sometimes fails to be “analytic”, fails to produce unbiased, truly reductive reductions.

Schenker’s theory of tonal music

Schenker held that an *Ursatz* underlies all (non-deficient) tonal pieces of music. This fundamental structure is a minimal specimen of two-part counterpoint: an I–V–I *Baßbrechung* making up a harmonic cadence and an *Urlinie*, a treble line falling from the third, the fifth, or (very rarely) the eighth degree. It is quite possible to conceive of other underlying structures than the *Ursatz*, but no other tonal schemes are allowed in Schenkerian theory, although a further chord (II, III, IV, or VI) after the initial I might be acknowledged as belonging to the deep structure. It is the authentic cadence of the *Ursatz*, ultimately emanating from the tonic chord expressing the key, that makes for tonal unity in the work. In a Schenkerian analysis the actual music (the surface) is eventually shown as the final result of a number of recursive prolongations of the fundamental structure.

There are two agents of prolongation: voice leading and harmonic progressions – root-position chords are strongly preferred when it comes to determining which chords in the music that count. Structural upper-line motions are to proceed stepwise. An important analytic principle is that

44 The final formulation of Schenker’s ideas (whose development can be followed in many of his earlier publications) is to be found in *Der Freie Satz*, Wien 1935. Since then, his followers have put out many textbooks expounding his theory and innumerable papers applying it in more or less orthodox ways.

notes of structural importance in the treble and the bass should coincide and mutually support each other. Beyond the “free composition” of the surface there is a strict counterpoint to be recovered in the analysis; hence another rule, the *Satzprobe*, requiring that deeper structural layers must not contain voice-leading errors like consecutive octaves and fifths. To comply with these (and other) theoretical stipulations, considerable adjustments of the musical substance are allowed along the route, adjustments that only come to the fore if you study the analysis as a reduction.

Schenkerian theory insists that, no matter occurring modulations, there is only one encompassing, unifying *Ursatz*. This is possible since partial *Ursätze* can follow upon each other or be nested within each other. The fundamental structures may also be interrupted in various ways, but it should be observed that within its domain an *Urlinie* cannot return to a structural degree once it has been left. Since the closing *2/V–1/I* part of the *Ursatz* is crucial for tonal unity/closure, virtually all important prolongations are bound to appear before the “structural”, penultimate dominant.

Schenkerian analysis

This much about Schenkerian theory, introducing a number of (more or less gratuitous) rules restricting what must or must not occur at deeper layers. Turning to analysis, the idea of tonal prolongation issuing from the *Ursatz* together with that of the *Satzprobe* mean that not only is the final result of a tonal reduction posited beforehand, restricted are also the harmonic and voice-leading means at disposal to produce this very outcome. “Tonal reduction” tends to become theory-driven, top/down, rather than bottom/up, i.e. data-driven.

The crucial thing when starting a tonal reduction is to locate the *Kopftön*, the third- or fifth-degree initial note of the structural descent, and to find out whether or not this note is preceded by a lower-level rising motion, the *Anstieg* or structural ascent. What then remains is to demonstrate how the music step by step yields this very *Ursatz* – or rather, assuming that the prolongational approach is really adopted, to reconstruct how the *Ursatz* step by step produces this very music. This means that a free quest for what the deep structure underlying the music might perhaps be – true bottom/up reduction tends to discover alternative readings and disclose ambiguities – is

supplanted by a top/down quasi-deductive synthesis proceeding from the *Ursatz* to the musical surface. Proving, rather than finding, is on the analyst's agenda.

It does of course happen that tonal analyses are not through and through conceived of and carried out as recursive prolongations; at any rate, nowadays the analyses are often arranged as if they were exercises in reduction. In such cases the analytic work apparently starts bottom/up issuing from the surface, but later on the reductions tend to deteriorate into selecting suitable notes and chords, into revealing voice-leading connections promising the pre-established result, although other readings would have been quite possible. Piecemeal tactics gives in to overall strategy.

In Schenkerian analytic work salient features of melody, rhythm, and formal articulation are sometimes, and certainly when theoretically necessary, left out of account or distorted. Indeed, such discrepancies tend to be regarded as an asset, even as the very point, of Schenkerian analyses.⁴⁵ Particularly when it comes to melody, the methodology allows of considerable licences: melodies may be treated as passages of counterpoint, paving the way for assumed motions out of and back into the structural line in view, or be verticalized into harmonies, irrespective of how and when the notes actually turn up.

Schenker was quite convinced that his analyses, always safely arriving at the same few, acknowledged *Ursätze*, disclosed something interesting by relegating the work's individuating features to prolongations at a far distance from the fundamental structure. He was also no doubt quite certain that his theory had a solid foundation in his analytic work, carried out according to his theory. This reciprocal dependence cannot but open up for the suspicion that a vicious circle is involved.

It remains to see whether this critical presentation is substantiated by the following discussion. Some adherents of Schenkerian analysis might be annoyed and simply dismiss this chapter as unfair, but in as far as any of them finds a grain of truth in it, it is not written in vain.

45 Cf. Nicholas Cook, "Music Theory and 'Good Comparison': A Viennese Perspective", *Journal of Music Theory* 33(1989) 1, 117–141, and "Schenkerian theory and better comparison: An out-of-the-way perspective". ch. 1 in Bengt Edlund, *Questioning Schenkerism*, Frankfurt 2015, Peter Lang Verlag

Two “tonal reductions” of the K. 331 theme will be studied, two readings arriving at different fundamental descents. In addition, two further analyses will be discussed, readings suggesting that there is an escape out of this dilemma: the possibility of two structural upper lines.

The various, yet fairly standardized graphic notations used in the reductive graphs should be self-explanatory.

Schenker and Forte & Gilbert: the initial period

The first analysis of the K. 331 theme derives from Schenker himself; Exs. Sch 1–3, accounting for mm. 1–8, 9–12, and 13–18, respectively. Reductions from Forte & Gilbert’s textbook are reproduced along with Schenker’s graphs; cf. Exs. FG 1–3. These analyses, showing a more complete picture of the music, largely replicate, sometimes deviate from Schenker’s reduction. Those who want to feel the tide of history should consult *Der freie Satz*, others – those who prefer readable commentaries – are referred to *Introduction to Schenkerian Analysis*.⁴⁶

Starting with Ex. Sch 1, the initial period is understood as an interrupted, then completed, structural descent from the fifth-degree e^2 , retained/prolonged across the formal demarcation and the half-way dominant. In the antecedent a falling fourth reaches the dividing second-degree b^1 , in the consequent a falling fifth arrives at a^1 , the closing first degree. These structural descents are in turn subdivided into falling third progressions, accounting for mm. 1–3 and 5–7, followed by a descending third and fourth, respectively, brought by the cadences. The structural fourth-degree d^2 ’s are supported by the (actually non-root-position) “II” chords starting the cadences.

Why is the fifth-degree e^2 chosen as *Kopftön* for the two structural descents making up the divided *Urlinie* of the *Ursatz* accounting for the entire period? The additional examples give some answers, but presumably they do not disclose the decisive inducement; see below. Sch 1a shows that Schenker understood (or chose to understand) the inherent rising thirds $c\sharp^2$ – e^2 and b^1 – d^1 as well as the mediated a^1 – b^1 – $c\sharp^2$ motion as shifts

46 Heinrich Schenker, *Der freie Satz* I–II, Wien 1935, Universal, Exs. 72:3, 87:5, 132:6, 141, 157; Allen Forte & Steven E. Gilbert, *Introduction to Schenkerian Analysis*, New York 1982, Norton, Exs. 137b, 139, 140 b/c, 150, 152, 154b.

to structurally superordinate notes. He called such operations within melodic lines (as well as within deeper-layer progressions) “unfoldings” and marked them with N-like (or inverted N-like) beams in his graphs; cf. the sketch Sch 1b. This assumed unfolding relationship apparently allowed him to enter e^2 -over- $c\sharp^2$ as a simultaneous third in his compressed three-part harmonic representation of the antecedent; cf. Sch 1c. But it must be pointed out how deceitful this seemingly innocent move is. By being placed over $c\sharp^2/a$, the e^2 emerges as both accented and root-supported; concurrently the strong-beat $c\sharp^2$, actually enjoying root-support, is eclipsed by being relegated to an interior voice.

Forte&Gilbert’s reading, also showing a divided *Ursatz* issuing from the fifth degree, brings some differences; cf. Ex. FG 1. Schenker’s subordinate falling third progressions are left out while (as the slurs indicate) his idea of unfolding is adopted. The fact that the e^2 and the d^2 are second-beat events and only enjoy oblique support is shown by diagonal lines. FG 1a makes it clear that F&G accept Schenker’s way of representing a melodic process as a sequence of chords, while FG 1b explains why the a^1 in m. 4 must have simultaneous root-position support, not an oblique one as the series of unfoldings in mm. 1–3 of FG 1 would otherwise suggest; the correct reading avoids middle-ground consecutive fifths. The most crucial difference between FG 1 and Sch 1, however, is the fact that the fourth degrees are located much earlier in F&G’s reduction than in Schenker’s. Their structural d^2 ’s turn up already in mm. 2 and 6, relegating the d^2 ’s in mm. 4 and 7 to the status of neighbour-notes appended to the structural third degrees, which also occur earlier than in Sch 1.

F&G’s reduction seems preferable since the *Ursatz* is more evenly distributed and hence accounts for more of the musical process. Schenker’s analysis perhaps reflects the swift melodic injection brought by the appoggiatura e^2 in m. 4 – a Madeleine cake joining past and non-present fifth degrees into a precious moment of structural truth. But his reading is quite heavy at the back – the decisive motions happen rapidly in the cadences and leave the third-degree $c\sharp^2$ to be supported by six-four chords, while mm. 2–3 and 6–7, bringing the musical core of the period, are left out of the fundamental structure.

F&G’s slurs show how rising-third progressions issue into the $c\sharp^2$ ’s in m. 4 and 7, but since rising sequences of tenths are also marked, one cannot but

wonder why the preceding, falling tenths are suppressed in favour oblique twelfths. Furthermore, the unfolding thirds in the treble are far from commensurable: the e^2 's and d^2 's are unaccented notes whereas the $c\sharp^2$ in m. 4, and arguably also the $c\sharp^2$ in m. 7, are quite strong events. It may also be questioned whether it is really appropriate to understand the d^2 's in mm. 4 and 7 as neighbour-notes. Nor is it for that matter really possible, as shown in Sch 1, to regard the d^2 in m. 4, having merely an upbeat function within the half-cadence and actually lacking root II support, as a structural fourth degree.

Turning to the choice of e^2 as *Kopfton* in these reductions, it is not very convincing. The e^2 is undeniably the top note in m. 1, but it enters on a weak beat and it only enjoys oblique root support. Taking the initial motion $c\sharp^2-e^2$ to be an “unfolding” neither explains, nor proves anything, since this term might just as well – or indeed rather – be used to back up the idea that e^2 covers a vertically root-supported, structural $c\sharp^2$. And the transformation in Sch 1c of the successive melodic third in m. 1 into a simultaneous harmonic one is, in virtue of being a manipulation, equally impotent as an argument for choosing e^2 as the primary note.

F&G's fourth-degree d^2 in mm. 2 and 6 is as precarious as Schenker's in m. 4 since its oblique support derives from the bass note of a first-inversion chord. The oblique supporting relation between $f\sharp$ and $c\sharp^2$ (as shown and dismissed in FG 1b) is a bad idea, of course, since the $c\sharp^2$'s in mm. 4 and 7 obviously enjoy simultaneous root support, and since these tonic notes cannot very well be supported by a relative-minor root appearing one bar earlier. The argument to the effect that consecutive fifths impend is weak because it derives from the theoretically imposed *Satzprobe* principle stating that strict counterpoint necessarily prevails at deeper levels.

A grave shortcoming of both FG 1 and Sch 1, and a strong argument against the idea of fifth-degree descents, is that these readings fail to take account of what everyone listening to the antecedent (or consequent) is bound to hear in the first place, namely that the initial $c\sharp^2$ -over-a returns in m. 4 (7). Due to the hierarchical mode of representation characterizing the two analyses, the initial $c\sharp^2/a$ must show up at a lower level than the return to $c\sharp^2/a$ – however obvious, this patent discontinuous relationship eludes analytical attention.

The concluding sections

After having discussed mm. 1–8, it is advantageous to proceed directly to mm. 13–18. The reductions, cf. Exs. Sch 3 and FG 3, may look different at first sight, but it soon becomes apparent that they are predicated on the same idea, namely that the “coda” makes up an integral part of a tonal structure extending from m. 13 to m. 18. The juncture between the two constituents of the structure is located to the resolution/anticipation/confirmation at the bar-line mm. 16/17, which is a reasonable idea. But the two final bars do not fare well, and problems arise when m. 16 is to be attached to m. 17.

Schenker’s rising-third progression in the treble keeps to the melody in m. 17 up to e^2 ; then follows a falling-third progression starting from d^2 ; cf. Sch 3. The d^2 may perhaps be taken to represent Mozart’s left-hand d^1 , belonging to the rising bass line, while the $c\sharp^2$ in the reduction presumably corresponds to the inner-voice $c\sharp^1$ and/or to the sixteenth-note appoggiatura $c\sharp^2$ of the melody. In any case, Schenker’s d^2 does not exist in Mozart’s music, but it is badly needed since it makes us believe that there is a stepwise falling progression from e^2 . In Sch 3a the middle-voice a^1 in the subdominant chord is also added, suggesting more continuity across the bar-line than there actually is.

The possibility that the “coda”, attached by Mozart in a way that is both demonstrative and seamless, might stand for a drastically shortened, self-dependent A^2 section obviously never occurred to Schenker. This is of course not surprising since a rising-sixth *Urlinie* would have been completely out of the question for theoretical reasons; furthermore, it probably seemed impossible to just abandon the structural descent of the A^1 section at the third degree in m. 16. Its most unusual musical content notwithstanding, the “coda” simply had – against it will, as it were – to serve a run-of-the-mill analytic purpose, that of bringing the fifth-degree *Urlinie*, started in m. 13 and then arrested at $c\sharp^2$, down to its preordained close at a^1 .

But can the fundamental descent really be stopped as shown in Sch 3? Are we likely to hear mm. 13–18 as Schenker wants us to do? In Sch 1 the eighth-note b^1 in m. 8 was to be understood as representing the penultimate structural dominant, and this should by rights apply also to the corresponding b^1 in m. 16, but in Sch 3 this note is, along with the

preceding $c\sharp^2$, deprived of its structural status. Instead, the following, last-moment $c\sharp^2$ is prolonged over the bar-line, and the structural b^1 is withheld until m. 18. In effect this cannot but mean that the third and second degrees are in fact revisited, although an *Urlinie* is not allowed to return to an already left tonal degree. But Schenker wants both to eat the cake and to have it. The slurs bring out an actually quite discontinuous descending structural fifth in the treble whereas the left-hand beams indicate two tonal units.

The explanatory example Sch 3a is interesting because it shows how Schenker recruits support for his rising-third progression from the ascending bass voice, setting in firmly at a root-position tonic; the bass “*führt*”. But given the similarity in terms of rising parallel tenths between m. 17 and m. 1, this argument applies equally well to the start of the theme, a fact that cannot but open up for the possibility of a third-degree *Urlinie* in mm. 1–8, issuing from a root-supported and accented $c\sharp^2$ in m. 1, as opposed to Schenker’s less obvious fundamental descent from the fifth degree.

(After all, perhaps the idea of a drastically shortened, self-dependent A^2 “coda” section did occur to Schenker, but since it would have overturned his fifth-degree reading of the theme, it had to be suppressed.)

Looking at Mozart’s mm. 17–18, it is obvious that some unwarranted reductive choices are required to arrive at Sch 3. Otherwise put, issuing from Sch 3, as Schenker wants us to do, one cannot but be taken aback at the low probability of arriving by means of prolongations at exactly what Mozart wrote in mm. 17–18. But Mozart did not prolong fundamental structures, he was a composer. According to a still unknown source this was how he hit upon mm. 17–18:

To begin with he wanted, just for a change, to conclude his theme with a rising thrust towards the upper tonic note. On second thoughts, however, this idea emerged as too straightforward, and when returning to repeat m. 9 an unequivocal eighth-degree a^2 would have eclipsed the sense of tonic expansion associated with the introduction of e^2 . Therefore – and since he was smart – he decided to write m. 18 in inverted counterpoint. Alternatively – since he was also childish – he found up an a^1 -instead-of- a^2 escape for the melody, hiding the octave trapdoor under a witty allusion to m. 4.

There are problematic things also in FG 3, featuring a fundamental descent abandoned already at the $c\sharp^2$ in m. 15 – it is degraded into a local falling-third connection subsumed under the long-distance falling-fifth *Urlinie* started back in m. 1. When this overall structural upper line is resumed in m. 13, the listener has to retroactively suppress the fourth-degree d^2 in m. 14, a note understood as structural in mm. 2 and 6, in favour of the d^2 in ... yes, where is it? The newly discovered, decisive fourth-degree d^2 tops the II^6 chord in m. 15, but the oblique line refers it forwards to the V chord that actually supports the formerly structural resolution-note b^1 in m. 16, as it once did in m. 8. Evidently, the II^6 chord is taken to “pre-prolong” the dominant but the d^2 nevertheless belongs to the antepenultimate chord of the cadence. Who is schizophrenic enough to hear mm. 13–16 in this way?

F&G then make an attempt to do justice to what happens in the “coda” by following the melody up to the fifth degree – the figure is put within parentheses since such upwards/backwards regressions are not allowed according to the code of conduct for fundamental descents. Just as the d^2 -over- II^6 in m. 4, the $f\sharp^2$ -over-IV in m. 17 is not really a neighbour-note, and there is certainly not any upper-line e^2 (even within parentheses) over the dominant root in m. 18 – Mozart preferred a slightly dissonant a^1 suspension reached by means of an octave leap. Needless to say, and no matter the adjuring arrow, this non-existent e^2 cannot and does not fall to the inner-voice d^1 since this note enjoys an upper neighbour-note relation to the surrounding $c\sharp^1$'s.

Schenkerian analysis boasts of being the discipline of “structural hearing” *par préférence*.⁴⁷ Schenker's and F&G's readings of mm. 13–18 demonstrate that what is meant is hardly music listening in current sense but rather carefully disciplined problem solving. Their readings are unplayable: m. 17 refuses to be put within parentheses in order to pave the way for a belated falling *Urlinie* in m. 18.

47 *Structural Hearing* is the presumptuous title of Felix Salzer's textbook on Schenkerian analysis (New York 1962, Dover Publications).

The middle section

In both Exs. Sch 2 and FG 2 the contrasting part of the theme comes out as still another sectional *Urlinie* falling from the fifth degree; yet it is suggested that the initial tonal position is preserved.

In FG 2 the presence of middleground consecutive octaves in mm. 9–10 is duly acknowledged. As to mm. 11–12, FG 2 makes the three right-hand triad figurations provide the stepwise structural descent. Mozart would have been astonished at this reading since the obvious way of understanding the right hand is to hear it either as imitating the parallel-third upper neighbour-note motion of the left hand in mm. 9–10 or (which amounts to much the same result) as bringing a parallel-third contrary motion to the left-hand lower neighbour-note motion in mm. 11–12. In particular, he would have regretted that the point of leaving out d^2 in m. 12 is wasted.

Turning to Sch 2, it presents a different, but equally unconvincing picture. The quite exposed, stretched upper-line neighbour-note $e^2-f\sharp^2-e^2$ motion in mm. 9–10 is followed and imitated by a covered line $c\sharp^2-d^2-c\sharp^2(-b^1)$ inconspicuously bringing an upper neighbour-note serving as fourth degree and then a dividing second degree. This complementary line under the retained e^2 issues from the third degree.

Schenker's and F&G's middle-section fundamental descents bring the second of three local *Urlinien* contributing to the overall *Ursatz*. No matter whether or not there is a stepwise structural descent in the B section, it cannot, considering the massive presence of e^2 in mm. 9–12, very well be denied that the B section of the theme is very much about the fifth degree. Since the theme must have an encompassing *Ursatz*, the A sections simply have to feature a fifth-degree *Urlinie* as well, otherwise the tonal unity of this masterly theme would be compromised. Hence, presumably, Schenker's choice of e^2 as the *Kopftön* already in m. 1.

This concession to Schenkerian theory commands a high price. Considering what was probably Schenker's decisive inducement for selecting the fifth-degree e^2 as structural in m. 1 – the B-section's stubborn insistence on e^2 – the A sections cannot, indeed must not, be understood as fundamental descents from the third degree despite the fact that the accented $c\sharp^2$ in m. 1, as becomes a *Kopftön*, enjoys immediate root support as a

tenth above the *führende* bass. In other words – and completely at variance with realistic, beginning-towards-end listening – Schenker’s analysis of the A sections is apparently dictated by the undeniable fifth-degree dominance in the not-yet-heard B section. Turning from the analyst’s agony to the listener’s loss, anyone attending to Mozart’s theme is bound to experience an expansion of the tonal space in mm. 9–12. But this aesthetically crucial effect is obliterated in Schenker’s playing-patience analysis, in which the fifth degree is established as the structural point of departure already at the very beginning of the theme.

Understanding the B section as continuing the prolongation of an already established structural fifth degree is musically inappropriate, and yet it exemplifies the kind of Schenkerian discrepancies *vis-à-vis* the music that Nicholas Cook considers to be valuable since they invite to enlightening comparisons. But wouldn’t it be better to engage in truly reductive analyses bringing out essential properties of the music, rather than to circumvent them by showing what the music is not? A pianist who meets with Schenker’s and Forte & Gilbert’s analyses, and believes in what he/she sees, is likely to render mm. 9–12 in a disinterested and disinteresting way.

Lester’s analysis

Joel Lester has proposed a reductive analysis of the K. 331 theme according to which the primary note of the A sections is the third-degree $c\sharp^2$.⁴⁸ Since he apparently also thinks that there must be an overall *Ursatz* accounting for the tonal unity of the theme, he is forced to read the B section against its grain, as somehow retaining the third degree as structural. But why must the B section, arguably having a contrasting function within the theme, necessarily have any tonal obligations *vis-à-vis* to the outer sections and their *Ursätze*?

Lester’s reading can be studied in Exs. L 1–4. It appears from L 2 that the line starting from e^2 is thought of as a secondary, covering voice somehow

48 Joel Lester, “Articulation of Tonal Structures as a Criterion for Analytic Choices”, *Music Theory Spectrum* 1(1981), 67–79

emanating from the e^1 drone – “somehow” since there is no hint in the music that such a duplication of the inner voice actually takes place. There is perhaps more substance in the observation made in L 2 and L 3 that the e^1 's in mm. 9–10 may have some relationship with the e^2 's in mm. 11–12, which in turn perhaps have something to do with the left-hand e^1 in m. 12. But according to L 3 and L 4 the e^2 in m. 9 is supposed to derive from the inner e^1 of the closing tonic chord in m. 8, an observation that would be quite detrimental to the tonal experience of the theme if it were true.

The once structural third degree $c\sharp^2$ survives as $c\sharp^1$ in mm. 8–9, which is quite hard to hear. Then, in virtue of the imitation relationship (cf. L 1–3), the third degree turns up as $c\sharp^2$ in mm. 11–12, a covered note that eventually proceeds to the structural top-note b^1 . According to Lester's analysis the third-degree *Urlinie* prevails also in the B section, a conclusion that is difficult to accept due to the wanton octave displacements, and since this is not what we hear. (Another questionable octave trick is to be found in m. 10 of L 1 where the top note a^2 is connected to the bass drone a .)

All this ado, supposed to explain the conspicuous presence of e^2 in mm. 9–12 without according it fully structural status, would have been unnecessary if Lester had dropped the idea of an encompassing *Urlinie* from the third degree; if he had accepted that the middle, contrasting section might have its own tonal agenda, might present a static treble structure keeping to the fifth degree. To the extent that there are listeners capable of really hearing (or perhaps just conceiving) the theme in the way Lester recommends, the tonal expansion up to e^2 in m. 9 does not emerge as the liberating event that it could be, that it presumably was meant to be, since the fifth-degree emerges as impeded by the third-degree anchor.

It is no doubt quite natural and easy to hear – and to play – mm. 1–4 as bringing a fundamental descent from the third degree; the bass follows the accented main line in the treble at the distance of a tenth. (Perhaps the bass is *geführt* by the melody?) After the detour down to a^1 the *Kopfton* $c\sharp^2$ unmistakably turns up again over the root-position tonic chord.

Lester's crucial remark (referring to Schenker's analysis of mm. 1–4) “I can make no sense out of the tenth doublings if they are to imply a tonic prolongation” (p. 76) is quite to the point – the primary note and its root-position tonic chord are regained, rather than prolonged.

But, as Eugene Narmour has pointed out,⁴⁹ Lester's account in L 1 and L 2 of what happens in terms of nested neighbour notes/chords is not satisfactory. The initial root-position tonic chord is supposed to be prolonged by the V⁶ chords, the first of which is in turn prolonged by the intervening VI⁷ chord. This is simply too hierarchical to come true: the two dominant chords are not metrically commensurable, and (no matter the fact that there is an intervening, weak-beat chord in m. 2) both of them rather invite to be understood as passing events on the way to a¹/f_♯ and c_♯²/a, respectively.

It goes against the grain of this passage to just assign a neighbour-event status to the a¹/f_♯ sonority. Being more accented than its attending chords, and notwithstanding its (slightly) dissonant quality, the root-position VI⁷ chord emerges as more stable than the two V⁶ chords. As already pointed out, the F_♯-minor chord, or rather its particular use in m. 3 (7) in the K. 331 theme, is paradoxical since, although the passive organ-point seventh e¹ is the source of the dissonance, we are prone to hear it as caused by the actively introduced root f_♯. Hence the sense of a piece of ice being pressed under tonic water and the "will" to return to the surface, hence the idea to conceive of this point-of-return chord as a neighbour phenomenon.

There is quasi-fact making us accept Lester's limping nested-neighbour-note reading: our willingness to hear m. 3, not as it is written, but as our second-rate prospective imagination wants it; i.e. as sketched in Ex. 2. While Mozart's m. 3 accumulates strength to rise thanks to its repeated notes, it concurrently offers more harmonic information within this one bar than expected. As a result the second part of m. 3 may seem to assume the same importance, the same "musical size", as m. 2, an illusion that helps to neutralize the metric imbalance affecting Lester's idea of a neighbour F_♯-minor chord.

All these theoretical considerations aside, it is a fact that Narmour's bottom/up implicational hierarchy (cf. Ex. 33a) supports Lester's falling-third fundamental line, not Schenker's and Forte&Gilbert's *Urlinie* descending from the fifth degree.

49 Eugene Narmour, "Some Major Theoretical Problems Concerning the Concept of Hierarchy in the Analysis of Tonal Music", *Music Perception* (1983/84), 129–199. The final part of this paper is devoted to thorough criticisms of analyses of the K. 331 theme put forth by De Voto, Schenker, Lester, and Meyer.

Neumeyer's bilinear reading; matters of orthodoxy

Evidently, it is hard for “tonal” analysts to make up their minds as to whether the K. 331 theme starts with a fifth- or a third-degree *Kopfton* – a decision that turns even more difficult if one must stick to the reading of the initial period throughout the theme in order to demonstrate overall tonal unity in *Ursatz* terms. So the question cannot but arise: why not have both primary notes?

Outside the Schenkerian paradigm the beginning of the K. 331 theme has been described as a structure featuring two coexisting upper lines.⁵⁰ It falls beyond the scope of this account to present and discuss Cone's and Meyer's readings, issuing from non-Schenkerian theoretical perspectives. But the bilinear tonal reduction proposed *en passant* by David Neumeyer and particularly the reaction it stirred up are of great interest.⁵¹

Neumeyer's analysis, inspired by von Cube, is shown in Ex. N; as can be seen, many of its details agree with Schenker's and F&G's “main-stream” readings. The remarkable trait in Neumeyer's reduction is his refusal to choose between the falling-fifth and falling-third *Urlinie* options: all the way from the three initial “unfoldings” in mm. 1–3 to the unison a¹ in m. 18 there are two upper lines. But they do not proceed in tandem throughout the theme. In the middle section the upper structural connection persists as an unresolved fifth-degree e², while the lower, third-degree structural line is eventually allowed to descend to b¹; it is first pursued as c^{#1} and then as c^{#2}, and the neighbour-note motif supplies the link between the left- and right-hand figurations. Both *Urlinien* then start anew in m. 13. It should be noticed that Neumeyer does not accept a fully structural seventh degree; cf. the premature end of the final lower beam.

Neumeyer's reading (having much in common also with Lester's more orthodox analysis) makes a good deal of sense, but it is arguably an odd (and certainly a bold) idea to join the A+A¹ and B sections, letting the

50 Edward T. Cone *Musical Form and Musical Performance*, New York 1968, Norton, pp. 26–31, and Leonard B. Meyer, *Explaining Music* (University of Chicago Press, 1973, pp. 37–38.

51 David Neumeyer, “The Three-part *Ursatz*”, *In Theory Only* 10(1987)1/2, 3–29, and Steve Larson, “Questions about the *Ursatz*: A Response to Neumeyer”, *In Theory Only* 10(1987)4, 11–31; Neumeyer's reply is to be found on pp. 33–37.

b¹-over-e in m. 12 serve as the dividing dominant of the lower structural connection despite the fact that the formal demarcation in m. 8 has already brought full tonal closure for both lines at a¹. Also, suggesting a prolongational retention of e² across the double-bar fails to do justice to the sense of a fresh start from the fifth degree in m. 9. We will return to Neumeyer's analysis at the end of the chapter on "just reduction".

Right now we must turn to Steve Larson's problems with accepting three-part *Ursätze*. The bulk of Neumeyer's evidence, when pleading for the possibility, and even the value, of combining structural descents from the fifth and the third degree, derives from analyses of short pieces from Carl Czerny's Op. 823, *Der kleine Klavierschüler*. Hence, much of Larson's criticism amounts to showing that a Schenkerian analyst worth his/her salt can deal with these pieces without recourse to bilinear solutions.

Arguing against Narmour rather than Neumeyer, Larson holds that dual upper-line connections are to be avoided since listeners are unable to hear them simultaneously – just as we cannot see the rabbit and the duck at the same time. Narmour, on the other hand, is cited to the effect that listeners, unlike rabbit-or-duck viewers, *can* hear incompatible reductions at the same time. (Larson p. 20)

But it seems that Narmour's position becomes much less "startling" if one observes that melodies, unlike rabbit/duck pictures, take place in time and that, consequently, when we say that we "hear" a melody, we rather (or also) mean that we are hearing it and that we have heard it. There is inevitably and crucially a past-tense quality in all our musical experiences, in the "objects" that musicians, among them analysts of all kinds, talk about. Larson is quite right when saying that a Schenkerian analysis "records the interaction of that music and a listener's heightened attention". (pp. 21–22) Such interactions, if anything, have a past-tense, the-cud-is-already-chewed quality that makes the experiences accessible for musical reflection as objects rather than processes.

When listening to Mozart's melody, we are likely to first pay attention to the c_♯², then to the e², then to the b¹, then to the d², etc., just as we may in turn discover, or deliberately shift our attention between, the rabbit and the duck. But once the entire melody is a fact, we can summarize the experience by thinking of it as the melody that repeatedly starts with (as the melody that again and again started with) descents from the third *and*

from the fifth degree. In much the same manner we are able to think of the famous drawing as the rabbit-*and*-duck picture.

By means of analytical musical notation it is possible to fix our flickering auditory impressions in a present-tense graph, showing, for instance, how two inherent lines are (were) alternately fed by a certain melody. Since complex representations of complex passages are quite interesting, it is hard to understand why, as Larson insists, we should be reduced to show different structural connections one at a time in separate graphs – and this holds especially if the composer has seen to it that the concurrent lines are perfectly compatible.⁵²

But the decisive reason why Larson rejects the possibility – or shall we say the opportunity – to enjoy, to imagine, and try to convey dual upper lines surpasses both rabbits and ducks. Judging from his initial sermon on the fundamentals of tonal reduction, the answer is as simple as his attitude is chilling: once and for all Schenker was decidedly against dual upper lines. “In fact, Schenker explicitly states in *Free Composition* that where linear progressions appear in combination, one of them must lead”. (Larson p. 14) As Neumeyer points out in his reply, creative analytic work (as opposed to clever problem solving) and a productive development of reduction as an analytic method cannot thrive in an atmosphere of exegesis and orthodoxy.

Before closing this account of Schenkerian readings of the K. 331 theme, it should be stressed that the main point of the criticism is *not* the fact that the same analytic principles apparently allow analysts to arrive at quite diverging tonal structures. This is just fine, and similar disagreements may also occur when it comes to other varieties of musical description.⁵³ The first and only one to blame for the disunity is Mozart – the different readings testify to the complexity of the K. 331 theme. The real problem with the disagreeing Schenkerian reductions is that they, as a consequence of the theory, fail to account properly for the music; for instance, that they fail to do justice to its trio-sonata-like tonal structure.

52 Whereas it is possible to draw a picture in which the duck is “de-rabbitted”, or the other way around, it is hard to think of a picture that brings out both the rabbit and the duck more clearly than exactly the rabbit/duck drawing.

53 Cf. “In defence of ambiguity”, ch. 2 in this volume.

Generative reduction

In effect, but perhaps not intentionally, the theory advanced by Fred Lerdahl and Ray Jackendoff makes up a radical revision of Schenkerian analysis. It may be described as a thorough and systematic attempt to bring “tonal reduction” in better agreement with modern scholarly thought and available empirical knowledge about music cognition.⁵⁴ The point of departure for L&J’s theory – generative linguistics in the wake of Noam Chomsky – is certainly different, but its goal – to assign tonal structure to music works – is shared with Schenker and his followers. And although L&J’s method differs very much from Schenker’s, they apparently also take it for granted that the core of structural understanding is to demonstrate unity in terms of a tonal hierarchy.

Introduction

L&J’s “generative theory” is a careful combination of bottom/up and top/down approaches. After having established rhythmic and metric properties, the musical events are recursively selected so as to form ever larger and ever more sparse time-span segments of music. Only then is the aspect of tension/relaxation brought in to operate within these time-spans, introducing differential tonal properties among the selected events, and turning the time-spans into tonal layers ultimately governed by the assumption that the topmost layer always describes tension-followed-by-relaxation. But, unlike in Schenkerian theory, nothing else is stipulated as to what this topmost tonal structure must necessarily be: L&J’s idea of the “normative prolongational structure” is considerably more open than that of Schenker’s *Ursatz*.

On the other hand, whereas the recursive set of prolongations making up a Schenkerian “reduction” are hierarchical in a fairly loose sense, the layers within a generative analysis must for methodological reasons form a strict hierarchy. Relationships between non-contiguous events and network connections are therefore as a matter of principle left out of account.

54 Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music*, Cambridge, Mass. 1983, MIT Press

The recursive bottom/up selection of events, and then the top/down recursive generation of the tonal structure, is accomplished by means of a number of empirically grounded or musically reasonable “preference rules”. In addition, L&J’s generative theory contains “well-formedness rules”, ensuring strict hierarchies, and allows of a few “transformational rules” to be resorted to when the musical structure needs to be adjusted in order to be amenable for analysis.

In the final stage of the analysis, i.e. in the “prolongational reduction”, – which is of particular interest in the present context – L&J visualize the tonal structure by means of “trees”. Right-branching indicates passages involving increasing tension while left-branching corresponds to relaxation. They also introduce three categories to be applied when determining the degree of tension/relaxation obtaining between two harmonic events. In a “strong prolongation” (signified by a circle) the roots as well as the bass and treble notes are identical; in a “weak prolongation” (filled circle) the two events have the same root whereas either (or both) the bass or the treble notes are different. When, finally, the two events have different roots, the relationship is called a “progression”.

What a “generative” reduction amounts to when applied to a piece of music, will emerge from the following discussion of L&J’s analysis of mm. 1–4 of the K. 331 theme. This passage runs like a silver thread throughout their book, and L&J’s examples will be reproduced and discussed in due turn.

Grouping structure

Starting with the grouping structure, mm. 1–2 may be understood in different ways since two conflicting preference rules apply. The greater temporal distance between the quarter-note and the eighth-note makes for a group boundary after the long note. On the other hand, the fact that a five-note motivic unit is repeated effects a boundary after the eighth-note; cf. Ex. LJ 1. (L&J, p. 63)

It should be observed that this example demonstrates two either/or alternatives at the same time; due to the strictly hierarchical nature of L&J’s theory, groups are not otherwise allowed to overlap each other – as they can in L. B. Meyers approach to rhythm (cf. Ex. 31). Hence, the analyst must

choose one of the options – and perhaps try out the other one in a separate analysis. This restriction is a methodological choice, but it may be argued that rhythmic structure, and musical structure in general, is not quite as hierarchical, as unequivocal as L&J's "generative theory" stipulates.

The grouping structure of this passage is also a matter of how the pianist plays it. "A performer wishing to emphasize grouping *a* will sustain the quarter note all the way to the eighth and will shorten the eighth and diminish its volume. [...] On the other hand, a performer who wishes to emphasize grouping *b* will shorten the quarter, leaving a slight pause after it, and sustain the eighth up to the next note." The pianist may also slightly shift the attack point of the eighth note, "playing it a little early for grouping *a* and little late for grouping *b*". (p. 63) It might be added that there is further, and quite conspicuous, beyond K. 331, way of expressing upbeats: the eighth-note might be early and stressed.

Metric structure

Turning to the metric structure, the accentual hierarchy within the bar is (as a matter of principle) determined by the time signature and the bar-lines. The number of dots under each note in Ex. LJ 2a (p. 71) indicates the metric weight. Particularly in periodic music a regular distribution of accents tends to apply also at higher metric levels; cf. Ex. LJ 2b. (p. 33)

But the tonal content of the music may impinge on its rhythmic structure, and according to L&J one source of influence is the distinction between metric and "structural" accents. The beginning and ending of (higher-level) formal units carry structural accents, and if this idea is applied to mm. 1–8 of the theme, the metric accents will be relocated as shown in Ex. LJ 2c (p. 32) making up an irregular sequence. The "first-beat-of-the-bar" accents are not equal, and in mm. 4 and 8 they occur, not on the first, but on the second beat. The phenomenal accents (i.e. the sense of "accentedness") depend on what happens in the music, and as a result of this an otherwise regular distribution of accents may be disturbed.

This idea is quite reasonable from a musical point of view, and we have already applied it in the rhythmic analysis of the K. 331 theme, cf. Ex. 31 – although arriving at a different result. The regularly accented down-beat starting m. 3 was reluctantly (as it were) moved to the root-position

tonic chord beginning m. 4 as soon as the two-bar unit was available for rhythmic evaluation. And a similar, but much more drastic shift occurred in m. 7 when the too-early, second-beat root-position tonic chord “stole” the first-beat accent – a metric perturbation that in turn could not but rob the first-beat six-four chord in m. 8 of its privileged metric position in favour of the mid-bar root-position tonic chord, being also structurally accented. On the other hand and turning back to m. 4, the first-beat root-position tonic chord did not have to give up its status as primary accent in favour of the mid-bar six-four chord.

The differences between the reading just recapitulated and that of L&J may partly depend on how the music sounds, indeed, on how the analyst imagines or wants the music to be played. But it is crucial to lay bare two fundamental theoretical reasons for the divergent outcomes. L&J deal with music as a “final-state” product whereas the point of C&M’s analysis is to account for music as a process, including various aspects of re-evaluation occurring along the route. And even more important is the fact that L&J’s generative theory makes a distinction between metric and “structural” accents. When considering the structural accentuation within the theme, mm. 4 and 8 are in virtue of being endings more accented than mm. 3 and 7, and by the same token the mid-bar chords in mm. 4 and 8 gain the upper hand at the expense of the nominally most accented first-beat chords.

The irregular distribution of accents in LJ 2c is apparently due to the fact that considerations rather belonging to time-span reduction have been introduced prematurely. The preliminary time-span reduction shown in Ex. LJ 3 (p. 120) suggests what lies behind the disruption of the regular metre. As we extend the time-spans, there is (as it were) a survival-of-the-fittest competition between the chords. In mm. 1–3 the second-beat harmonies are less important than the first-beat ones, but in m. 4 the second-beat six-four chord, representing the (relatively) concluding dominant, is given priority over the root-position tonic chord at the main downbeat. At the next stage the “vi⁷” chord starting m. 3 is left out of account, and what remains is just the initial tonic.

But whatever merits LJ 2c may have as a final-state description of the theme’s phenomenal rhythm, it does not offer the solid regularity necessary when the rhythmic structure is to serve as the input for the time-span

and prolongational reductions. In fact, since it conflicts with L&J's metric well-formedness rules, LJ 2c is disallowed.

Time-span reduction

Next we will account for the time-span reduction of the theme, producing the raw, bottom/up input for the ensuing prolongational reduction. Two examples demonstrate the procedure: Ex. LJ 4a (p. 164), presenting two alternatives, of which one is discarded, and Ex. LJ 4b (p. 227), showing a more detailed picture of the preferred option and introducing the tree notation used for time-span reduction.

Turning to LJ 4a, what are the arguments, the preference rules, making us hear alternative *b* rather than *c*, if we accept the reduction *a* as a fair representation of mm. 1–4? When selecting the “head” of a time-span, the event at the relatively most accented position is to be given priority; in mm. 1–3 this rule means that the first chord of each bar is chosen. Another rule to the effect that the relatively most consonant event is to be preferred yields the same result when applied to mm. 1 and 2; the second-beat chords are left out of account. Furthermore, a non-local rule states that when motivic or rhythmic parallelism obtains, the units should be treated in the same way – the reading adopted in m. 1 should apply also to m. 2.

But, as L&J put it, in m. 3 of the preferred reading *b* “the highly unstable chord in strong metrical position has managed to override the more stable chord in weak metrical position”. (p. 164) To explain this outcome they posit two further preference rules. The first one involves harmonic rhythm and stipulates that you should give precedence to time-span reductions in which the harmonic shifts occur on relatively strong beats. This means that the quasi-syncopated sequence of reading *c* is to be discarded. The other rule states that stepwise motions are preferable; hence, the falling fourth emerging in *b* is the best reading of the bass line.

These additional preference rules correspond to important musical intuitions, and in this case they no doubt lead us to the best choice. But they are not necessary when dealing with m. 3 since this bar can hardly be described as a “highly unstable chord” being succeeded by a “more stable chord”. The F \sharp -minor seventh-chord is in fact not heard as very dissonant; quite to the contrary, it is immediately understood as a root-position chord

including an organ-point note e^1 preserved since m. 1, and it is followed by a first-inversion E-major chord emerging as less stable due to its final-state function as a passing sonority. The two chords do not simply make up a “progression”, they do so on unequal terms – the root-position chord weighs more than the inverted one.

The reason why m. 4 is represented by its very last, and rhythmically quite weak, E-major chord emerges from the hierarchical representation of the time-span reduction shown in LJ 4b. The final dominant is the crucial chord of the cadence (half-)closing the antecedent, and there is a preference rule to the effect that cadences are to be retained. Another reason for this choice is a consequence of the idea that a final structural accent may overrule the metrically assigned accent. As to the first-beat tonic chord and the subdominant chord following after it, they are downgraded in the time-span reduction since, being part of a half-cadence, they attach to the closing six-four cliché expressing the dominant. Whether the tonic chord really belongs to the cadence is debatable since it has a concurrent function of closing a harmonic circle; cf. below.

(Although the point of departure for L&J’s time-span reduction is quite different from the basis of Narmour’s I-R model, the reduction shown in Ex. LJ 4b agrees with the retained notes in Ex. 33a.)

Prolongational reduction

The above presentation, and particularly the principle of cadential retention, suggests that time-span reduction is not simply a bottom/up affair producing the substrate for the ensuing prolongational reduction: top/down arguments foreboding the latter, tonal stage of the analysis have already turned up. All the same, when now proceeding from time-span to prolongational analysis – as demonstrated in Exs. LJ 5 a/f (pp. 228–231) – we can see how the bottom/up selection of events is replaced by a top/down derivation of tonal structure, a replacement characterized by a give-and-take mediation between the two perspectives.

The first step is to deal with the mm. 1–4 region defined by the progression from the starting tonic to the closing dominant; cf. LJ 5a. The time-span reduction (LJ 4b) has brought out the first-beat V^6 and “ vi^7 ” chords in mm. 2 and 3 as the most important events in the time-spans occurring

on the route between the initial I and the final V. But this conflicts with, and is overruled by, a rule stating that the first-beat, root-position I chord of m. 4 is to be considered tonally more important since it brings the most stable connection within the region, namely the right-branching “strong prolongation” back to the initial root-position I.⁵⁵ Hence, the preferred analysis is the one shown in LJ 5b.

Turning to m. 4, the ii⁶ chord exhibits the most stable relation since it exhibits “a descending fifth progression” to the final V. But this conclusion may be contested since it relies on a defect in Roman numeral analysis; the “ii⁶” chord, with d as bass note, is not likely to be heard as a first-inversion II chord, having a descending-fifth relationship with V, but as an added-sixth IV chord in root position. In any case, the “ii⁶” chord turns up as the most important left branch in LJ 5c. As to the six-four chord of the cadential formula, it attaches directly to the V chord, whose bass note has already arrived.

Working now from the start of the theme, the second-beat I⁶ sonority does bring the most stable right-branching connection, but since this “weak prolongation” is melodically counter-intuitive, the progression to the first-beat V⁶ chord, which is proximate in terms of pitch and readily available as an accented event in the following time-span, is given precedence. The result is shown in LJ 5d.

According to the time-span reduction the most important event in m. 3 is the first-beat “vi⁷” chord, but in the prolongational reduction the second-beat V⁶ chord is preferred either since it brings a strong prolongation back to the first-beat V⁶ in m. 2, or since it attaches as a progression in terms of a “descending fifth” to the first-beat I chord in m. 4. This “is a genuine ambiguity in the piece”, forcing the analyst to choose one of the alternatives; cf. LJ 5e. L&J argue that option *b* is slightly more preferable – the following I chord belongs to the same higher-level time-span, and it is also held to be more overall important than the V⁶ chord in m. 2 in the previous time-span.

55 An altogether different tree is conceivable, a non-prolongational representation of the antecedent in which the foremost right branch would bring out the “progression” from the initial tonic to the relative minor seventh chord instead of the vacuous stability of the I–I relationship.

It might be argued both that attaching forwards to tonics is what dominants usually do, especially if there is a leading-note in the bass, and that few listeners are likely to miss the backward association between the two identical V^6 chords. The V^6 dominant in m. 3 ascends whereas the one in m. 2 descended, but this quasi-symmetrical relationship is weakened since the two chords occupy ill-matching positions in the metric hierarchy. Anyway, this similarity observation involves a non-contiguous relationship which means that it falls outside L&J's generative theory. It should furthermore be observed that the recurrence of a certain sonority is not tantamount to hearing the first sonority as being prolonged – the two V^6 chords just appear to form a strong prolongation. (This may, no matter the circularity, also apply to the I root-position chords in m. 1 and m. 4.)

The so far left-out, strong-beat “vi⁷” chord, accorded high priority in the time-span reduction, must of course be included in the prolongational structure. As a consequence of the two options to attach the V^6 chord in m. 3, there are two ways of understanding the “vi⁷” chord; cf. LJ 5f. Reading *a* attaches the “vi⁷” chord (as well as the following V^6 chord) to the first-beat V^6 in m. 2, whereas reading *b* straightforwardly connects it to the weak-beat V^6 available in the same time-span. While option *a* “captures the double neighboring motion in the voice leading” – i.e. “the V^6 within a prolonged I and the “vi⁷” within a prolonged V^6 ” – option *b* “better represents the pattern of tension and relaxation”. (p. 231)

But the first very-hard-to-hear, nested reading is difficult to reconcile with the dual fact that the recurring V^6 chords do not add up to a true prolongation, and that the “vi⁷” chord is actually heard as more stable than the attending V^6 chords, which does not fit with a chord supposedly acting as a neighbouring event. And none of the readings brings out the intuition that the two V^6 chords function as passing sonorities on the route to the “vi⁷” turning point – the “vi⁷” chord is shown as being subsumed either (indirectly) under the first or under the second V^6 chord, respectively. In other words, to the extent that that “vi⁷” chord is really a true neighbour sonority, the sense of symmetry does not emerge. Furthermore, none of the readings gives precedence to the readily perceptible, but non-contiguous I–“vi⁷”–I relationship – an option that would have required a doubly attached “vi⁷” chord, a violation of L&J's strictly hierarchical system; cf. Ex. 34.

The trees shown in LJ 5f both exemplify (parts of) a “normative prolongational structure”, made up of a right-branching structural beginning followed by a left-branching structural ending. To those who listen, i.e. to those who have listened, in L&J’s way, the final-state retention of mm. 1–4 essentially amounts to a passage that keeps to the third-degree tonic until it finally gives in to the second-degree dominant; a meagre benefit.

The entire theme

We will now turn to L&J’s reading of the entire theme, a time-span reduction of which is shown in Ex. LJ 6. (p. 173).

At level *c* the final dominant chords representing the residual tonal content of mm. 3–4 and 11–12 are left out whereas the penultimate dominants within the time-spans mm. 7–8 and 17–18 are retained. This boils down to the question: which dominants are “structural”, the V chords at formal interruptions like the one in m. 4 or the V chords that are members of authentic cadences closing to the tonic, say the one in m. 8? Within L&J’s generative theory, the answer is given – as we proceed in the time-span reduction, which by and large follows the grouping structure, the V chord in m. 4 is bound to disappear in favour of the one in m. 8.

Turning to L&J’s musical argumentation, “the V at the full cadence [...] resolves the piece (or the passage) as a whole”. (p. 140). But it seems that this is not true since it is the I chord that resolves the passage mm. 1–8. The penultimate V chord in m. 8 is merely a tonic-preparing local detail, and it cannot be likened to the dividing, half-closing V chord in m. 4.

For this reason another argument advanced by L&J emerges as vacuous. They hold that the tonal structure of mm. 1–8 must turn out as in Ex. LJ 7b since the alternative representation 7a “would create an unfavourable prolongational reduction” suggesting “that the V in measure 4 prolongs across the repeat of the opening (measure 5) to the V in measure 8”. (p. 141) But, considering the quite different functions (and sonorities) of the two dominants, it is very doubtful that anyone would associate them with each other, and extremely unlikely that anyone would hear the dominant in m. 8 as a prolongation of the dividing dominant in m. 4 – recall that it has already been questioned whether we even can hear the V⁶ in m. 3 as a prolongation of the V⁶ in m. 2. Turning to the preferred reading 7b, it is,

due to the obvious antecedent/consequent parallelism, perhaps possible to understand the tonic in m. 5 as a prolongation of the one in m. 1. But one should ask oneself whether this is a very strong argument since what is involved is a formal recurrence (i.e. a discontinuous, associative relationship between m. 1 and m. 5) rather than a tonal prolongation.

Beyond the problem of “structural dominants” lies another one involving time-span reduction: to what extent are antecedent+consequent constructions at all reducible? When it comes to the crunch, what we do hear in mm. 1–8 are two formal units, starting in identical ways from the tonic but ending differently, first inconclusively in the dominant, then conclusively at the tonic. But does this important and very-hard-to-neglect difference allow us to erase the demarcation between these complementary units – as top/down prolongational reduction bids us to do and as happens in LJ 6 – and to take for granted the existence of a larger group recruiting its start from m. 1 and its ending from m. 8; cf. layer *c*?

Turning to layer *b* in LJ 6 similar objections apply. When the time-span corresponding to the B part of the theme is erased in the reductive process, its ultimate tonal representation, the tonic chord topped by e^2 , disappears as well. But do we really hear a unified mm. 1–18 time-span, in spite of the obvious return of the A-part in m. 13, in spite of the return to $c\sharp^2$ -over *a*? Otherwise put, is the expansion of the tonic space so as to include e^2 really a dispensable aspect of the theme’s tonal structure? While we are spared Lester’s voice-leading attempts to downgrade the tonal importance of the fifth degree which obviously dominates mm. 9–12 (cf. Ex. L 1–4), the e^2 and what it stands for is disposed of as a matter of analytic routine in L&J’s time-span reduction.

That the tonal structure assigned to the K. 331 theme – i.e. the prolongational reduction corresponding to LJ 6 – turns out to be similar to a Schenkerian *Ursatz* is hardly surprising since both time-span and prolongational reduction are quite strongly predicated on stability. Yet L&J, who like Lester prefer the third-degree $c\sharp^2$ as the primary note, offer a critical discussion of why Schenker came up with a tonal analysis of mm. 1–4, different from their own; cf. Ex. (LJ) 8 (p. 276), showing L&J’s transcription of Schenker’s “certainly plausible” reading.

Apart from the difficulties associated with Schenker’s choice of the fifth-degree e^2 as *Kopftön*, the crucial problem lies in the fact that Schenker’s

analysis implies that “the bass (that is, the harmony) and the melody must receive contrasting structural descriptions”. (p. 276) Ex. LJ 9 shows a reading featuring two prolongational trees in order to capture the melody and the bass as distinct (and yet interacting) musical processes, a proposal opening up for interesting but unwieldy reductive analyses in the future.

In conclusion it must be said that L&J’s “generative” approach is not without merits. Their analysis of the K. 331 theme makes up a detailed specimen of a new method for tonal reduction, and there is much to learn from it. But their comprehensive, empirically based, and strictly hierarchic approach may appear as “over-kill” to many musicians and analysts. It should be possible to arrive at a convincing, or at least reasonable, tonal structure by just using one’s ears and musical understanding, by just engaging in reduction in a piecemeal, non-biased, pragmatic way.

Just reduction

After having studied various Schenkerian attempts at establishing *the* tonal structure of Mozart's theme, diverging readings that had to be rejected both for theoretical reasons and due to their musical insensitivity – a deficiency caused by preconceived ideas as to what a tonal structure must be – it is necessary to start again with a clean slate. The reduction is too valuable a method to be wasted, so we must find out if there is anything like “just reduction”, i.e. an unbiased, piecemeal reductive approach doing straightforward justice to the music, to what we hear.

What is “just reduction”?

But what are the rules of “just”, non-Schenkerian tonal reduction? And how can we live up to “non-Schenkerian” while keeping to “tonal”?

First of all, it is necessary to stay clear of a number of regulations as to method and result that are taken for granted in so-called tonal analysis. Scholarly analysis – and there is no reason why Schenkerian reduction should be an exception – must never issue from or make use of preconceptions, but must always be guided by the very music under study, by what you can see in the score because it is actually there, and particularly by what you can reasonably hear.

This means that, when the music so dictates, you must be prepared to reconsider some of your cherished ideas, or at least to allow of alternative, perhaps unusual ways of conceiving what happens in the music. If the course of the music eventually fails to confirm some of your darling truths, the worse for them and the better for you since you may have learnt something. And if the general observation holds true that exceptional creativity goes with transgressing conventions, there is a chance that the music in question might be excellent.

Reductive analysis is not to be undertaken – and music does not exist – in order to prove anything. To avoid this trap (and biases in general) you should work bottom-up, respect what is written in the score, pay close and fair attention to your musical intuitions, and accept what comes out if you let the music have it in its own way. Don't sell the chickens before they are hatched.

But one holy cow will be kept and fed in the just reductions to follow. The analyses will be predicated on the dual notion that the sections, and eventually the entire K. 331 theme, somehow make up closed harmonic units, and that it is important that this property emerges from the reductions. This concession is not tantamount to saying that keeping to A major is the very point of Mozart's theme; if it had not offered some other feature(s) worthy of analytic attention, we would hardly take an interest in it.

Secondly, while voice leading and harmonic stability will still be found among the criteria of reduction, other musical elements will be accorded greater significance in just reduction than is normally the case in Schenkerian analyses. This means that features like metric position, motivic content, formal articulation, and salience (pure and simple) are to be paid due attention as potentially decisive factors when it comes to the recursive selection of notes. It also implies that lacking root-position support for structural upper-line notes as well as subsurface consecutive fifths/octaves are acceptable "deficiencies" since they do not necessarily diminish the phenomenal effect of the emerging structures.

Since discovering tonal connections inherent in the pitch substance makes up the essence of Schenkerian analysis, it happens that melodies are understood in "unmelodic" ways – the notes tend to be selected so as to turn melodies into bundles of linear connections. In a just reduction this analytic possibility must not be put to improper use, as it is when the idea of covered/covering notes is resorted to in order to dispose of theoretically unwanted notes and to bring out desirable ones. Nor should melodies without valid reasons be thought of as a sequences of harmonic units supplying suitable registral pigeonholes for "inherent" lines.

Thirdly, a just reductive analysis should be guided by your ears rather than by your eyes or intellect. This means that audible connections count for more than visual observations of inherent lines. And if there is a choice between a salient event and an inconspicuous one, that happens to fit in with a connection that you have found in retrospect and want to demonstrate, it implies that you should first give the salient event a chance and see where it leads you. It is *not* a hallmark of pertinent or interesting reductions that they run against the grain of the music, and obvious connections do not necessarily indicate that the analyst (or the composition) is unsophisticated.

The “ears-first” principle also means that you should be very reluctant to transform the musical text so as to make it more amenable for analysis, or to make it yield something that you wish to find in the music. Don’t add desirable notes or delete unwanted ones, and don’t put notes in the wrong octave unless there are very good reasons to do so! (You are the first to be deceived.) There may be permissible transformations on rare occasions, transformations that are necessary for structural understanding, but they must have very strong support, for instance by deriving from a current compositional practice or by being convincingly grounded in the particular passage under study. Your structural hypothesis, whatever it is, does *not* amount to a sufficient ground for manipulations producing the evidence you need.

In the fourth place, just reduction does not make up an inverted magnifying glass. The current Schenkerian habit of extending the “bars” as you proceed to higher, more encompassing levels in the reduction is deceptive. The music keeps to its pace, and its notes do not disappear, but when you compress what happens in, say, four bars into one “analytic bar”, you are easily misled into thinking that the remaining – actually quite sparse – events make up an audible or meaningful structure in the music, but this is not necessarily the case.

A related rule is that you should not displace notes to the right or left in your graphs in order to show that something is present at a certain, desirable moment. The relationship may be much less apparent than you take for granted because, unlike our eyes, our ears are by and large reduced to a temporal, sequential mode of experience. Non-coinciding events should not be represented as if they were simultaneous, and you must be particularly wary against “pre-prolongations” – make sure that such forced coincidences correspond to actual retrospective insights.

Particularly when dealing with higher levels, you must check with the music to ensure that your long-term structural discoveries have not turned into musical nonsense! If we want to confine ourselves to what we can reasonably hear, we must realize that tonal connections – just as, for instance, Meyer’s implications and rhythmic groups – expire long before our credit cards.

Finally, since there is nothing in tonal music that prevents us from assuming the presence of several plausible connections, from being aware of several

coexisting tonal structures, it is not the task of just reduction to do away with all alternatives but one. There may be arguments to the effect that a certain reading is the most plausible, but the other options are still there, and neglecting or suppressing them is to impoverish the music. A just reduction should bring out structural ambiguities, not iron them out.⁵⁶

It is about time to stop moralizing and proceed to business, not as usual, but as all too seldom practised. To begin with, the AA¹, B, and c sections will be dealt with separately, and the events to be retained at the next level will be selected step by step. While still keeping to the bottom-up approach, the sections will then be joined in order to study the K. 331 theme as a whole. Throughout, alternative reductions will be presented and discussed.

Mozart's music is of course shown at the topmost staff. Considering our reading habits, where else than at the top of the page can an unbiased bottom/up reduction, proceeding from the music's surface to its depths, start? (There is a vexing confusion when talking about "bottom/up" analysis proceeding from "surface" to "deep structure"!) Next comes the preliminary layer – the rhythmic information is preserved by means of proportional spacing, and virtually all notes are included in this first representation. Then follows the deeper – or if you so prefer higher – layers in due order. Notes written with small note-heads are to be deleted at the next level. The slurs mark notes belonging together, but the reason for their doing so varies: neighbour-note and passing-note relationships, appoggiaturas, notes issuing from or leading to other notes. Notes that appear to be "dormant" are indicated by hatched slurs, but it should be observed that "dormant" does not necessarily mean prolonged – it sometimes happens in music that notes just turn up again in significant ways, reminding us of the fact that we have heard them before.

It should be pointed out that while the analysis to follow is of course not beyond criticism, it cannot very well be questioned by arguments deriving from within Schenkerian theory. "Just reduction", being a free quest into free composition, moves outside the fence.

⁵⁶ For a further discussion, cf. "In defence of musical ambiguity", ch. 2 in this volume.

The initial period

The preliminary analysis of the first two sections is shown in Ex. 35 A/C. Generally, the selection of notes to remain at (say) level C is discussed in the context of level B, where the notes to be deleted are still present.

As appears from level A, Mozart's upper neighbour-notes in m. 1 (etc.) and the appoggiatura in m. 4 are insignificant details. When the neighbour-notes are absent at level B, it appears that the repeated notes in the parallel soprano and bass melodies are dispensable as well; cf. level C. The static tenor-register voice is gradually deleted; it causes a slight dissonance at the start of mm. 3 and 7, and only in the closing full cadence it leaves e^1 , giving rise to parallel sixths. There are four different structural interpretations at level C, being the fork from which alternative reductions begin to proliferate.

As can be seen from the small note-heads in Ex. 35 C1, the upper notes in mm. 1–2 and 5–6 may be understood as melodic offshoots from the lower notes.⁵⁷ This emerges as a quite reasonable choice since the upper notes enter on the second beat, and since they lack (simultaneous) root-support. As a result of this reading, a stepwise descending-then-ascending $c\sharp^2$ – b^1 – a^1 – b^1 – $c\sharp^2$ connection begins to emerge in the antecedent and consequent; indeed, due to the accented positions and the parallel tenths with the bass, this motion is virtually unmistakable. Turning to the cadences, the 35 C1 reading gives precedence to the upper-line; the alto-voice thirds and later on the sixths shadowing the top voice will be taken away.

35 D1 signals that the passing sonorities $b^1/g\sharp$ are to be left out at the next level – the root-position $a^1/f\sharp$ chord emerges as more stable – and so are the d^2/d events in mm. 4 and 7 in spite of their harmonic significance. At this level, and since the upper-line interpretation is given precedence, the excursions up to d^2 emerge as relatively insignificant as do the cadential six-four $c\sharp^2$'s.

57 Thus, they are *not* understood as “covering unfoldings” which is lingo term feeding from Schenkerian theory and taking a certain deeper-layer explanation for a fact, instead of asking whether “the fact” has support in the musical surface. What happens in this case is simply that the melody moves from $c\sharp^2$ to e^2 , etc.

The main remaining events in 35 E1 are the descending-then-ascending thirds. It is assumed that many listeners will associate the $c\sharp^2$'s in m. 4 and 7, respectively, with the starting $c\sharp^2$'s in mm. 1 and 5, and that at this oxygen-deficient distance from the musical surface the turning-point a^1 's tend to be heard as less significant.

At the “background” shown in 35 F1, finally, there is only a third-to-second-degree, tonic-to-dominant structure left in the antecedent, whereas the consequent proceeds to the first degree supported by the tonic. Due to the demarcation between antecedent and consequent, and of course the overall parallelism, the listeners cannot but associate the $c\sharp^2$ in m. 5 with the one heard in m. 1, but they will most likely think of the connection as a new start, not as a dormant note.

Only to those who are immune to formal demarcations, an encompassing *Ursatz*-like structure covering the whole period mm. 1–8 will come to the fore. The fact that the root-supported VI chords are not included into the partial fundamental structures may be questioned. The excursions down to $a^1/f\sharp$ make up the very core of the harmonic process, but the two relative-minor chords are bound to be sacrificed in the final reduction, ultimately predicated on tonal stability. The reduction from C1 to F1 presents itself quite clearly to the listener and, turning to the pianist, no extra efforts are required to bring it out.

Turning to the second alternative, Ex. 35 C2 differs from 35 C1 in two respects. The upper notes in mm. 1–2 and 5–6 are retained on a par with the lower ones – after all, both strands are conspicuous. In the two cadences the alto-voice is selected as the primary connection, a reasonable reading considering that a new surface line $e^2-d^2-c\sharp^2-b^1$ may be taken to enter from above in m. 4. Bar 7 is then likely to be heard in a similar way although there is no obvious trace of an additional melodic entry.

This way of listening reveals another clearly audible sub-surface feature of the theme: shadowed by the bass a tenth below, there are three rising thirds in the antecedent and consequent as shown in 35 D2. The next notes to be deleted are the b^1 's; the passing ones in mm. 3 and 7, as well as the ones in mm. mm. 4 and 7 – they are supported by subdominant roots and yet they may emerge as passing-notes.

In 35 E2 the upper notes of these thirds are marked for disappearance. As a result of this deletion, the VI chords are given priority at the expense

of the following tonic chords, and the low-strand a^1 's emerge as revisited in mm. 4 and 8 after the excursions upwards to $c\sharp^2$ – recall that the alto voice in the cadences has been understood as primary. The six-four $c\sharp^1$'s are to be deleted at the next level.

The final picture emerges in 35 F2: two readily audible descents from the third degree down to the seventh and to the tonic, respectively. These background descents are followed by the bass voice at the distance of a tenth – the last tenths are expected events, perceptibly delayed by the rising melodic deflections and the cadences.

The weak point of this reduction is that some listeners may not be willing to abandon the soprano voice at the cadences. No matter how conspicuous and well-supported the deep-layer descending-fourth progressions $c\sharp^2/a-g\sharp^1/e$ may be, they do not qualify as fundamental motions in a Schenkerian sense since an *Urlinie* for quite abstruse, orthodox reasons is not allowed to feature seventh degrees as dividing or penultimate structural dominants.

Allowing for a digression at this point, let's assume that Mozart had composed a theme whose first eight bars run as in Ex. 36a. There are no dividing and penultimate "structural" dominants topped by second degrees at the cadences; instead these all-important dominants are represented by seventh degrees. But a Schenkerian analysis would nevertheless most likely turn out as shown in Ex. 36b. With (or even without) parentheses, second-degree b^1 's replacing the unwanted $g\sharp^1$'s will be procured from (say) the inner-voice b in m. 4, and a similar transformation will no doubt occur also in m. 8 although there is not even any b to recruit. (Readers at home in tonal reduction as currently practiced can raise their hands if they have never seen manipulations of this kind.) A good piece of music simply must have a unifying structure of the theoretically approved sort, and if a correct *Ursatz* fails to turn up, tonally responsible analysts are called upon to enforce order.

Turning to the unfortunate, recomposed theme in Ex. 36a, does it lack tonal unity because it features seventh degrees perched over "structural" dominants in the bass? No. Is the 36a theme musically or even stylistically impossible? No. Is it aesthetically inferior to Mozart's theme? Perhaps slightly so, but not because it exhibits a theoretically illegitimate upper line, but due to the fact that the late $c\sharp^2-e^2-d^2-c\sharp^2$ and $c\sharp^2-d^2-c\sharp^2$ motions in

Mozart's theme are welcome detours on the route towards the foreseeable closing notes.

The first reductive step of the third reading is shown in Ex. 35 C3. It is immediately apparent from the graph that this reading will give priority to the upper notes in mm. 1–4 and 5–7, and to the soprano in the cadences – the melodic entry in m. 4 may be understood as a swift repeat of the preceding slow descent. It might be argued that the upper notes to be selected do not occur at the primary beats, but they are top notes (enjoying some lingering bass support) and the preceding quasi-upbeat motifs bring them out. Just as the second reading, this one is supported by the prominent rising thirds inherent in the melody, but they are given a different interpretation – the lower notes are now giving in to the upper ones.

The next stage 35 D3 signals that the six-four $c\sharp^2$'s as well as the upper neighbour-note-like d^2 's, together with their subdominant roots, will be taken away.

The ultimate structural connections emerge in 35 E3: stepwise descents in the treble from the fifth degree towards the second and first degree, respectively.

Made up of exposed top notes and “pre-shadowed” by the bass (i.e. obliquely supported by twelfths), these connections can be heard quite well, and they may perhaps make up a divided *Ursatz*, despite the weak support for the fourth degrees and the fact that the initial treble notes actually lack root support. But we have to accept oblique relationships between the principal bass motion and the structural treble as well as sequences of consecutive twelfths/fifths. Despite its importance in the overall harmonic process the VI chord is suppressed; after all, the $c\sharp^2$'s in mm. 4 and 7 enjoy patent, simultaneous support from I chords.

The point of departure for the fourth alternative reading of mm. 1–8 is similar to the one of the reduction just accounted for: 35 C4 is identical with 35 C3 except for the fact that the alto strand is given priority in the cadences.

Once the lower notes marked for deletion at the preceding level have disappeared, the final result emerges in 35 D4: descents from the fifth degree down to the seventh and first degree, respectively, come to the fore. Initially, these descents are made up of second-beat top notes marked for consciousness by rising thirds and pre-shadowed by the bass a twelfth below. The

descending motions are finally accelerated along with the cadences giving firm root support.

If you are prepared to abandon the top-voice melody in the cadences – again the apparently new melodic strand entering from above in m. 4 may seem to relegate the main upper connection to the alto voice – you may hear structural upper-line connections of this kind. Since these descents feature seventh degrees as “structural” dominants, they must again be dismissed as members of a divided *Ursatz*.

One might think that a much more serious deficiency would be that two structural notes a^1 and $g\sharp^1$, or for that matter $c\sharp^2$ and b^1 if you stick to the upper voice in the cadences, share the same penultimate-dominant root support. But such overcrowding is an entirely accepted and very common emergency expedient in Schenkerian analyses when it comes to precipitately cashing in *Urlinien* just before closing-time, but it is no more convincing for that. The first note in six-four-chord formulas is a local dissonance, and like other dissonances it should – being the less stable of the two notes involved – be reduced out of structural consideration if we are to respect one of the most basic rules of the Schenkerian game.

The middle section

The reduction of the middle section of the theme – there is only one reading to account for – appears from Exs. 37 A/D.

The foreground representation in 37 A makes clear which notes will be left out at the next level. In m. 9 the repeated notes are considered structurally insignificant, and so are in m. 10 the notes leading up to a^2 and returning to $f\sharp^2$. As to the accompaniment figurations in the left and then in the right hand, the middle notes are to be deleted; they are simply less conspicuous than the following notes – as is explicitly prescribed by the articulation in mm. 11–12. Thus, the reason for deleting the middle notes is not to get rid of consecutive octaves: they happen to be suppressed in mm. 11–12, featuring parallel sixths rather than octaves, but are brought to the fore in mm. 9–10. This voice-leading “flaw” is in fact a constitutive characteristic of mm. 9–12, and also a quite common feature in much music. In mm. 9–10 most listeners are likely to enjoy the fact that the motion in

the melody up to and then down from $f\sharp^2$ is confirmed by being doubled in the left hand.

A pair of two-bar drones emerge in 37 B, the first on a in the left hand, the second on e^2 in the right hand; these drones accompany neighbour-note motions in the other hand. The notes of the inner voices will subsequently be cleared away.

Four-bar drones on a and e^2 come to the fore in 37 C, and they are readily audible features of the B section. The melodic excursion to $f\sharp^2$ in mm. 9–10 as well as the cadential $f\sharp$ in the bass and the melodic appoggiatura note $c\sharp^2$ are marked for deletion at the final level.

The emerging background in 37 D is as simple as it is conspicuous when listening to the music. The middle section remains stuck on e^2/a until the prolonged 5-over-I is abruptly replaced by a second-degree b^1 supported by the dominant.

This structure is very far from being even a part of an *Ursatz*, and it features an irreducible component: the top note a^2 , which in the listener's memory of the B part survives its own *raison d'être*, the syncopated excursion to the upper neighbour-note $f\sharp^2$.

The “coda”

Turning finally the composite A^1c part of the theme – and disregarding that m. 17 may be heard as a kind of enhanced replica of m. 15 – we only need to deal with the “coda”, but there are two reductive options to account for.

At the foreground shown in Ex. 38 A1, the upper bass voice and the drone on e^1 announce their demise; the quick appoggiatura-note $c\sharp^2$ in m. 18 is also to be left out as are the swift “tail” notes after $f\sharp^2$.

The following stage of the reduction, 38 B1, shows that next to go are three insignificant neighbour-notes: the two $g\sharp^1$'s prolonging a^1 and the left-hand d^1 issuing from and returning to $c\sharp^1$. But the a^1 – b^1 – a^1 motion in m. 18 is retained since it belongs to the top line.

In 38 C1, the now inactive alto and tenor strands are marked for deletion. The ascents in the soprano and bass suggest rising thirds, filled in by dispensable passing-notes.

Turning to 38 D1, the e^2 and $f\sharp^2$ in m. 17 are to be left out – the initial $c\sharp^2$ is retained since it enjoys tonic root-support and because it is relatively

more accented. The d in the bass is saved since it represents the subdominant of the cadence whereas the “six-four” a¹ starting m. 18 is dispensable.

The background result of the reduction is shown in 38 E1. The upper line and the bass progression constitute a local *Ursatz* in which the *Urlinie* falls from the third degree.

It seems that the bold, stepwise excursion upwards reaching as far as f_♯²(-a²) and being eventually supported by the subdominant makes up a crucial musical feature, whose elimination cannot but cast doubts on this reduction. Otherwise put: one might wonder whether listeners, who somehow manage to hear the c_♯² as being prolonged throughout m. 17, have not eaten stones instead of bread. And stones is hardly a diet for musicians – no pianist will even try to give precedence to a falling-third descent in mm. 17–18 since it is impossible.

In the alternative reduction, Ex. 38 A2, the final g_♯²-a² motion in m. 17 is *not* marked for disappearance.

The result can be seen in 38 B2. It should be noted that according to this reading the stepwise ascents of the top and bass voices are to remain intact – the weak-beat notes will not be deleted at the next level. While the alto neighbour-note motion in m. 17 and the tenor one in m. 18 will be left out, the final bar offers two alternative neighbour-notes in the right hand, b¹ and g_♯¹. Of these, it is the lower one that will be given priority.

The upper-line connection emerging in 38 C2 is certainly not an *Urlinie* since *Urlinien* are not allowed to ascend. But the rising sixth from c_♯² to a² (a¹) in the treble is convincingly supported by the rising A–e motion in the bass, and the complete I–IV–V–I cadence is engaged as harmonic support.

The first part of this tonal structure can be heard very well; the two rising gestures are virtually the only thing that you are likely to pay attention to in m. 17. But what about the final notes of the structural upper line, showing up in the wrong octave after two swift and seemingly irrelevant top-register notes? In terms of tonal analysis, isn't the final a¹ a first-degree note rather than an eighth-degree one?

The fact that the melody quite unexpectedly drops by one octave down to the first-degree register is no great problem for the listener. Melodies sometimes behave in this way and, no matter whether we listen in terms of tonal degrees or not, it is not difficult to follow their course. The situation at the bar-line mm. 17/18 is in fact self-evident, and this is exactly what “quite

unexpectedly” suggests. For rhythmic, melodic, and tonal reasons we are bound to anticipate that another a^2 will turn up immediately after the bar-line, and when a^1 turns up in its place, it will be heard as a transposed eighth degree, not as a regression to the first degree occurring by accident, let alone by necessity.⁵⁸ Adopting the terminology of melodic implications, this a^1 is not just any surprise; it is the final, but deceptive, realization of the preceding rising motion along the scale. It is an arrival that is concurrently both “right” and “wrong” – which is of course the very point of Mozart’s formulation.

The “codas” of the variations have already been cited as material for comparison when discussing whether mm. 17–18 make up a coda or a shortened A part, and they may serve again; cf. Ex. 23 a/g. The closing sections of Variations 1 and 3 also feature sudden octave transfers to a lower register; i.e. they end at the eighth degree disguised as a first degree. The latter variation is of particular interest since the downward leap occurs at the fifth degree, from which the melody as if nothing had happened proceeds its stepwise rise to the eighth degree.⁵⁹

Further evidence is brought by the second movement of the K. 331 Sonata. The main part of the *Menuetto* features several passages abruptly vacillating between the upper and the lower register, and particularly striking is the similarity between the “coda” of the first-movement theme and the closing passage of the minuet, which clearly exhibits a structural ascent from the fifth to the eighth degree despite the last-moment leap downwards; cf. Ex. 39.

In this context it should be recalled that Mozart’s *forte* marking in m. 17 lasts until the very end of the theme, suggesting that what happens in the low register in m. 18 is a continuation of what happened in the high register in m. 17. The fact that the *forte* is not cancelled by any *piano* in m. 18 is

58 Outside the Schenkerian universe this leap downwards can certainly not be explained by referring to the fact that Mozart had to fulfil the eternal duty of bringing the *Urlinie* back to the “obligatory register”. Schenker has dominated much analytic thinking for almost a hundred years, but music composed in 1778 lies beyond his reach.

59 If the compass of his keyboard had been wider, Mozart might have avoided this downward leap, but this would have meant missing an association back to the “coda” of the theme.

often disregarded; apparently, many pianists prefer to underscore the contrast in register by adding a sudden contrast in terms of dynamics – the last bar is played in a parenthetical way.

But the structural motion $(a^1-)\text{g}\sharp^1-a^1$, representing $(a^2-)\text{g}\sharp^2-a^2$, is in fact not heard as the melody in m. 18 since it is overlaid by the motion $a^1-c\sharp^2-b^1-a^1$. This element of voice-crossing, present also at the end of the minuet, admittedly makes the very end of the “coda’s” structural rising sixth somewhat more difficult to follow; cf. Ex 40. But it should be observed that all cadences in the theme feature two closely parallel lines in the treble, a fact that invites to voice-crossing exercises. Particularly in m. 4, a sense of voice crossing presents itself – the possible structural connections proceeding down to the seventh-degree $\text{g}\sharp^1$ presuppose that the soprano melody is understood as a secondary voice.

However, voice crossing in quasi-Schenkerian terms is perhaps neither the whole story, nor the best explanation. It seems that the “voice crossing” in m. 18 should rather be understood as a specimen of inverted counterpoint. As shown in Ex. 41 the actual alto-register lower line in m. 18 can be transferred to the top register, relegating the actual soprano melody to a lower, supplementary or sub-melodic status. With the appoggiatura/neighbour-note motion $a^2-\text{g}\sharp^2-a^2$ as the top voice, the structural ascent from the third degree would be crowned by the eighth degree without any sense of inhibition, would be brought to its end just as the listeners are likely to expect.

Furthermore and *à propos* voice leading, the “coda” may be taken to bring another sudden shift downwards, a shift occurring simultaneously with the unexpected twist of the upper line; cf. Ex. 42a. The upper bass voice shadowing the top-voice ascent in m. 17 may be taken as featuring a d^1-e leap across the bar-line. But there is another and perhaps better way of understanding the situation. Mozart perhaps did not want a right-hand octave reinforcement of $\text{f}\sharp^2$, and therefore he replaced $\text{f}\sharp^1$ by a left-hand d^1 . This means that the initial $c\sharp^1$ in m. 18 emerges as belonging to an inner voice falling from the last right-hand e^1 via the left-hand d^1 . In addition, if we add virtual lower octaves to the swift ascent and (as a matter of inverted counterpoint) duplicate the alto voice in m. 18 one octave upwards, the a^1 after the bar-line presents itself as an inner voice. In any case, the a^1 drone in mm. 17 seems to survive the drastic shifts. The various ways to understand mm. 16–18 are to be found in Ex. 42b.

The fact that m. 18 brings a closing seventh-to-eighth-degree motion does not mean that one should write $g\sharp^2-a^2$ in the reduction in addition to or instead of $g\sharp^1-a^1$. Such a transformation of the text is not necessary: given the determined ascent towards a^2 in m. 17, $g\sharp^1-a^1$ represents the seventh and eighth degrees anyway. In other words and again, the last two notes of this rising structural connection are strongly implied but, as it immediately turns out, deceptively realized, and this fact cannot but support the reduction shown in 38 C2.

This point deserves to be generalized: tonal connections emerge as more convincing if they are also effective as melodic/linear implications in Meyer's sense. The urge for realization inherent in generative events cannot but inform and give life to otherwise more or less static tonal connections.

Compatible upper lines in the initial period

“Just reduction” has so far yielded four (more or less) plausible readings of the AA¹ period, two of the “coda”, but only one of the B section. It will be recalled that the first reduction of mm. 17–18 was not very satisfactory since it failed to account for the extraordinary rising motion in m. 17. To understand this bar as a “prolongation” of the third degree over the tonic – or for that matter to think of the entire “coda” as prolonging the first degree being denied in m. 16 – is simply not good enough, and this reading (38 E1) will therefore be disregarded in what follows.

It remains to join the sections and to find out what the encompassing tonal structure of the K. 331 theme might be – if there is any such overall structure.

As a first step we will combine the four plausible readings of the treble in m. 1–8 in order to see whether these connections are compatible with each other and make up musically meaningful structures. Outside the world of Schenkerian orthodoxy, there is (as pointed out previously) no reason to discard beforehand the possibility and legitimacy of trio-sonata-like tonal structures with two upper lines.

The combination shown in Ex. 43 A exhibits an eventually descending second and above it a descending fourth in the antecedent, and corresponding motions reaching the first degree in the consequent. The two

connections finally share the notes $c\sharp^2$ and b^1 , and the combination amounts to hearing first lower, then upper structural notes in mm. 1–3 and 5–7. This option quite readily presents itself due to the mediating rising thirds inherent in the melody. The lower connection issuing from the third degree is rendered conspicuous by the obvious connecting $c\sharp^2-b^1-a^1-b^1-c\sharp^2$ motion, accompanied by a corresponding detour in the bass. The upper line starting from the fifth degree is obliquely and yet sufficiently supported by the descending-fourth motion in the bass, a support suggesting consecutive twelfths/fifths. This combination emerges as the most plausible, and it is made up of two equally valid lines.

In 43 B the two treble connections, essentially descending fourths, do not really meet until the final a^1 in m. 8, since the lower line, after its excursions up to the shared note $c\sharp^2$ in mm. 4 and 7, joins the alto voice. Although initially slightly less prominent, the upper line eventually emerges as the most important connection because we are likely to attend to the upper, soprano strand when approaching the cadences in spite of the fact that an additional voice may seem to be introduced in m. 4. This combination must also be regarded as quite plausible, and it means that the two layers identified in mm. 1–3 and 5–7 turn up as parallel thirds in the cadences: the initially un-coordinated thirds eventually become aligned.

The final option to be considered, 43 C, combines the lower-line descending second (then third) with an upper-line descending sixth (fifth). This reading enjoys good support from the inherent voice leading as well as from the bass, but since the listener has to understand the parallel thirds at the cadences as involving voice crossing, it emerges as the least plausible of the three combinations.

In each of these readings two inherent connections (or lines/strands) are shown to coexist within the melody. It should be stressed, however, that this does not imply that the melody is somehow in fact made up of two voices. It is a melody that, along with being heard as having a self-dependent structure replete with implications, may plausibly also be understood as a two-layered structure. The analytic fission of the melody into two layers is a latent potential in Mozart's melody, and its sense of bifurcation is far from the clear impression of hearing two-melodies-in-one that is characteristic of some Baroque figurations, moving quickly up and down in large intervals so as to make for true, perceptual fission.

Nor do these readings imply that the upper of the inherent lines, even when it may perhaps emerge as less prominent, is to be regarded as some kind of secondary connection that somehow pops up to a position above the lower, principal strand. Consider mm. 1–2: the upper line is certainly there as a result of the peculiar behaviour of the melodic motion, not because any imaginary interior voice has somehow got a “covering” position above the structural line. There is no sign in m. 1 of any inner e^1 that can explain the outer e^2 , and to the extent that the lower line $c\sharp^2-b^1-a^1$ in mm. 1–3 emerges as slightly more prominent than the lagging upper $e^2-d^2-c\sharp^2$ strand in mm. 1–4, this fact does not turn the latter connection into a runaway interior voice.

The entire theme: a monolinear and a bilinear reading

As the final step of the from-scratch attempt at a “just” tonal reduction, the theme will be considered as a whole. Two readings will be proposed: the first one selects for each section the most plausible right-hand structure whereas the second one allows of two structural connections in the treble.

The “single-line” tonal reduction of the theme is shown in Ex. 44 A. In virtue of its bass-line shadow a tenth below, its vertical harmonic support, and its down-beat rhythmic salience, the structural descent from the third degree is preferred to the lagging one issuing from the fifth degree as far as the A and A¹ sections are concerned. In both cases the connections reaching down to $g\sharp^1$ are disregarded since they require listening in terms of voice crossing. As to the B section and the “coda” there is just one structural option to consider – recall that understanding the “coda” as a structural descent from the third degree has been dismissed. Thus, the middle section emerges as a prolongation of the e^2 -over-a drone, whereas the “coda” exhibits a structural ascent from the third degree to the eighth-degree a^1 (a^2). The latter tonal motion is supported both by the parallel rise in the bass and by the final cadence, and it is quite obvious in spite of the sudden octave transfer. Indeed, this twist suggests that the final bar may be understood in terms of inverted counterpoint.

It seems that the selection of these upper-line connections is confirmed by the tonal impression of the theme as a whole. The analysis does justice to the crucial importance of the heightened, fifth-degree tonal level in the

middle section as well as to the unmistakable sense of a final, rising arrival at the eighth degree. And yet this reading amounts to a complete failure by Schenkerian standards since, in addition to the unacceptable rising upper-line closing the theme, it does not describe the music as having one single, tonally unifying fundamental structure. Or else it is Mozart's theme that fails and has to be dismissed: it should exhibit an *Ursatz*, but it doesn't.

But the K. 331 theme is arguably a masterpiece, and nobody has complained about its lack of tonal unity. Apparently, Schenkerian analysis has a too narrow idea of tonal unity – which, by the way, does not occupy a place apart when it comes to unity in music; there are other properties besides tonal conduct that make for unity and deserve to be studied. The first, “just-tonal” analysis indicates that it is not advisable to capture the entire theme by means of one and the same fundamental structure, no matter whether the encompassing upper-line descent starts from the third or the fifth degree. If a structural fifth degree is thought to be there right from the start, the analysis fails to do justice to the sense of tonal rapture in m. 9. If the third degree is adopted as *Kopfton*, the reading fails to account for the middle section.

The second overall structural account, cf. Ex. 44 B, is of the “trio-sonata” type featuring two structural connections in the treble. This reading, in which Mozart's (presumed) inverted counterpoint in the “coda” is undone in order to render the structural connections more distinguishable, does justice to the fact that we may readily hear the A and A¹ sections in terms of two coexisting treble strands, as well as to the sense of a fifth-degree structural “solo” in the middle section. It might also explain what happens in the “coda” and in the extraordinary bar preceding it.

In mm. 1–8 and 13–16 the upper connection issuing from e² emerges as an important complement to the lower line starting from c[♯]. In the B section the upper, fifth-degree tonal position takes over completely until the abrupt transfer to the lower tonal level in m. 12. At the start of m. 17 there is a dual sense of beginning and arrival; in other words, there is a sense of layered elision.

It is possible to think of the tonic downbeat a¹ in m. 17 as belonging to and closing the two structural strands in mm. 13–16 since it is anticipated by the alto a¹ just before the bar-line, and since the following rising line,

issuing from the third degree and being anticipated by the soprano $c\sharp^2$, is introduced as a fresh upper voice in concurrence with the arrival of the previous structural connections. Along with the new rising line starting from $c\sharp^2$, there is in mm. 17–18 perhaps also a slight sense of a supplementary double neighbour-note motion around a^1 . But this motion cannot reasonably be taken to represent a final prolongation of the first degree, cannot very well provide the badly needed confirmation of the closing tonic of the descending fundamental connections started in m. 13. While the rising sixth in mm. 17–18 may perhaps be a huge deflection, it is not a covering motion.

Ex. 42b is an attempt to reconstruct and clarify the actual voice leading within the four-part, later five-part writing in mm. 16–18.

Returning to Neumeyer's analysis

At this late point of our discussion of possible reductive structures in the K. 331 theme, we will return to Neumeyer's analysis, which as will be recalled also failed to be Schenkerian enough.⁶⁰ There are valid observations in Neumeyer's reading of the B section – as there are in Lester's – and what follows are some further remarks; cf. Ex. N and especially Ex. 45.

It is obvious that the first- $c\sharp^2$ -then- e^2 intertwined descents in the A parts are replaced by a straightforward e^2 -slightly-before- $c\sharp^1$ relationship when m. 9 starts the static middle section. And just as there was in the A parts a bass shadow issuing from a , there is within the left-hand figurations of mm. 9–10 a supporting tenth-below voice $c\sharp^1$ - d^1 - $c\sharp^1$. It is rewarding to bring this lagging shadow out when playing.

And it is a fact that $c\sharp^2$ - d^2 - $c\sharp^2$ turns up in mm. 11–12, making up a corresponding neighbour-note motion faintly suggesting a subordinate link down to the second-degree b^1 ; a similar a^1 - b^1 - a^1 motion leads to the seventh-degree $g\sharp^1$. These closing notes may be thought of as local dividing dominants of interior lines, but the decisive division in m. 12 is caused by the fact that the fifth-degree drone on e^2 , increasingly prominent throughout the middle section, is denied a structural descent – unless you read the right-hand figurations against the grain to enforce a stepwise connection down to b^1 .

60 David Neumeyer, "The Three-part *Ursatz*", *In Theory Only* 10(1987)1/2, 3–29

But to the pianist another way to make sense of mm. 11–12 may present itself as more interesting. The repeated e^2 's ask for being opposed, and a lower neighbour-note figuration $a-g\sharp-a$ is available within the left-hand, double stops.

Furthermore, there is in mm. 9–12 a sense of three accelerating, ready-steady-go attempts to rise above the third-degree $c\sharp^1$. The first describes a complete subdominant neighbour-note motion, the second an incomplete/interrupted dominant one. The third overlapping and successful thrust via $d\sharp^1$ turns e^1 into a strongly dividing fifth degree – in other words, there is in the middle part of the theme a third-to-fifth-degree structural line eventually underscoring the tonal tension associated with the suddenly absent top-voice e^2 .

Conclusion

Far from lending itself to a successful “tonal reduction” confirming the Schenkerian ideas of tonal unity and the general applicability of the *Ursatz* concept in all valuable tonal music, this masterly Mozart theme makes up a powerful counterexample. Indeed, since it eludes, even opposes, normative efforts at unifying tonal descriptions, since it refuses to exhibit an overall fundamental structure, there are many things to learn from it. If we abstain from forcing it to exhibit what we for theoretical reasons want it to demonstrate, we may realize that it demands to be described in terms of sections having separate and substantially different tonal agendas, that it insists on having its own kind of non-monolithic tonal unity, that it invites to being understood as holding several concurrent and coexisting upper lines.

Justly reduced, then, this theme has a considerable falsifying potential, and revising ossified theoretical systems and ingrained analytic methods is of course desirable. It appears that its masterly qualities and its aesthetic singularity derive from the very fact that its idiosyncratic tonal structure, ambiguous as it is, defies standardized description.

Focal analysis

The non-Schenkerian, “just-reduction” attempt to find a sub-surface structure of the K. 331 theme did away with most of the normative elements associated with tonal reduction as currently practised. But a more radical alternative, indeed an altogether other kind of reduction, is conceivable if one abandons the very core of Schenkerian analysis, the holy-cow idea that reductions must be predicated on unity, that “tonal” reductions are to ultimately show how sections (and eventually entire pieces) make up contrapuntally impeccable, root-position authentic cadences moving from relative to absolute stability. This is why the deep-layer voice-leading graphs produced in Schenkerian analyses tend to be so disappointing: self-evident matters of tonal convention come more and more to the fore as you proceed, while the events and connections that stand out as crucial in your musical experience are gradually relegated out of sight.

If the aim of structural analysis were reversed, it would open up for the possibility to undertake reductions in order to bring out the tonally most remote, unstable events, and to describe how these high-tension points within the musical process are approached and left. Of course, such crucial events tend to show up in tonal analyses as well, provided that the graphs are reasonably detailed and that the readings pay respect to the music. But being understood as stages on the route from the initial tonic to the (usually very late) structural dominant, they are disposed of as matters belonging to inferior, close-to-the-surface layers.

If listeners and musicians were allowed to decide, the remote, unstable events – not the machinery bringing about the taken-for-granted tonal unity – would be taken as the *raison d'être* of the musical process as well as of the analysis. After all, and venturing a grand generalization, music is more about disturbing tonal equilibrium than about maintaining it. While tonal reduction as currently practised constantly shows that debits and credits meet, music is a matter of spending.

Reduction according to a reversed agenda is different from tonal reduction in two fundamental respects.

If we disregard the bad habit of representing the reductive process as a series of prolongations, Schenkerian analyses usually (or seemingly) start bottom/up by removing insignificant details so as to reach layers fairly close

to the surface. Then this piecemeal procedure tends to be abandoned for a normative top/down approach, in which the events are selected in virtue of their usefulness with regard to certain theoretically desirable voice-leading connections or tonal structures. But when it comes to the reversed kind of reduction, there is nothing to prove, and hence no need to let preordained conclusions produce the evidence. The analytic process begins with a tentative identification of one or several remote, high-tension events in the music, a selection ultimately deriving from the analyst's own musical sensitivity as he/she listens bottom/up to the music from beginning to end and then reflects on his/her experience.

Turning to the second difference, Schenkerian analysis is an exercise in hierarchical prolongation whereas reversed reduction starts from a few core events. The approach is in principle sequential: the very point of the analysis is to study how the music arrives at and then leaves the interesting, tonally remote events.

While Schenkerian reduction in current sense, as well as “generative reduction” and “just reduction”, may be called varieties of tonal analysis, it seems that a proper, contrasting name for the method soon to be applied to the K. 331 theme might be “focal analysis”. Its purpose is not to show how the tonic is left and eventually regained, but to demonstrate how the most remarkable events within a musical process – the “focal” events that we remember because we paid them close attention while listening – come into being and phase out.

Tonal and focal analyses certainly derive from contrary perspectives, but this does not mean that they are mutually exclusive. Since they address two quite different, coexistent aspects of the musical structure, they should be regarded as complementary.

Focal analysis is largely an informal procedure. The first thing to do is to find the focal event – there may be more than one – and in order to locate it you must let your musical intellect be informed by your musical sensitivity. Then you follow the music backwards to identify the less tense and less tonally remote event(s) leading up to the focal event. After having completed this regression back to a point of (relative) stability, you turn to the event(s) appearing after the focal event, and following the music forwards you go on to study the process of relaxation.

When tracing the music backwards and forwards, some events are relegated to a lower level, or are entirely disregarded because they emerge as details that do not contribute to the tensing and relaxing tendencies. Needless to say, it might happen that a tonally remote, high-tension event is introduced abruptly without any preparation, or that the tension inherent in a focal event suddenly disappears.

Whereas the initial and terminating points of tonal stability are normatively established in Schenkerian analysis, you have to decide on the core events all by yourself. There are no ready-made generalizations that you can rely on – each section and each piece is unique in this respect – but fortunately there is likely to be a reasonable degree of consensus as to which the focal events are in a certain work.

A “generative reduction” along the lines proposed by Lerdahl and Jackendoff may be of some avail when locating the focal events. By and large, the crucial events are likely to appear in the areas between right-branching/tensing and left-branching/relaxing processes in their tree-notations of prolongational reduction. Indeed, L&J’s tree representation of tonal prolongation might be adapted so as to meet the demands of focal analysis. The context around the focal event can be visualized by left and right branches, indicating tensing and relaxing events, respectively, and attaching in due order to each other and eventually to the vertical stem of the focal event.⁶¹

A focal analysis of the theme

Turning to the K. 331 theme, virtually all listeners will agree that the focal event in mm. 1–4 (5–8, 13–16) is the relative-minor seventh-chord; the subdominant launching the cadences is not remarkable enough to qualify as focal. The E-major harmonies in mm. 2 and 3 make up a tensing and a relaxing connection in relation to the tonic chords in m. 1 and m. 4, respectively. The first dominant complex is deceived by the relative-minor chord, which heightens the tension, while the second dominant immediately gets

61 For another example of focal analysis, cf. Bengt Edlund, ch. 5 in *Chopin. The Preludes and Beyond* (Frankfurt 2013, Peter Lang Verlag), dealing with the A-major Prelude

the tonic chord it wants; the remoteness of the $F\sharp$ -minor chord emerges as symmetrically related to the A-major tonics. The focal analysis does justice to the impression that the A and A^1 sections recall a piece of cork being pressed under the water, an action requiring energy and producing tension. The result of the focal analysis runs contrary to the rule that rising pitch goes with increasing tension.

In the B section of the theme the subdominant six-four-chord passage in mm. 9–10, featuring $f\sharp^2$ to be surpassed by a^2 , is of course the focal event. The $f\sharp^2$'s are attended by e^2 's on each side, and the rise to a^2 brings a further increase of tension. The rising motion to the second-position subdominant involves three voices and requires considerable energy.

Bars 17–18 bring one focus, the $f\sharp^2$ -over-d subdominant, approached and left along a rising scale which finally for a short moment touches a^2 . Ultimately, this subdominant comes from and issues into tonic chords, but it should be observed that the final, first-degree tonic chord is more relaxed than the initial, third-degree one. The relaxing tonic note a^1 *alias* a^2 means a drastic decrease of tension. Far from associating to a cork pressed under the water, we hear a balloon going up in the air and being pricked.

However unusual the rising gesture in m. 17 is, its root-position subdominant, visited on the route upwards and in retrospect introducing the final cadence, cannot compete with the second-position subdominant in mm. 9–10, an event being there in its own right. It may be argued that D major is not very remote from the A-major tonic, but for two reasons the passage mm. 9–10 is heard as the tonal focus of the theme.

Locally, the strong sense of tension at this point is due to the fact that three notes of the preceding tonic chord are raised, opposing the “gravitation” deriving from the persisting tonic root in the bass – a force that will eventually drag these notes down again – and to the fact that $f\sharp^2$ is subsequently outdone by a^2 .

Turning to the entire theme, another factor effecting tension must be observed. In the antecedent and consequent the tension is appreciated with reference to the initial third-degree tonic chords topped by $c\sharp^2$. When the middle section starts from e^2 and then keeps to the fifth-degree tonic, the listener cannot but experience a substantial overall rise in tension. Hence, the tension associated with the focal event in mm. 9–10 is appreciated against the background of a raised tonal level.

A tentative graphic representation showing the three pertinent passages is to be found in Ex. 46. The analysis makes us pay attention to the quasi-subversive subdominant counter-current in the music. It serves as an important complement not only to the Schenkerian tonal reductions, obsessed by their all-important “structural” dominants, but also to the “just reduction”, representing the theme as a series of disparate and ambiguous local cadences.

Extra-musical content

Everyone will probably agree that the K. 331 theme, as amply demonstrated in the previous chapters, embodies a web of meaningful internal relationships of various kinds. But depending on how “extra-musical” and “content” are defined, there are purists who may not be willing to subscribe to the view that this piece of music – an eighteen-bar theme of a variation movement in a Classical piano sonata – also bears an “extra-musical content”, that the Mozart theme may also be studied in terms of “external” semiosis.

Most people do not bother to deny that music – even music of this sort – may reflect feelings and/or communicate moods; that it may do so is a widely shared opinion. Indeed, emotional content in music is so commonly accepted that we do not think of it as extra-musical. It is therefore neither controversial, nor very difficult to find emotionally tinged adjectives that may be used to describe mm. 1–8, characterizations that we are then likely to modify when listening to mm. 9–10, 11–12, and 17–18. Depending on our aesthetic outlook, these emotional experiences – or merely observations – can be conceived of in various ways. We may, for instance and picking out extreme stances, ascribe them to some abstract “persona” inherent in the music, or say that the music was moving to such a degree that it made us really feel these emotions.

Some people hold that music can be “narrative” – perhaps the melody recalls human diction, perhaps the musical course suggests some kind of “story”, featuring various more or less identifiable agents and events. Obviously, if the idea of musical narration is to be credible, it must be understood in a figurative sense. The semantic element in music is quite attenuated, and therefore music cannot really tell us anything. Turning to the K. 331 theme, its well-ordered, non-rhapsodic form seems to offer few opportunities for narration, although (as always) the chances of suggesting a story are bettered if the repeats are omitted.

Yet other people believe that musical formulations may, from case to case, be taken to refer to, or may sometimes be reasonably associated with, extra-musical phenomena. Some associations derive from personal memories or notions – the music makes us remember a certain event or makes us think of how a certain object behaves. Others are part and parcel

of our culture, and some connections have even attained the status of established symbols – fanfares, for instance, may stand for or represent war or festivities. If the Mozart theme had started otherwise, cf. Ex. 47, a keen-eared (and injudicious) listener might have recognized the initial notes of the *Dies Irae* melody, and then ventured to make up a story about Death.

Certain “post-modern” analysts, devoted to “music criticism” and generally to “deconstructive” interpretations of art, are prone to entertain quite strained associations – culturally derived or stemming from their own more or less idiosyncratic notions – and to base astounding extra-musical narratives on these ideas, no matter if the analytic support is scant. Musical hermeneutics as an arena for grand airs.

Assuming that we have three resources at our disposal – emotional character, narrative course of events, and musical formulations inviting to associations – what might the extra-musical content of the K. 331 theme amount to? The following proposals are to be regarded as thought experiments, and when evaluating these exercises the reader must not believe in them more than the present writer perhaps does.⁶²

The Order and The Other

It is a commonplace idea that the melody carries much of the hermeneutic burden. And what melodies first and foremost, and quite obviously, do is to move up and down in the available tonal space. Let’s find out what these unsophisticated points of departure yield; cf. Ex. 48.

Following the lower inherent strand in the antecedent, the melody takes us from $c\sharp^2$ down to a^1 , a slow and pleased motion, set in a sensuous *siciliano* atmosphere and expressed by the leisurely lilting rhythm and the graceful neighbour notes. But m. 3 brings a shift: the melody turns hastily upwards back to $c\sharp^2$, and the sixteenth-note ornaments disappear, lending a more determined character to the ascent, which owes some of its decisiveness to the minor quality introduced by the $f\sharp$ of the parallel left-hand melody. In

62 For another essay, dealing in more depth with the question of extra-musical meaning, cf. “Schubert’s promising note. Further exercises in musical hermeneutics”, ch. 8 in the present volume.

m. 4 the falling tendency effortlessly gains the upper hand; what we hear is merely a cadential cliché leading to the dominant.

Instead of just describing these events neutrally in terms of motions between tonal positions and the like, we might impersonate the antecedent by identifying two agents in it. The first, descending agent may be taken to represent the normal order of things; the more active, ascending second agent stands for a sense of opposition or subversion – let’s call it “The Other”.

The consequent brings support for this reading. In m. 7 the repeated notes are absent as well, making the rise more emphatic, even abrupt. Indeed, the determined gesture of the Other is forceful enough to overshoot the $c\sharp^2$ by reaching d^2 . But this note, topping a subdominant chord, also introduces the cadence to the tonic and marks the point where “The Order” reasserts its power and starts to pull the melody downwards.

Turning to the B section and mm. 9–10, the ascending aspirations of The Other, now taking off from e^2 , manages to attain the upper tonic a^2 . Back in m. 1 the rising third was just inherent in the melody whereas in m. 9 the melody “wants” something, and it does achieve a rising second, a note with a releasing potential. Indeed, it seems as if the melody recruits the pianist – it is hard to resist its urge for more *legato* and a fuller sound. But the triumph of m. 10 soon comes to nil. The demand for a falling resolution inherent in the second-inversion subdominant helps to drag the melody downwards, restoring the e^2 . Bars 11–12 repeating e^2 may be understood as unsettled with respect to the Order-vs.-Other antagonism: the three iterated melodic triads bring falling three-note motions overlapped by rising leaps. The net result of this struggle is that the rising “will” of e^2 is checked until the no-more-of-this signal of the altered chord gives the falling cadence to the dominant the upper hand.

Bars 13–16 replicate the consequent until m. 16 comes up with a last-moment twist. When The Order is just about to bring the theme to its foreseeable descending conclusion at the tonic, The Other suddenly breaks in, introducing a rising b^1 – $c\sharp^2$ resolution of the dominant/tonic clash. Having drastically seized the initiative, The Other makes a vehement thrust, supported by the rising bass, from $c\sharp^2$ all the way up to the upper tonic a^2 . But this victory over The Order is not confirmed at the downbeat of m. 18, featuring merely the lower tonic a^1 ; the theme is then rounded off by a

swift falling motion. Ultimately, it remains an open question whether m. 18 brings the defeat of the ever-rising agent, or represents a compromise between the two protagonists. One might say that the Other finally does attain its eighth degree, the goal of its aspirations, but this happens in the first-degree territory of The Order.

Irrespective of whether you like this story or not, it seems that it makes sense in purely musical terms. It is, for instance, quite possible to use it to inform your playing. This intra-musical narrative paying attention to the rising gestures contains the seeds of a quite unusual, active way of rendering the theme, perceptibly different from the current, well-ordered interpretations – but perhaps also out of place as the point of departure for a set of variations.

So far we have suggested what the musical events of the theme might mean in terms of emotion or human action. We have identified two agents in the music, readily distinguished by their falling and rising tendencies, and accounted for the course of the music as if it were a story. It may be assumed that so far this reading is by and large acceptable to most people. Indeed, this narrative, this way of animating the musical process, is perhaps so uncontroversial that the suggested aspects of content do not emerge as extra-musical.

Two extra-musical interpretations

But we must not shrink from the crucial stage of the hermeneutic endeavour: to name the referents, to specify what the story is about. In what follows two extra-musical readings of the theme will be proposed. The first story stays within the music theoretic domain whereas the second hunts out another field of human life.

The idea that the agent of Order, first identified in the motion $c\sharp^2-b^1-a^1$ in mm. 1–3, recalls a Schenkerian fundamental descent immediately presents itself, and this association is confirmed. When these very notes appear with suitable chords and a proper bass in mm. 7–8, they close a quite patent *Urlinie*.

But these descents are challenged by The Other, untiringly presenting rising motions restoring and even exceeding the *Kopftton* point of departure of The Order. The ascending protagonist repeatedly musters support from

the bass voice, and finally it even reaches the upper tonic a^2 , a note that must not be approached from below since (according to The Order) this would amount to an unacceptable *Urlinie*. Hence the need to disguise the eighth degree as a^1 in m. 18.

According to the first reading, then, the theme tells a story about the oppressed Other and its (perhaps) successful subversive activities. If we listen attentively to the melodic process, we witness the workings of a rising force incessantly opposing the pre-established law of tonality; a rising force that, as it seems, is strong enough to overthrow The Order, if the latter had not in the last moment called in the principle of the *obligatorische Lage* for protection.

The second reading is not as far a cry from the first one as it appears. The musical narrative remains the same; it is merely a matter of assigning other referents to the protagonists.

Isn't there a sense of feebleness in the sinking motions towards the zero, first-degree level of tonal tension, even a sense of impotence? It is interesting to equate a Schenkerian *Urlinie* with malfunction, and don't, at least to friends of Freud, the ever more insisting rising motions in the K. 331 theme associate to power and erection? But, joking aside, you can also resort to the current (and somewhat worn-out) male/female duality and choose a topic belonging to the *siciliano* sphere. Doesn't this theme conjure up a pastoral love scene – attempts at seduction followed by determined action, or at least by an indecent exposure of the upper tonic?

Surely this is a totally unwarranted reading of the music, introducing a base association! But we must not forget that the K. 331 Sonata was composed in 1778, at the time when Mozart wrote his obscene letters to his cousin Maria Anna. What *Bäsle* had no problems to understand, we should be able hear.

2 In defence of musical ambiguity

These four statements make up the final conclusions in Kofi Agawu's critical study of ambiguity in music (music analysis) as well as the core of his policy against musical ambiguity.¹

1. Theory-based analysis necessarily includes a mechanism for resolving ambiguities at all levels of structure.
2. An analysis that terminates in undecidability represents a conscious or subconscious retreat from theory.
3. While ambiguity may exist as an abstract phenomenon, it does not exist in concrete musical situations.
4. In situations of competing meanings, the alternatives are always formed hierarchically, making all such situations decidable without denying the existence of multiple meanings.

The present writer is far from enthusiastic about the anti-ambiguity stance advocated by Agawu, however. It seems that music analysis cannot do without ambiguity – it goes without saying that ‘ambiguity’ is a concept that should be used with discrimination – if you want to do justice to music as an object of cognition and aesthetic enjoyment. Music analysis is at its best when alternative possibilities of structural understanding are discovered, compared, and explained in ways that open one's ears and mind. And the value of some of the very best passages in music appears to derive from the dual fact that the composers have exploited the possibilities of creating ambiguity, and that their listeners have a capacity for appreciating multiple musical meanings. Rather than doing away with ambiguity as Agawu wants, we should try as best we can to grasp these moments of musical richness in all their complexity.

Since there is much at stake, Agawu's arguments for a quite restricted scope for ambiguity in analysis must be critically discussed; indeed, you cannot afford not to take up the gauntlet if you want to keep ‘ambiguity’

1 Kofi Agawu, “Ambiguity in Tonal Music: A Preliminary Study” in Pople, Anthony (ed.), *Theory, Analysis, and Meaning in Music*, Cambridge 1994, pp. 86–107.

as a working concept in analysis and as a key phenomenon in music perception. Furthermore, while Agawu's argumentation may after all be less convincing, he does bring up a number of important topics, bearing upon the very core of the epistemology of music analysis. A discussion of these matters may hopefully add to our insights into the many-faceted phenomenon that we (awaiting a terminology that allows of finer differentiations) rightly call "ambiguity".

The following defence of ambiguity will proceed along the path laid out by Agawu's five examples; to these will be added a further one. For each passage it will be claimed that ambiguity is in fact involved, and efforts will be made to distinguish between various types of ambiguity and to explain their working mechanisms. Finally, some broader issues touched upon in Agawu's essay will be considered.

One "motto" or two?

The famous initial four notes of Beethoven's Fifth Symphony serve as Agawu's first example – since nothing will be taken for granted here, the "motto" simply runs as shown in Ex. 1a. It is discussed under the heading "An unlikely example". Since the descending third $g^1-(say)e^1$ fits in with no less than fourteen major and minor scales, "the opening is ambiguous in the sense that it gives rise to two or more harmonic meanings".² Yet Agawu is not willing to accept the motto as tonally ambiguous since nobody will "hear simultaneously" all these harmonic meanings. Furthermore, if the context (actually "a series of additional texts") is taken into account, the "ambiguity dissolves into clarity": "after all, this is a work in C minor, its opening plays with and against the Classical convention of beginning, the

2 Quite a few scales, indeed, but "in the universe of major and minor scales" Agawu generously includes "the melodic, harmonic, and natural minor as distinct constructs". But the point he wants to make does not need this overkill. Turning to rhythm, it will be assumed (as does Agawu) that the motto is understood as a duple-metre idea; this is a realistic limitation since the performance is likely to bring cues ruling out that the first three notes make up a triplet. In a performance failing to express the correct, notated metre, the motto would of course be even more ambiguous.

four-note motive is sequentially repeated”. (p. 86) But how cogent are these arguments for dismissing the motto as a specimen of ambiguity?

The fact that nobody is likely to “hear simultaneously” fourteen or (reducing the alternatives to a more reasonable number) even some five tonal meanings at the same time is hardly decisive since this requirement is itself unreasonable – simultaneous perception of a number of possible alternatives cannot very well be a necessary condition for ambiguity.³ What usually happens is that you attend to just one of the plausible options, and the most likely alternative is probably the one in which the long, (apparently) accented note of the motto is taken to be the tonic. But this does not exclude the other four options: the preference for E \flat major is heard against a background of further possibilities. It just takes some musical introspection to realize that the fermata on the last note is crucial for the sense of tonal ambiguity – or rather tonal vagueness since the alternatives are not clearly distinguished – that is part and parcel of this motto.

The four notes do suggest a reduced set of (say) five inherent and quite possible harmonic interpretations: without any internal order of precedence, the motto can be heard as being at home in B \flat -major, E \flat -major, C-minor, A \flat -major, and E minor.⁴ These tonal meanings can be imagined one at a time by any musically competent listener, and they will emerge quite clearly, albeit retroactively, if the motto is provided with immediate and patently disambiguating continuations; cf. Exs. 1b and 1c, pursuing the E \flat -major and E-minor meanings of the motto, respectively. It should be observed that in Ex. 1b the motto does not emerge as tonally indeterminate – there is no time for such an impression – whereas in Ex. 1c its sense of tonal vagueness is enhanced and emerges as a prospective quality due to the prolonged duration of the last note.

As Agawu points out later on when discussing a song by Schumann, many pieces are ambiguous at their very start. Indeed, *all* beginnings are

3 By the same token, the rabbit/duck picture is not ambiguous either since it is impossible to see the rabbit and the duck at the same time. But you may *conceive* of the two alternatives inherent in this picture simultaneously.

4 E minor? It is assumed that the pitch notation of the motto is unknown, and that the enharmonic intonation difference, if any, between e \flat ¹ and d \sharp ¹ can be disregarded.

likely to emerge as vague or indeterminate (rather than ambiguous) if just the initial fragment chosen for context-free listening or analytic consideration is short enough. There are simply too many alternative ways of understanding such fragments and, generally speaking, indeterminacy of this kind tends to be aesthetically significant only when the moment of uncertainty is brought out, for instance by being perceptibly prolonged – as it is due to the prolongation of the final note in Beethoven's motto. Just like in language, the presence of multiple meanings is largely a matter of rhetoric, and *double entendre* depends not only on what you say, but also on how you say it – remove the fermata from the motto, and you will have, say, the virtually unequivocal first four notes of Ex. 1b.

What we normally do when listening to the very beginning of a piece, i.e. when the evidence for its tonality (or metre) is still insufficient, is to postpone the experience of relief associated with the identification of the key (or time). But the vehement starting gesture of the Fifth Symphony is extraordinary, and the motto with its fermata attracts our attention in a way that puts its indeterminate tonality on the listener's agenda, giving rise to a perceptible sense of tonal vagueness, which in turn makes for an ambiguity that Beethoven will exploit in the following bars.

Agawu's second argument involves the disambiguating effect of context. And of course, if only the context is large enough (if the "additional texts" are as many or as long as you please), any vagueness of this kind is bound (or at least likely) to melt away. What kind of vagueness? Evidently, the vagueness (and the ambiguity soon to be explained) of the start of the Fifth Symphony involves the future tonal course of the music, and it is the fermata that makes the listener uncertain as to how the music will continue. When you have become fully updated by later events in the work (or by information external to it), and *if* you for some reason allow this knowledge to make you think that your initial impression of uncertainty was unfounded, there are no multiple meanings to worry about. This is of course good news to *in vitro* theorists not really interested in music, but a disastrous message to *in vivo* analysts wanting to find out what goes on in the music as a present-tense process.

The fact that the sense of musical vagueness/ambiguity tends to be a time-dependent phenomenon makes such effects vital – and vulnerable – but it does not do away with them; quite to the contrary, this is what makes

them real, concrete. Agawu’s idea that the only ambiguities that count are those multiple meanings that persist when the music is reduced to a timeless object – enabling hard-and-fast facts to be established, but placing the musical essence beyond reach – is an unreasonable and far too severe criterion for ambiguity. If keeping to “theory” implies killing off the temporality of music, it commands too high a price.

Knowing that this movement “after all” is in C minor is a giant context that all too easily does away with any tonal vagueness or ambiguity occurring at its beginning (and elsewhere). Disregarding the question of how long we have to listen to this particular movement in order to be able to positively establish its key, one should in the first place ask to what extent it is at all warranted to assume that future, not-yet-heard events influence the experience of what we are presently hearing. Furthermore, it seems that the time span for disambiguating reappraisal when it comes to impressions of indeterminacy (or ambiguity) is fairly short.

A similar qualification pertains to preceding contexts: after some while passed events lose their power to censor our listening responses. External information tends to supply what in effect amounts to a preceding context. You may know that the Fifth Symphony is in C minor before hearing a single note of its motto, and you can read about the motto in the programme, or you can see it printed on the first page of your score. And perhaps you have heard the symphony many times before and know how Beethoven is going to accommodate the motto with its slight bent towards E \flat major to the overall C-minor tonality of the movement.

There is a general and very sensible rule to the effect that as a listener you should not make use of any information (internal or external, pertaining to preceding or to following events) that may impinge upon your aesthetic enjoyment of a certain passage. Especially when it comes to rehearing music, the art of listening includes abstaining from remembering the course of the music, from memories based on past encounters with it.⁵ Music is a process rather than a fact, and that you should not listen to music as if it were an open book is a crucial stipulation in the “contract”

5 Cf. Leonard B. Meyer, “On Rehearing Music”, *Journal of the American Musicological Society*, 14(1961), 257–267; reprinted in *Music, the Arts, and Ideas*, Chicago University Press, 1967

between composer and listener. And in as far as understanding how a piece of music really works is a primary aim of analysis, analysts (however “theoretic” they wish to be) should respect this contract as well – otherwise their endeavours run the risk of being set aside as aesthetically irrelevant.

The impact of Beethoven’s motto is least of all an exception to the rule that there is a vital relationship between aesthetic benefit and the listeners’ willingness to treat any knowledge they may have with discretion. If the motto is preceded by a heavy C-minor chord as in Ex. 1d – an addition that for all its bluntness corresponds to being unduly aware of the fact that the movement “after all” is in C minor – a most important dual aspect of the motto is lost, namely its initial sense of tonal vagueness and its not yet released capacity of generating tonal ambiguity.

If you have the stylistic knowledge required, it may certainly be interesting to take into account how openings “play with and against the Classical convention of beginning” when listening to how symphonies start; indeed, observations deriving from intertextual associations are hard to keep out. But much of that very “play” is likely to depend on more or less transient states of indeterminacy and ambiguity, and some of these subtle effects presuppose that the key has not yet been established. When trying to explain how such beginnings work, we need to seriously consider the initial events as transiently having multiple meanings; we need to describe, for instance, what these events are like when heard against this or that tonal backdrop. Thus, undue awareness of the fact that the symphony “after all” is in C minor is harmful not only to the experience of the motto as an intra-opus event, but also when it comes to understanding its intertextual meaning, the way the beginning of this symphony “plays” with the rhetorical habits of its time.

Agawu also refers to the immediately following context, claiming that the second motto $f^1-f^1-f^1-d^1$ disambiguates the first $g^1-g^1-g^1-c^1$ one. In a trivial sense this is of course true: due to the sequenced repeat of the motif, the E-minor and A \flat -major alternatives disappear altogether, and the B \flat -major reading turns much less probable. On the other hand, the second motto surrounds e^1 in a way that brings it out as the tonic note of the key to come; alternatively, the falling sequence of the two motifs suggests that c^1 might eventually follow as a terminating point of tonal stability. And symphonies may be imagined that satisfy the expectations aroused by these two remaining tonal meanings, meanings actualized by the obviously ambiguous

double motto; cf. Exs. 1e and 1f, starting symphonies in E \flat major and C minor, respectively.

Now, and this amounts to a crucial observation, the disambiguating effect of the second motto is what it takes to turn the vagueness of the first motto into a germ of ambiguity, what it takes to sufficiently undermine its E \flat -major bias so as to achieve the musically vital tonal equivocality characterizing the compound double motto, having but two plausible tonal meanings, E \flat major and C minor. The first motto is vague and features several tonal meanings with E \flat major as the most privileged one; only the double motto is genuinely ambiguous, suggesting two equally probable meanings – a rabbit and a duck.

This can be demonstrated by contrasting a no-second-motto variant of the symphony and the two-motto actual beginning of the work; cf. Exs. 1g and 1h. That E \flat major is (was) the privileged tonal option among the five possible ones inherent in the indeterminate first motto emerges from the tonal bump felt when the continuous C-minor motion starts in Ex. 1g. Gradual release of tension characterizes Ex. 1h, and this is *not* due to the fact that the two mottos retrospectively amount to an unequivocal C-minor passage. The effect is caused by the dual fact that C minor was one of the double motto’s two equiprobable tonal meanings, and that the start of the *piano* passage, bringing a C-minor root in the accompaniment, eventually realizes one of the two inherent harmonic implications of the double motto.

It should be pointed out that the first motto is not only vague in terms of key. Since it does not as yet exhibit any relationship to any other event, it is also indeterminate as to harmonic function. It is important to realize that the second motto not only makes the forthcoming key less uncertain, it also specifies a harmonic function. Whether we think of the two-motto-passage as being in E \flat major or in C minor, the second motto represents the dominant, urging the music to come up with a fitting tonic.

To make the description of the situation complete, it should be admitted that the eight-bar *piano* passage supplies a retroactive clarification of the two *fortissimo* mottos. It can be regarded as a prolonged, continuous repeat of the preceding fragmentary bars, and this repeat unequivocally indicates that C minor is the tonic and that G major is its dominant. This does of course not alter the dual fact that the first motto *was* tonally vague and that

the double motto *was* ambiguous, and that they *are* vague and ambiguous, respectively, when we think of the start of the symphony as good listeners.

Agawu's first, "unlikely" example of ambiguity emerges as seriously flawed, and it is flawed in a way that makes it all too easy to discard. In his discussion of a Chopin mazurka, Agawu rightly objects when Carl Schachter sets up two all-too-easily-dismissed "straw alternatives" (cf. p.104), but unfortunately Agawu's own essay starts with a "straw" specimen of ambiguity. From a tonal point of view, the first motto is vague since it is too minimal and too open to give rise to any significant sense of ambiguity – ambiguity requires that there are a few, but not necessarily very clear, fairly equiprobable alternatives and a framework, however faintly outlined. And the second motto is not a "context" doing away with the would-be ambiguity of the first; it makes up the second constituent of a compound event that gives rise to the perceptible sense of ambiguity in the passage by qualifying inert vagueness into active equivocation.

Beethoven was apparently quite aware of this ambiguity: there is still something undetermined in the air after the second motto, an impression that he wanted to give his listeners time enough to appreciate. Therefore he prolonged the pause on the last note of the second motto by giving the d¹ an extra bar, leaving it to the following *piano* passage to clear away the ambiguity. But today we are perhaps less able to perceive the sense of tonal equivocation inherent in the double motto. We have heard the Fifth Symphony so many times that its introduction has lost some of its startling quality; hence Agawu's trivializing after-all-in-C-minor argument.

Using a passage from the discussion of a Schumann song (cf. p. 93), Agawu has not "insisted on some kind of relationship as the irreducible minimum unit for drawing harmonic inferences" when he selects just the first motto as a specimen of ambiguity – a specimen that he promptly discards – nor has he bothered to "*justify* the context" that he has "constructed to enable" the perception of ambiguity. The first motto, merely four notes involving two pitches, is vague rather than ambiguous, but this does not prevent Agawu from using the second and crucial motto as a "context" in order to show that the first motto is not ambiguous. Indeed, "the construction of context depends, of course, on what the analyst wishes to show", and Agawu gets a flying start for his essay by dismissing of one of the most

patently and emphatically ambiguous passages in all music. Had Agawu “justified the context” independently of what he wished to show, the first motto would not have been used as a “straw” specimen of ambiguity, nor would he have used the second motto to put off the first motto as “an unlikely example”. His treatment of the first motto is tendentious and begs for far more questions than it answers.

That the compound unit of two mottos is in fact harmonically ambiguous can readily be shown by adding clarifying tonic and then dominant timpani blows in E_b major and C minor before the mottos; cf. Exs. 1i and 1j, respectively. The latter after-all-in-C-minor passage is a world apart from the before-anything-has-happened double motto that Beethoven composed. Doesn't Agawu's idea to the effect that the second motto annihilates whatever sense of “ambiguity” (i.e. vagueness) there is in the first motto miss exactly what is remarkable in the passage? And wouldn't a harmonic parsing of the symphony, claiming that the two mottos represent the tonic and then the dominant in C minor, be a gross, indeed downright wrong one since it anticipates what is not, and that should not, be known, since it sticks to an insensitive “theory” and “terminates in decidability”?

The discussion has revealed that ambiguity may be based on the presence of a limited number of prospective meanings: at certain points a piece of music offers several meanings that more or less transiently open up for significantly different continuations. But Agawu, taking primary account of the (would-be) disambiguating context to follow, understands true ambiguity as a permanent property to be established retroactively after its actual occurrence, and hence he is bound to hold that most events or passages that did feature multiple prospective meanings are – in fact – unequivocal. It seems that an interest in transient states of cognitive uncertainty is a prerequisite for the study of musical ambiguity; otherwise the very object of the study will slip out of your hands.

Whether symbolizing Fate or not, the motto has a fate within the first movement of the symphony, and it seems evident that Beethoven in various ways and to quite diverse effects exploits the ambiguity introduced by the compound motto. If this initial ambiguity is analytically suppressed, some important passages later on in the movement cannot be properly explained; in other words, we can be confident that Beethoven knew what he was doing.

Before long, the motif turns up again as $a^{\flat^1}-a^{\flat^1}-a^{\flat^1}-f^{\flat^1}$, and the listener is prepared for an ambiguous situation. F minor is in the air after this motto and so is a continuation of the G-major dominant; in addition a second, follow-up statement of the motto is strongly expected, although the extra-bar prolongation of the last note may be taken as an indication that a second motto will not occur; cf. Ex. 1k. It turns out that instead of a further *fortissimo* motto, a *piano* G^7 chord, the less probable alternative, begins to emerge.

The second theme is introduced by the French horns, playing two interlocking fifths, $b^{\flat^1}-e^{\flat^1}$ and $f^{\flat^1}-b^{\flat^1}$, the first of which features the rhythm of the four-note motto; cf. Ex. 1l. Considering the preceding B^{\flat^7} chord and the fact that the original double motto turned out to have a tonic-to-dominant meaning, the horn calls are likely to be understood as introducing E^{\flat} major. On the other hand, taking account of the dual fact that the last note b^{\flat} of this transformed double motto persists as an organ-point under the second theme, and that this theme starts from and returns to b^{\flat^1} , there is a lingering sense of B^{\flat} major throughout the passage. The subtle sense of harmonic ambiguity pertaining to the start of the second theme is furthered by the absence of any separating fermatas within the double motto.

The emphatic start of the development is most ambiguous. The first motto $b^{\flat^1}-b^{\flat^1}-b^{\flat^1}-g^{\flat^1}$ is followed by $d^{\flat^1}-d^{\flat^1}-d^{\flat^1}-c^{\flat^1}$, a drastically compressed variant of the second motto, setting in far too low; cf. Ex. 1m. It should be observed that the second motto follows immediately after the first – insert a separating fermata and much of the effect of this passage will be destroyed. The situation brings a strong sense of ambiguity and a suspense bordering on chaos: F minor, in retrospect a quite plausible outcome of the C^7 applied-dominant potential inherent in this two-motto event, is the first chord to take form in the following *piano* passage.

The full-orchestra double motto starting the recapitulation and tightly linking it with the development is, unlike the one at the beginning of the movement, not at all ambiguous due to its preceding context; cf. Ex. 1n. It is preceded by repeated $a^{\flat^1}-a^{\flat^1}-a^{\flat^1}-f^{\flat^1}$ motifs that, following after b^{\flat} , betray their G-major dominant function.

Ambiguity, or in the last case its absence, emerges as an essential property of all these motto episodes, and the notion of ambiguity is indispensable for

explaining their aesthetic effect and crucial when it comes to understanding their function. Abstaining from the concept of ‘ambiguity’ means impoverishment of appreciation as well as analysis.

Agawu closes his discussion of the Fifth Symphony with a few general remarks. He grants that “this does not mean that there might not be a network of harmonic meanings” associated with the opening of the symphony. But he wants to know whether in this network there “are some meanings stronger than others”, whether there are “reliable ways of choosing preferred meanings”, and whether listeners need to “voluntary incorporate additional meanings into their experience” as opposed to just knowing them. (p .86)

The first two questions have already been discussed when explaining in detail the tonal workings within the initial motto episode; as to the last one, it seems that it is neither necessary to “know” of any “additional meanings”, nor to “voluntary incorporate” them into one’s experience. We do not listen to the beginning of this symphony with virtual, silent timpani tuned in the tonic and dominant of two alternative keys, i.e. as an imaginary mixture of Exs. 1i and 1j. But whether hearing the double motto as being in E \flat major (as a first-time listener is perhaps likely to do) or as being in C minor (as the hard-to-escape, concert-goer routine bids), some awareness of the tonal ambiguity, of the fairly equiprobable harmonic options, involved in this passage is an essential requirement for a fully adequate musical experience.

Taking account of the gist of Agawu’s entire essay, it becomes obvious that he makes a distinction between “ambiguity” and “multiple meanings”. The term “ambiguity” is reserved for those (presumably very few) sets of multiple meanings that pass every theoretical test, that refuse to be reduced into just one, strongly privileged and hence unequivocal meaning.

It should be noted that throughout the critical discussion “theory” (in current sense) has not been eschewed. Quite to the contrary, various basic theoretical concepts have been applied, not in order to enforce absence of ambiguity, but to understand the balance between plausible multiple meanings, and to study how various elements combine to bring about ambiguity, and then to dissolve it as the music unfolds – a preferable, non-arrogant use of theory.

One path or two forks?

Agawu's next specimen is taken from the very beginning of another piece, the twelfth song, *Am leuchtenden Sommermorgen*, of Schumann's *Dichterliebe* Op. 48; cf. Ex. 2a. This passage is said to be "plausible", but considering the strict qualifications for ambiguity proposed by Agawu, it seems that when it comes to the crunch it gets no further than being a slightly more plausible example of ambiguity than the discarded Beethoven motto.

"Ambiguity is thought to reside in the harmonic narrative, specifically in the play between the synonymous German sixth and dominant seventh chord".⁶ [cf. m. 1] But, Agawu argues, one is "unlikely to regard the two alternatives as equally plausible" since "on statistical grounds, a V⁷ meaning is more likely than a German-sixth meaning", an estimation that is all the more probable since Schumann was fond of starting out from dominant seventh-chords. On the other hand, Agawu points out that "knowing what usually happens should not lead me to discount what *could* happen". He also claims that it is fair to "diagnose ambiguity on the basis of hearing a single chord" because the V⁷ sound is a "musical term" of high "particularity".⁷ (p. 92–93)

As to the sense of ambiguity of the song's beginning "during a real-time audition", Agawu reports that when the B \flat -major chord has turned up in m. 3, "I understand (in retrospect) the function of the opening chord as an augmented sixth", and asks whether ambiguity "exists only in prospect, never in retrospect". Dismissing the prospective "I do not know" type of ambiguity as weak and unsuitable in a "theory-based context", he defines ambiguity in a strong sense as being both prospective and

6 The two chords are not "synonymous", strictly speaking, since they have different harmonic meanings. Taking account of the notation, they are different chords bringing distinct expectations; considering the fact that they can be enharmonically exchanged for each other and that they sound identically, they are homonyms. (This is not to say that a pianist cannot suggest, say, the German-sixth aspect by gently bringing out certain notes at the expense of others.)

7 In functional terms, the "particularity" of V⁷ chords amounts to their strong propensity to issue into tonic chords, i.e. they are inherently relational. The first Beethoven motto is a much less "particular" "term" than the Schumann chord, tonally speaking, and yet Agawu allows himself to discuss the former as a separate event and to do away with its ambiguity (vagueness).

retrospective: “the event should remain ambiguous *after* a reflective analytical exercise”. (p. 93)

Does Schumann’s initial chord pass this test? It may seem so since “the richness of the experience” crucially derives from “the dual meaning of the opening chord”, and since one might choose to “enact a state of harmonic ignorance”, “temporarily unknowing” what one already knows from earlier encounters with the song. “When the chord resolves on the downbeat of bar 2, I obtain foreground assurance of the chord’s German-sixth function but I do not lose the complementary ‘background’ sense of a denied V⁷ function, which will be implemented in bars 8–9”. (p. 93)

But some analysts (and Agawu is apparently one of them) are prone to insist on “weighing the relative potentials of the two meanings”. If an ambiguous musical event is “one that gives rise to a multiplicity of undifferentiated meanings”, the first chord of Schumann’s song is ambiguous. If, on the other hand, one takes account of “internal (structural) and/or external (stylistic) factors”, the opening of this song is not ambiguous: when things such as “context, listener baggage and segmental level” are specified, the ambiguity is “effectively contextualised” and “its constituents” emerge as “hierarchically rather than non-hierarchically formed”.⁸ (p. 93–94) Agawu does not adopt an “I know it all” position, but he does not “find the analytical situation undecidable”. (p. 95)

It is hard to know for certain whether Agawu (whose argumentation is not quite easy to follow) in fact and at the end of the day considers the start of the song to be ambiguous or not. If he does, it seems inconsistent when recalling his rejection of the Beethoven motto. The second motto in the symphony may be equated with the second chord in the song in as far as both are parts of larger disambiguating contexts. Furthermore, whatever sense of ambiguity there is in the song, it could be dismissed (by *Lieder* connoisseurs) since “after all” Op. 48, No. 12 is in B \flat major; on the other hand, “temporally unknowing” is a listening strategy that could also be used in the symphony. As Agawu points out, Schumann offers a kind of answer by presenting both harmonic interpretations of the crucial sonority: it is

8 “Segmental” and “hierarchical” presumably refer to structural layers in a Schenkerian sense, and more generally to units that are larger than the causing core of the multiple meaning.

notated differently in m. 1 and m. 8, but turning to the listener it is used in ways that disclose its multiple meanings, i.e. that disclose the ambiguity involved already in the initial “term”; cf. below.

Agawu is quite right when pointing out that the dominantic $F\sharp-a\sharp^1-e\sharp^1-c\sharp^1$ meaning of the chord in m. 1, a meaning suppressed by the notation and immediately denied by the following chord, is more probable than the subtly subdominant, “German-sixth”, $G\flat-b\flat^1-e\sharp^1-c\sharp^1$ meaning appearing in the score and being promptly confirmed by the ensuing cadence to $B\flat$ major. It is also correct that V^7 chords (generally, as well as within the “universe” of Schumann’s beginnings) are “particular” in the sense that they give rise to expectations of forthcoming tonics, and that the dual meaning involved, covertly holding out the prospect of two different continuations, is aesthetically important and worth the make-believe effort required to appreciate it. But his description of the situation can be amended, and as to his conclusions, they must be contested in as far as they amount to a denial of the ambiguity that is a vital quality of this passage. Generally, his line of reasoning seems to imply a depreciation of the importance of the prospective aspect of listening as well as a questionable idea of the role of “theory” when it comes to identifying ambiguity.

Apart from the obvious fact that the unexpected turn of events at the beginning of m. 2 has the effect of enhancing the listener’s interest in the two involved sonorities – otherwise being just harmonic staple commodities – what is the real-time relationship between the first two chords of the song? In the Beethoven symphony the second motto reduces the number of possible meanings of the first, tonally vague motto to the manageable and ambiguity-making number of two about equally probable main options. By contrast, the second chord in Schumann’s song selects, not the privileged meaning of the “particular” first sonority, but a much less obvious meaning inherent in it, a perfectly plausible meaning although a listener is not likely to be aware of it when listening to m. 1.⁹ In both the Beethoven and the Schumann excerpts, then, the effective “term” of the ambiguity is a two-event affair – but the working mechanisms are quite different.

9 There is actually (at least) one further non-privileged meaning inherent in the first sonority of the song, a meaning that would have come to the fore if an even less expected continuation had turned up in m. 2; cf. Ex. 2b.

In addition to being a dominantic appoggiatura-chord with prospective significance, the B \flat -major six-four chord in m. 2 has the function of turning the preceding sonority into a subdominant (or at least antepenultimate) “German-sixth” chord. This retroactive actualization of a less privileged, unusual meaning is obviously necessary for activating the opening chord’s capacity of being ambiguous, a capacity that would otherwise have been latent and of little analytical interest. The paradox involved seems to be this: the second chord retroactively determines the actual meaning of the first chord, and only when the unequivocal meaning of the two-event term is a fact, does the first chord emerge as ambiguous; only when its privileged meaning is denied, is its less likely meaning disclosed, is its sense of inherent prospective ambiguity accessible.

The first Beethoven motto is indeterminate – the fermata brings out its otherwise latent vagueness – whereas the seemingly unequivocal initial chord in the Schumann song is latently ambiguous: it turns manifestly equivocal only when its unprivileged meaning is unexpectedly disclosed by the second chord. The two-motto term in the symphony is acutely ambiguous in a prospective sense because it holds out the possibility of two different continuations, whereas the two-chord term in the song exemplifies a retrospective (or reflective) variety of ambiguity – the second chord brings about the ambiguity, but it is the first chord that radiates it. The first chord bears two (or several) prospective meanings, but it *is* not ambiguous when we hear it; it *was* ambiguous when the second chord is a fact.

Retrospectively, Schumann’s opening chord evidently *had* an unusual subdominant function, while prospectively it just as evidently *has* its current dominant meaning, a function that was not discharged. The crucial, ambiguity-making point of mm. 1–2 in the song is the difference between what happens and what was likely to have happened. The start of Beethoven’s symphony is pregnant with future; Schumann’s song begins with a sonority retrospectively understood as belonging to a never realized past – hence the strange and exquisitely poetic impression that the music does not really start, it is already there.

When Agawu says that one does not “lose the complementary ‘background’ sense of a denied V⁷ function”, it is an understatement. As a result of the unexpected retroactive emergence of the “German-sixth” aspect of the first sonority, its basic but unrealized function as a dominant seventh-chord is strongly

actualized by being denied. Normally, we do not pay much attention to what these worn-out dominant chords want since as a rule they get what they want. On the other hand, it is clearly an exaggeration on Agawu's part to associate the very beginning of Schumann's song with an event "that gives rise to a multiplicity of undifferentiated meanings".¹⁰ Quite to the contrary, the first chord has but two meanings (of relevance in the present discussion), and they are clearly differentiated both as to their functional implications (i.e. prospective meanings) and their probability: either this sonority is a plain and plausible dominant seventh-chord or an unlikely, altered subdominant chord.

This *inequality* of probabilities, not any balance between possible options as required by Agawu when dismissing Beethoven's first motto, is crucial and what makes Schumann's particular kind of harmonic ambiguity work. If the first half of m. 1 is exchanged for a B \flat -major triad – as in mm. 6 and 11 – the altered-subdominant, German-sixth, reading of the initial V⁷-sounding sonority becomes quite obvious. Due to the clarifying effect of the preceding B \flat -major chord, the less probable of the two inherent harmonic meanings of the crucial sonority is boosted at the expense of the otherwise privileged, more likely V⁷ one, and as a result its sense of ambiguity disappears. The mechanism of ambiguity at work in Schumann's mm. 1–2 presupposes that the privileged V⁷ meaning of the V⁷-like sonority is disconfirmed by the following chord, whereas in mm. 6 and 11 the subdominant function of the crucial chord is uncontested due to the preceding chord. In the latter passages the ensuing six-four chord has nothing to disconfirm, nor does any harmonic surprise turn up that could make us hear the now unlikely dominant meaning of the crucial chord.

The ambiguity of the two-chord term in mm. 1–2 is *both* prospective and retrospective – it is *first* retrospective, *then* prospective – and the very crux of the effect is that the privileged but non-realized prospective dominant implication and the non-privileged but realized retrospective subdominant implication of the initial sonority do not match, nor do they occur at the same time. The ambiguity is retroactively prospective, as it were, and it certainly satisfies Agawu's double criterion of ambiguity since it not only

10 The first Beethoven motto, on the other hand, features "a multiplicity of undifferentiated meanings" – that is why it is not in itself an ambiguous event, but rather a vague one.

remains, but is discovered “after a reflective analytical exercise” – an exercise that is not necessarily deliberate and intellectual but sub-conscious, taking place in a fraction of a second as we listen.

Finally, it should be observed that there is also a similarity between the first Beethoven motto and the initial Schumann chord. Apparently the two composers wanted us to pay attention to the tonal vagueness and the reflexive, retrospective/prospective ambiguity, respectively. The motto is prolonged by the fermata on its last note, and the chord is prolonged by being repeated and exposed in two registers.

What can help us to appreciate the ambiguity involved in the opening of the song? It seems that any knowledge about the relative rarity of the subdominant meaning of the initial sonority to be retroactively clarified by the second chord, and about the high prevalence of its taken-for-granted but non-realized dominant prospective meaning, will reinforce the sense of mismatch inherent in the compound formulation and the sense of latent-then-manifest ambiguity of its first chord. The ambiguity of the song’s beginning thrives when fed by any “listener baggage” – things like internalized statistics of the harmonic implications of V^7 chords and observations as to Schumann’s dominant habits of starting – that may first convince us that the dominant-seventh meaning of the opening sonority is privileged to the point of being granted, and then tell us that the following harmonic twist is unusual – internalized knowledge about the relative rarity of quasi-subdominant uses of V^7 -sounding chords.

This is how far the “I know it all” approach can take us, but the sense of ambiguity involved in this opening passage cannot be dismissed by the definitive, “segmental-level” *fact* that the beginning of the song is (just) a specimen of a “Riemannesque three-stage progression from dominant preparation through dominant to tonic chords”. (p. 94) Allowing of a travesty: knowing what *has* happened should not lead me to discount what *might* have happened. The crucial thing is that the second chord is unexpected as a continuation of the first, which may be satisfied by other possible progressions, whether making up “Riemannesque” three-stage progressions or not. Consider the chord sequences shown in Exs. 2 b/d, featuring initial sonorities of the V^7 kind, which no doubt are somehow explainable in the Riemannesque harmonic space. It must be observed that the “I do not

know” (or rather the “I did not know”) aspect of these sequences should not be dismissed as theoretically primitive: it represents the element of uncertainty that is essential in some varieties of ambiguity, and it may be quite informed. Listeners (and analysts) at home in Romantic music never trust dominant-seventh sonorities, and they love being deceived again and again.

The crucial point at the beginning of Schumann’s song is that the first chord sounds as a dominant but functions as (say) a subdominant. The value of a “theory-based” approach to analysis is questionable if it cannot do justice to such a perfect example of reflexive ambiguity – being of paramount importance when it comes to explaining the aesthetic properties and compositional subtleties of the song (and being crucial in harmonic parsing) – but has to discard it because there is a “segmental-level” pigeonhole ready for what actually happens.¹¹ The eventual “analytical decidability” of this situation is irrelevant when dealing with matters of phenomenal ambiguity; it appears that the resolving “theory” that Agawu has in mind is too strong an acid to be added to test tubes with living content.

At this stage a possible objection should be discussed. Considering the huge number of dominant seventh-chords in tonal music, there is also bound to be a fair amount of latent, unrealized “German-sixth” quasi-subdominant dominant-seventh-sounding chords around, and potentially as much unconsummated ambiguity. The risk that the frequency of this type of ambiguity might be overestimated seems all the more impending since, especially in Romantic music, quite a few of all these dominant seventh-chords or dominant-seventh-like sonorities are treated deceptively one way or the other. Ambiguity cannot reasonably be involved whenever dominant seventh-chords (or other “particular” chords) do not keep what they are taken to promise.

High-probability, privileged harmonic meanings do of course not give rise to “retrospectively prospective” ambiguity when the chords are followed

11 *À propos* Riemann, it seems unfair to associate functional harmonic parsing in general with analytic cocksureness. The various designations thriving within functional analysis allow more readily for a context-sensitive harmonic interpretation than does Roman numeral analysis with its unfortunate residues of non-functional thorough-bass terminology.

by and duly confirmed by their expected continuations. If the first bar of the song is changed so as to feature a patent E \flat -major subdominant chord (with an added “Rameau-esque” sixth to be on the safe side), the following six-four chord will emerge as just a regular member of an expected B \flat -major cadence, and it does not reflect back on the preceding chord; cf. Ex. 2e. The start of the song is not only entirely disambiguated, it is disenchanted as well.

Furthermore, all deceptive harmonic progressions do not involve reflexive ambiguity, or rather: the amount of ambiguity varies. The decisive factors are on the one hand the relative probabilities of the inherent prospective functions of the first chord, and on the other hand the impact of the disconfirmation brought about by the second chord. How unusual is the continuation, how strong is the retrospective reflection? And is the passage at all understandable in harmonic terms? If a passage is grasped primarily in terms of chromatic voice leading, almost any harmonic continuation will seem possible, and the sense of reflexive ambiguity will decrease accordingly.

Consequently, Romantic music is less ambiguous harmonically than one might think, and “retrospectively prospective” ambiguity is not a black-and-white affair – nor, it should be added, is ambiguity in general.

Consider again Exs. 2 b/d. In Ex. 2b, the first chord is not a “German-sixth” subdominant as it is in Schumann’s song; retrospectively, it rather emerges as an altered form of the following dominant seventh-chord, providing resolution. Turning to Ex. 2c, the first chord, due to its obvious use in the cadence, seems to work as a subdominant despite its (V⁷) appearance and sonority. In Ex. 2d the first seventh-chord can perhaps be related to what follows if the second, third-position seventh-chord is interpreted as an A \flat -major submediant replacing the C-minor target chord, which if understood as a II chord would in turn have represented the antepenultimate position within the cadence. (Since this convoluted explanation borders on nonsense, there is obviously a limit beyond which thinking in terms of voice leading is preferable to functional analysis.)

Now, how much ambiguity is involved in Exs. 2 b/d? It seems that Ex. 2b (like the actual beginning of Schumann’s song) exemplifies ambiguity since it features a proper imbalance between the probability of the current but suppressed dominant meaning and that of the latent but subsequently realized meaning, and since the harmonic deception involves a proper amount

of mismatch between the privileged prospective meaning and the retrospective disconfirmation of it. Ex. 2c is much less ambiguous since the sense of deception, when the E \flat ⁷ chord does not resolve in the way a standard dominant seventh-chord should, is rather mild. The harmonic complexity of Ex. 2d, involving a series of three dominant-seventh sonorities, is likely to outwit the sense of harmonic deception. The listener may not be able to appreciate that a C-minor chord, being replaced by a third-position A \flat ⁷ chord, satisfies the privileged dominant implication of the initial G⁷ chord. Rather than involving any ambiguity, the passage will probably be heard as a matter of chromatic voice leading prompted by the outer voices moving in contrary motion (g¹-a \flat ¹-a \natural ¹ vs. G-G \flat -F).

It is of interest to trace the initial harmonic idea further on in the song – like Beethoven's motto Schumann's initial chord is highly pervasive, and it occurs no less than four times already within the first twelve bars.

In m. 8 it turns up in the middle of a phrase and, preceded by a B \flat -major tonic chord, it is straightforwardly written as an F \sharp ⁷ chord and then regularly resolved to a B-major ninth-chord. After having presented the unusual progression twice and accustomed the listener to understand the dominant-seventh-like “German-sixth” chord as a kind of subdominant, Schumann introduces the so far suppressed, theoretically privileged dominant function of the chord as a deviation. As a result of this, the B-major resolution in m. 9 actively reflects back on its immediate (V⁷) origin, reminding the listener of the by now almost forgotten current meaning of this sonority. Again the first chord retrospectively emerges as ambiguous, but the relationship is reversed: when you hear the resolution to B major, it releases the chord's usual, dominant function, and for this reason the crucial sonority retrospectively insists that, along with its so far established but now suppressed subdominant German-sixth function, it *had* a prospective meaning as a dominant seventh-chord. Schumann's sensitive harmonic tactics has turned the normal resolution into an unexpected and truly singular event.

By using the same device in complementary ways, by exploiting both harmonic implications of the crucial sonority, mm. 1–2 and mm. 8–9 support the idea that a genuine ambiguity is involved in these passages, and indicates that Schumann was aware of the ambiguity of his initial harmonic formulation. The song has repeatedly featured the “same” chord, but it has

been used so as to covertly suggest an interpretative fork with two prongs. The music has in turn chosen one and then the other of these alternatives but avoided to continue along the prong that was expected.

Turning to the rest of the song, the crucial chord appears three more times, and it is obvious that Schumann repeatedly makes use of its by now expected capacity of being ambiguous. After having effected a re-modulation from G major/minor in m. 19, it turns up in two parallel passages that demonstratively exhibit two novel resolutions. In m. 24 chromatically diverging motions produce a transient diminished-seventh harmony; in m. 26 converging motions give rise to a short C^7 -moment.

In the modulating progression in mm. 8–9, a further ambiguity occurs – at least to the musicians who may in turn try to pass this subtlety on to their listeners. The singer's line is notated with flats whereas the cadence in the piano part uses sharps. This simultaneous enharmonic ambiguity may be taken to suggest that the vocal line is not aware of the piano's momentary digression into B major with its sweet major ninth. The text is about what the flowers whisper, and the accompaniment conveys a breeze of their scent, as it were.

The pianist, knowing what will happen in m. 9 (and then be deceptively cancelled in m. 10), should perhaps abstain from trying to play in a way that clarifies whether the crucial sonority is – will function as – a German sixth chord or a dominant seventh-chord. If the B^9 chord arrives too safely as an expected event, i.e. if the pianist prepares for it by bringing out the $F\sharp^7$ aspect of the preceding chord, the sense of a retrospectively perceived ambiguity is bound to diminish. Turning to the B^9 resolution chord there may be a point in somehow bringing out the sense of simultaneous ambiguity, the subtle tonal disagreement between the vocal and the piano part.

Can analysis afford not to sit on the fence?

Soon after the beginning of the first movement of Mozart's G-minor symphony K. 550 Lerdahl and Jackendoff identify a passage which in their opinion exemplifies genuine ambiguity in the rhythmic/metric domain.¹²

12 Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music*, Cambridge, Mass. 1983, pp. 22–25.

(Cf. Ex. 3a) But Agawu is sceptical and regards the extract as just “another plausible example”, and again it is difficult to know whether he eventually considers the passage to be ambiguous or not.

L&J’s point of departure is – and neither Agawu, nor the present writer disagree – that m. 9 and m. 20 are metrically strong, which in turn means that the regular train of strong and weak bars must have been disrupted somewhere between these points. According to L&J the shift can be explained in two ways.

If you listen “radically”, you are apt to notice and adjust to conflicting metric cues as soon as they turn up. In the present case it means that you are prepared to take account of the impression that m. 10 seems more accented than m. 11. Consequently, L&J mark already m. 9 as weak in “Interpr. B”; the present writer, however, does not think that such a retroactive adjustment is likely to occur. “Conservative” listeners, on the other hand, try to uphold regularity as long as possible. They are likely to reset the metre only in m. 13 since this bar, not quite fit to occupy a strong position, seems to give in to m. 14, having a sense of arrival that may support a strong accent; cf. “Interpr. A”.

According to L&J, then, there are two substantially different metric organizations of the passage. The “radical” alternative brings two juxtaposed weak bars (mm. 8–9) – alternatively, if we assume that m. 9 is not retroactively heard as weak, there are instead two adjacent strong bars (mm. 9–10). The “conservative” option features two weak bars in succession, or perhaps rather a weak double-size bar (mm. 12–13).

According to Agawu, L&J arrive at the conclusion that the “situation is undecidable”, and therefore [citing L&J] they “refrain from choosing between these competing alternatives”; instead they invite their readers to compare recordings in which the two metric options may be distinguished. But Agawu does not accept L&J’s resort to recordings as an evidence of ambiguity since “practically every performance and every hearing of the *G minor Symphony* prefers one of the two interpretations”. Although “not unaware of ostensibly ambiguous situations”, musicians “must decide one way or other and convey their interpretation with conviction”. Praising L&J for their interest in alternative readings, Agawu is not content with letting analysis terminate in undecidability, with letting analysis “sit on the fence”: “To ‘refrain from choosing between these competing alternatives’

is to refuse to take advantage of the disambiguating functions of theory; it is to retreat from the practice of theory". (p. 98–99)

It is true that performances virtually always display only one of several alternative meanings at a time – in this case either of two possible metric organizations. Attempts at expressing several options concurrently or trying to play in a neutral way will most probably result in unsatisfactory renderings. But the dual fact that we rarely encounter ambiguous performances, and that we are not likely to distinguish multiple meanings when listening to the (more or less) unequivocal performances we do encounter, does not imply that certain musical passages are not ambiguous, even ostensibly ambiguous. Nor does it imply that analysts should abstain from doing what *they* can do: to discover, describe, and explain different, and yet valid, ways of understanding ambiguous musical structures, and then convey *their* readings with conviction.

Besides, whereas a given musician can only present one interpretation at a time, musicians collectively offer a great variety of interpretations, and taken together, their performances show the potential richness of the works, including the ambiguities inherent in some passages. Such demonstrations of ambiguity contribute substantially to the cultivation of music, and there is no reason why analysts, collectively and as individuals, should not listen to crucially distinctive performances (or imagine their own distinctive renderings) in order to identify various, more or less probable readings – thus doing their share when it comes to the proliferation of meaning. Standardization of analytic thought is detrimental, and analysts had better sit on the fence because it offers a better view. To the extent that “theory” has “disambiguating functions”, it should be kept at bay since using these functions is not necessarily an advantage when it comes to musical understanding, let alone enjoyment.

By the way, since Agawu does not want us to “retreat from the practice of theory”, he should have presented and applied the theory, whose “disambiguating functions” L&J have “refused to take advantage of”. But, and this is all the better for the art of analysis as well as that of music, it is not likely that theorists have such an ace up their sleeve.

But what about the “radical” and the “conservative” metric options in Mozart’s symphony? Do they amount to a genuine case of ambiguity? Well, since two juxtaposed strong bars and a double-size weak bar, respectively,

are remarkable features making for distinctly different musical impressions, the situation may rightly be called ambiguous. And this applies not despite of, but is perfectly compatible with the fact that the two alternatives cannot be heard (or even imagined) simultaneously. After all, you cannot see the old woman and the young lady at the same time when looking at the puzzle picture that has come to be paradigmatic of visual ambiguity. Seeing both of them is possible only if you have a chance to look at the picture twice, or if you are exposed to it long enough to have time to reorganize your percept. When such conditions apply, seeing the old woman means that you are also aware of the young lady as something that might be there, as something that you have just seen and that you will see again if you try.

Turning to real-time listening, the rhythmic options inherent in the Mozart excerpt are mutually exclusive: either you understand mm. 10–11 in the “radical” way, letting then mm. 12–13 proceed regularly, or you listen “conservatively”, understanding mm. 10–11 as regular and then adjusting mm. 12–13; cf. Ex. 3b, using the analytic symbols introduced by Cooper and Meyer.¹³ The passage features two *loci* of ambiguity: mm. 10–11 that may be heard either as weak-strong or as strong-weak, and the quasi-parallel pair mm. 12–13 interpretable as being either strong-weak or weak-weak. But the irregular weak-weak accentual configuration in mm. 12–13 is the consequence of the previous choice to listen “conservatively” in mm. 10–11, and therefore the fork of the ambiguity is located to these bars, offering the options of listening either “radically” or “conservatively”, i.e. postponing the metric adjustment until mm. 12–13.

But you are not likely to be aware of the fact that there was a fork in mm. 10–11 determining how you will understand mm. 12–13. If you have listened to mm. 10–11 in the “radical” way involving two juxtaposed strong bars (mm. 9–10), mm. 12–13, fitting in with the adjusted metre, will appear quite normal, giving no hint that you are just listening to a passage having a further metric option. If, on the other hand, you have processed mm. 10–11 in the “conservative” way, the weak m. 13 will emerge as a kind of anomaly, but you are not likely to spot its source – the fact that

13 Grosvenor Cooper and Leonard B. Meyer, *The Rhythmic Structure of Music*, Chicago University Press 1960. L&J consider C&M’s system for rhythmic analysis inferior to their own, a view that the present writer does not subscribe to.

you have heard mm. 10–11 according to the metre established right from the start of the movement.

This is not to say that an alert listener cannot entertain a sense of metric shift at either the first or the second of the two *loci*. You might be aware of the fact that you have changed your mind as to the distribution of accents, cf. the arrows in Ex. 3b. When m. 11 shows up, and if you feel that it is unsuitable as a strong bar, m. 10 must have been accented, and this is a retroactive consequence that you are likely to notice since you will recall that m. 9 was a strong bar as well.¹⁴ And if you have not adjusted the metre at this first opportunity, m. 13, supposed to be an accented bar, turns out to be just a mediating “up-bar” to the obviously strong m. 14; this makes for a double-size weak metric impulse, which also amounts to a quite conspicuous effect.

Evidently, there is another kind of ambiguity at work here than in Beethoven’s repeated motto and Schumann’s chord progression. The double motto and the crucial chord are ambiguous in virtue of having two prospective meanings, one of which is realized. But when the clarifying continuation is a fact, it would be nonsensical to hold that the motto episode was *both* in E♭ major and in C minor, or to maintain that the chord was *both* a dominant and a German-sixth subdominant; when contemplated afterwards, these ambiguous situations must be thought of in terms of *either/or*.

This is not the case in the Mozart excerpt. As already pointed out, it features *two* pairs of bars where the metric alternatives may come to the fore – the metric shift may present itself either in the first or in the second *locus*, and whether two consecutive weak bars occur in mm. 12–13 depends on whether or not you have heard two consecutive strong bars in mm. 10–11. But no matter how the first passage is understood, it does not present any prospective consequences that we are aware of.

14 Evidently, this sense of retroactivity is not felt by a “radical” conductor who deliberately enforces accented status to m. 10, juxtaposing it with the preceding strong accent in m. 9. At the very start of the Schumann song, on the other hand, the two musicians, knowing what they are going to sing and play, respectively, will focus on the subdominant meaning of the ambiguous chord, whereas the listeners (at this first-bar stage of the music) will only have access to its privileged, dominant meaning. Generally, there may be interesting differences between the performer’s and the listener’s experience of ambiguities.

Neither while listening to mm. 9–14, nor after the whole passage has become a fact, does the music reveal its ambiguity. It just continues as demanded by the choice made in the fork bars 10–11, and the unequivocal accentual pattern in mm. 14–16 resolutely puts an end to an inherently ambiguous episode without giving any of the already passed metric alternatives the upper hand. And yet, no matter how you have listened, something has happened since the strong accent has been transferred from an odd-numbered bar (m. 9) to an even-numbered one (m. 16). The music does not offer the listener any clear hint as to where and how this change came about, but it makes sense to say in retrospect that m. 10, the earliest cause of the metric transformation, was (is) *both strong and weak*.

Passages featuring this kind of evasive metric ambiguity are not very rare, and the second theme from the first movement of Beethoven's Fifth Symphony provides a good example. Which bars are strong and which are weak?

As already mentioned, the theme is preceded by a transformed variant of the double motto, making it evident that the last notes of the two falling fifths are accented. But the first bar of the second theme also "wants" to be strong, and this brings an important reversal in relation to the accentual pattern prevailing in the preceding double motto, a reversal making for juxtaposed strong bars. Proceeding then regularly with accents every second bar, the next bar in the theme to be strong is the third, and as a consequence of this the melody tends to be heard as an opening motion from the tonic to the dominant which, introduced as a quasi-syncopation in the preceding weak bar, eventually supports the top note f^2 ; cf. Ex. 4a.

However, since one might prefer to keep to the accentual pattern of the double motto, the second bar of the theme may also be understood as strong. This metric organization is supported by the straightforward, non-syncopated shift to the dominant, and later on it is corroborated by the additional motto, clearly making for a strong accent at the return to the tonic in the fourth bar. The overall impression is a closing dominant-to-tonic harmonic motion within the theme; cf. Ex. 4b.

Finally, satisfying both the inherent demand of a starting accent and the motto cue for a closing one, as well as doing justice to the sense of a syncopated entry of the dominant, the four-bar phrase may be understood

as a compact, self-contained unit with accented tonics framing a weak double-size bar featuring the dominant; cf. Ex. 4c.

Now, which bars in the second theme are actually strong and which are weak? It turns out that, just as in the Mozart symphony, there is no “theory” that can be resorted to in order to resolve this ambiguity once and for all, no hard-and-fast guidelines that can tell the conductors (or listeners or analysts) which of the readings that is the privileged one. You simply have to make up your mind as to which option you prefer on the basis of your musical intuition.

In the Beethoven theme I personally prefer 4c due to its solid, block-like E_b-major quality, its quasi-syncopated dominant, its energetically juxtaposed accents, its sense of metric reversal in relation to the double motto, and due to the way this reading of the metre brings decisiveness to the following melodic expansion by giving emphasis to the chords left and arrived at in each phrase. Good reasons, perhaps, but they do not stem from any disambiguating “theory”, nor do they amount to an argument powerful enough to dismiss the alternatives, to do away with the ambiguity of the theme.

Turning back to the start of Mozart’s K. 550 symphony (cf. Ex. 3b), the “radical” reading seems preferable. The early, determined reversal of the metre, making for two juxtaposed strong bars, seems more vital than the two fused weak bars of the delayed “conservative” interpretation. And the “radical” option also means that mm. 10–11 are not forced to make up a heavy-at-the-back iamb; instead these bars bring a trochee, occurring again in mm. 12–13 as the parallelism bids. But these arguments are merely musical, not “theoretical”.

In a footnote Agawu seeks support from Bruce B. Campbell, whom he quotes quite extensively.¹⁵

“Some musical phenomena can be understood in several ways” [...] “but surely one of the functions of analytical insight is to show how all but one of the apparent or ‘theoretical’ possibilities are artistically untenable in a given context.”
 “An analysis, after all, is an opinion of how to hear a piece.” “A powerful analytical system, such as Schenker’s (regardless of whether his method can account for

15 The source of these citations is Campbell’s review of a book by Janet M. Levy; cf. *Journal of Music Theory*, 29(1985), p. 193.

all details of a composition), will at least be able to relate the details with which it is concerned (in Schenker's case voice-leading) to the larger structure, and thereby resolve any and all matters of seemingly local 'ambiguity' – certainly no mean accomplishment." (p. 98)

Campbell's views are positivistic in a way that by rights ought to arouse suspicion and even adverse reactions. Why should "analytic insight" be used to dismiss "all but one of the apparent or 'theoretical' possibilities" as "artistically untenable"? Quite to the contrary, single-minded analysts had better keep far out of artistic matters, and their opinions "of how to hear a piece" should be received with due scepticism. Reversing the dependence, it might be argued that analysts would benefit from listening to musicians.¹⁶

This is all the more necessary if the analysts are adherents of "a powerful analytical system, such as Schenker's", since being systematically biased is a particularly pernicious form of single-mindedness. And if a system is not God-given (but just Heinrich-given), why should the rest of us accept to be enlightened? How can "any and all matters of seemingly local 'ambiguity'" be resolved by a theory "regardless of whether" it "can account for all details of a composition"? These residual or even recalcitrant "details" may perhaps be quite important and serve as input for another, perhaps quite worthwhile, analysis, and they may very well be crucial for the sense of ambiguity that might be involved. Contrary to what Agawu apparently thinks, it might be held that ambiguity "exists in" and is fed by the details of "concrete musical situations", and it is up to us as listeners, musicians, *and* analysts to pay attention to them.

Furthermore, Campbell's claim does not agree with analytic realities since even within its own voice-leading domain Schenkerian methodology is not always capable of producing unequivocal descriptions: analysts operating within this paradigm sometimes assign significantly different underlying structures to the same piece, locally as well as globally.¹⁷ Unless it can be positively established that all but one of the disagreeing Schenkerian analysts are wrong, this amounts to an indication either to the effect that the

16 Cf. for instance Bengt Edlund, "Dissentient views on a minuet".

17 The first-movement theme of Mozart's A-major Piano Sonata K. 331 is a case in point; cf. the section on tonal reduction in the first chapter of the present volume.

theory is not “powerful” enough, or to the effect that the work in question may after all be structurally ambiguous in some way or another.

Reconsidering an “error”

William Thomson has proposed a kind of ambiguity that he calls “functional”.¹⁸ According to Agawu it boils down to “a proposition of ‘parametric noncongruence’. When parametric processes in a musical situation are non-congruent there is potential ambiguity”. Or, using Thomson’s own words, “if within the total event at least two properties are noncongruent, then structural ambiguity is a latent potential”. (p. 100)

The main point of Agawu’s criticism of the concept ‘functional ambiguity’ seems to be that Thomson’s definition is too broad: if his view were adopted, there would simply be too much ambiguity around. Agawu holds that the parameters involved in the non-congruence must have equal weight, and that, whereas treating parameters “democratically” might “serve the purposes of analysing a musically restricted structure”, it will “create severe problems in a tonal work with real harmonic, melodic, and rhythmic content”. (p. 101)

Agawu’s scepticism seems to be borne out by a passage from Debussy’s piano piece *Danse*, which Thomson considers “functionally ambiguous” because it is “a clear example of [...] bi- or polymetric rhythm”; cf. Ex. 5. According to Agawu, Thomson overshoots the target since the situation should rather be thought of as merely a conflict between the basic 6/8 metre of the left hand and the temporary 3/4 metre of the right, a conflict readily settled in favour of the left hand when listening to the music. Using Agawu’s words, the prescribed 6/8 metre withstands this “challenge [...] to its normative regularity”, and the right-hand 3/4 time is not “a comparable, equally valid metre but the aggregate of a set of effects heard within the overriding 6/8 metre. One would have to ignore the resultant rhythm in order to find this a ‘functionally ambiguous’ metric situation”. (p. 101–102)

Is this metric clash really nothing else than just a local polymetric disturbance of the prevailing accentual pattern? Granted that there are pianists playing

18 William Thomson, “A Functional Ambiguity in Musical Structure”, *Musical Perception* 1(1983), 3–27

this passage in a straightforward way corresponding to the notated metre – thus reducing the listeners' chances of hearing anything else – it can neither be excluded that in other performances it is quite possible to understand the passage as momentarily switching over from 6/8 to 3/4 – melodies do attract attention – nor that listeners can alternate quickly between melody and accompaniment in any performance so as to have a quasi-simultaneous awareness of both metres.¹⁹ The latter way of experiencing the passage may reasonably amount to a kind of ambiguity, however transient. Two opposed metres may be perceived, of which the one in the right hand is suppressed by the notation; yet, in virtue of carrying the melody, it is strong enough to be heard in concurrence with the basic metre of the left-hand accompaniment.

This conflict kind of ambiguity is quite different from the varieties of gradually emerging, syntactical ambiguity met with in the Beethoven and Schumann examples, but not altogether unlike the simultaneous presence of multiple metric options in the Mozart symphony. The main difference between the Mozart and Debussy passages is that in the *Danse* the alternatives reside in separate layers of the texture, whereas in the G-minor symphony the ambiguity is a matter of different ways of understanding the musical substance as a whole.

It is necessary to take the duality within the texture into account if one wants to cogently explain the properties of the passage from *Danse*. The patently inherent 3/4 metre of the right-hand melody is strongly contradicted by the prescribed 6/8 metre, and as a result the melody gets its recalcitrant, energetic character. Otherwise put, the imposed metric organization tries to enforce a non-privileged accentual configuration onto the melodic substance at the expense of its inherent metric accents.

Generally speaking, this phenomenon is far from rare, but usually the conflict involved is quite subtle: the musical substance (or some part of it) simply lends itself about equally well to two or several metric organizations, but the notation, being normative, tips the balance over in favour of one of them. This sort of multiple meanings often resides within just one element of the music, and it emerges most readily when the disambiguating

19 This metric conflict occurs elsewhere in the piece so it may be rewarding to play the music and to listen to it in a way that makes room for quasi-simultaneous metric layers.

presence of the other elements is disregarded, as we may do momentarily when listening, or systematically when analysing a certain passage with the intention to study one of its elements, for instance the melody. Furthermore, in order to fully appreciate the latent ambiguity involved one must, as a preliminary intellectual experiment, also disregard the information brought by the notation. In the case of metre, this means that the time signature, the bar-line positions, and the beams must be disregarded; when it comes to tonal matters, the “spelling” of the pitches has to be left out of account.

By implication it seems that Agawu disapproves of the tricks called for in order to identify this kind of latent possibilities: being either contradicted by other components of the musical design or simply ruled out by the notation, the latent metric alternatives simply emerge as unwarranted or illegitimate, respectively. In contrast to this attitude, it might be argued that a necessary counterpart to the composers’ prerogative to select one among several possibilities – or to the fact that the notation simply, often by default, favours one of the alternatives – is the duty of the analyst to restore and study also the discarded or unprivileged options.

It must be stressed that the latent alternatives residing in one element or layer of the music and being ruled out by the other elements/layers, or by the notation, are unrealized possibilities; they emerge only before the other elements and the notation have exerted their disambiguating influence. Yet these options, appearing in full light only if certain parts of the musical information are suppressed, may be of considerable analytic interest – and paying them due attention is what the intimate interdependencies obtaining between the elements making up a musical structure demand. No matter how suppressed they are, the ruled-out options will tinge the privileged one, co-determining its character and function, and helping us to understand why some passages might be played in different ways.

But a more representative, clear-cut example of this phenomenon than Debussy’s *Danse* is due. The pitch sequence making up the second theme in Beethoven’s Fifth Symphony, cf. Ex. 6a, is compatible with several different metric organizations, and the resulting melodies are distinctly different; cf. Exs. 6 b/e. While all of them are possible, they are of course not equally plausible when assessed in the context of the first movement, and just as with ambiguities in general, irrelevant alternatives should be left out of

account. Hence, the 3/4 time options 6d and 6e must be disregarded when the pitch sequence is imagined as a constituent of this particular movement. Otherwise these two alternatives are perfectly viable – 6e, for instance, with its neighbour-note motion and top-line ascent from $e^{\flat 2}$ to f^2 is quite natural – and they are left out of consideration only because no listener is likely to think of them in the 2/4 context prevailing in Beethoven's symphony. Still another 3/4 configuration of the theme's pitch sequence, cf. Ex. 6f, should not be accepted as an option at all since it is quite strained.

As to the two 2/4 melodies, they are quite different, and the latent alternative 6c illuminates the melody that Beethoven actually opted for (6b) in a way that a keen analyst should not neglect. Beethoven's theme features a prominent prepared appoggiatura c^2 in its last bar and suggests another, non-prepared one involving d^2 in its second bar. (Recall that the harmony is disregarded in this thought experiment!) In the melody 6c, the "same" d^2 turns into an unaccented neighbour-note.

Although by rights relegated to the background in performances of the symphony, the latent metric organization shown in Ex. 6c is likely to be faintly heard along with the prescribed one since the suppressed alternative reading is suggested by the initial rising fourth. This motion bears an upbeat-to-downbeat, dominant-to-tonic quality that (even when accompanied by a tonic chord as in Beethoven's theme) gives a transient impression that the second-beat $e^{\flat 2}$ in 6b is a kind of downbeat. Thus, no matter the initial accent in the actual second theme, the $b^{\flat 1}$ has a latent upbeat quality, and a downbeat quasi-upbeat is certainly an interesting feature. Turning to performance, the paradoxical sense of an accented upbeat-like $b^{\flat 1}$, followed by a seemingly displaced downbeat $e^{\flat 2}$ can be either counteracted or slightly underscored.

A similar ambiguity can be found in the harmonic domain since the pitch sequence in Ex. 6a lends itself to a number of different harmonizations. And even Beethoven's melody (6b) allows of being accompanied by various patterns of (say) tonic and dominant chords, with concomitant changes as to the character of the theme. Consider, for instance, the two notes of the second bar of the theme. If played over an E^{\flat} -major chord, d^2 emerges as an appoggiatura and $e^{\flat 2}$ as its resolution; if supported by a B^{\flat} -major chord, d^2 turns into a consonance while $e^{\flat 2}$ follows as a dissonant passing-note.

Just as Beethoven did away with the metric alternative shown in Ex. 6c when penning the bar-lines, he used his prerogative as a composer when excluding all harmonic alternatives but one when choosing the very chords to be found in the score. But the analyst is nevertheless free to consider the latent, non-realized options when trying to make out the nature of the actual theme.

The possibility of neither/nor

Agawu's final example derives from Carl Schachter's essay "Either/Or", and the passage studied is the first eight bars of Chopin's Mazurka Op. 33, No. 1.²⁰

Agawu starts by pointing out that Schachter's "exploration of analytical alternatives is firmly anchored in Schenkerian theory", and that "such situating of limits allows stronger theoretical grounds on which to discuss musical ambiguity". Indeed, Agawu considers Schachter's observations to be "a spectacular demonstration of the impossibility of apprehending ambiguity once the enabling constructs of theory have been explicitly invoked."²¹ Schachter's essay shows how in analytic work "additional – but not external – factors might be invoked in order to resolve the ambiguity". (pp. 102–103)

But Agawu also holds that "there is something programmatic about Schachter's 'Either/Or' title, for rather than pursue genuine alternatives, he provides, I fear, mostly weak alternatives that are promptly discarded". Although Schachter talks of passages involving "a true double meaning",

20 Carl Schachter, "Either/Or" in Heidi Siegel (ed.) *Schenker Studies*, Cambridge 1990, pp. 165–179; reprinted in Joseph N. Straus (ed.) *Unfoldings. Essays in Schenkerian Theory and Analysis*, Oxford 1999, pp. 121–133.

21 One cannot but feel sorry for those who have lost their ability of "apprehending ambiguity", and if it is the "constructs of theory" that have disenabled them, they ought to seek recourse to these constructs more sparingly. Agawu characterizes as "puzzling" Schachter's "confident assertion that 'ambiguity and multiple meanings ... certainly do exist'"; he is a bit disappointed, it seems, because Schachter is softer on ambiguity than he would like him to be.

Agawu holds that “none of Schachter’s analyses demonstrates a final-state awareness of ambiguity”.²² (p. 104)

Schachter lists three “viable interpretations of harmony and voice-leading”, cf. Ex. 7a, but quickly concludes that only one of them is “tenable”. “His preferred interpretation is one that takes account of the motivic shape of the music. Stated as a general rule: given two equally valid but mutually exclusive harmonic interpretations of a passage, prefer the one that is richer in motivic content.” [...] “[Analysts] might look to complementary domains for ‘disambiguating’ factors”.²³ Schachter’s ambition to do justice to the “specific features of the piece’s design” “logically entails the contextualisation of ambiguities encountered at earlier stages of the analysis”. (pp. 104, 106)

Agawu asks whether Schachter has set up “straw alternatives”, and at least as far as the beginning of the mazurka is concerned the present writer is prone to agree with him: all alternatives but the preferred one are quite weak. Who else than a Schenkerian analyst teaching correct theory to students by means of deterrent readings would propose the two implausible “*not*” harmonic interpretations shown in Ex. 7a? But it should be pointed out that the discarded reductions *are* conceivable under a Schenkerian voice-leading paradigm; cf. the additional sketch (b) in Ex. 7a, showing two passing-notes within a prolonged subdominant. The problem is that nobody is likely to actually hear a subdominant being prolonged from m. 5, or even from m. 6, to the dominant in m. 7 as if the intervening, quasi-resolving root-position tonic chords did not exist? However crucial for the

22 It may be recalled that when discarding the Beethoven motto as ambiguous, Agawu did not require “a final-state awareness of ambiguity”, but a simultaneous experience of competing tonal options.

23 Whether studying motivic content is integral to Schenkerian analysis, or makes up a “complementary domain” to be used at the analysts’ discretion, is immaterial here; cf. the discussion in “Hidden repetitions and uncovered parallelisms”, ch. 4 the present volume. Any analytic method is likely to produce better accounts when complementary domains are brought to bear on the music, and any analyst aiming at cogent descriptions should use complementary information, no matter whether his/her theoretic framework explicitly or implicitly acknowledges (or abstains from) such extensions.

musical content of the passage the two IV chords are, they certainly emerge as temporary excursions from the tonic.

Anyway, the harmonic parsing considered by Schachter (and presumably by Agawu as well) to be the only valid one, is supported by, or derived thanks to, the persistent presence of a neighbour-note motif issuing (in all cases but one) from the fifth degree and being always introduced over the tonic; cf. sketch (a) in Ex. 7a. Whereas the musical identity of this motif may be questioned – its rhythmic, metric, and melodic traits vary considerably, and as to the sixth-degree “neighbour-note” itself, it is always and quite conspicuously introduced as an accented appoggiatura note to be resolved. But there is no doubt a drone-like persistence of the pitch-class D \sharp throughout the melody, a virtually constant presence that may be taken to validate the preferred harmonic analysis as being the only “tenable” reading.

But as the non-neighbour-note variant of the mazurka in Ex. 7b shows, the harmonic reading selected by Schachter is not really dependent on the very melody that Chopin composed. It remains the preferable harmonic interpretation (out of those proposed by Schachter) even when the pervading motif is replaced by other motions. (There are two e²s in Ex. 7b, but they are reasonably not upper neighbour-notes.)

A more important objection is that there are two additional harmonic reductions: Chopin’s harmonic progression does emerge as ambiguous.

Particularly within a Schenkerian framework, where the actual appoggiatura-note quality of the “neighbour-note” e² in m. 5 is of no consequence, the reading shown in Ex. 7c immediately presents itself. Bars 4–8 bring a local structural descent from the fifth degree, a quite straightforward step-wise motion with obvious and complete harmonic support and with a subordinate “neighbour-note” motion prolonging the point of departure. This reading is by far more plausible than any of the two “straw” (*not*) ones summarized in sketch (b) of Ex. 7a, and since it coexists with Schachter’s analysis, the beginning of the mazurka emerges as genuinely and significantly ambiguous both with respect to the upper line and the harmonic progression. Furthermore, since either reading can be supported by key concepts in Schenkerian theory – long-term “neighbour-note” motion and fundamental descent, respectively – it seems, contrary to what Agawu claims, that ambiguity *is* quite possible even under a Schenkerian theoretical regime.

Fortunately, Schenkerian theory is not yet compulsory when dealing with tonal music, and it is therefore still possible to switch over to a non-Schenkerian mode of understanding. The passage may therefore be considered once more to find out whether it embodies any further plausible harmonic organization.

And yes, it does make sense in one more way. Disregarding the connecting solo melody (which just prolongs the tonic and is deleted when the passage is repeated later on) mm. 1–8 obviously consist of a sequence of clearly separated authentic and plagal cadences; cf. Ex. 7d. The two identical authentic cadences have a broad and decisive closing quality due to the accented tonic and the complex altered chord preceding the dominant, whereas the two intervening, swift plagal cadences take place in a higher register and feature second-beat subdominants, sounding like displaced accents and being followed by weak third-beat tonics. Far from making up just any harmonic sequence, the four cadential constituents emerge as both stratified and functionally differentiated: the anchoring authentic cadences make up a frame for the upper-line descent formed by the plagal ones. It should be observed that “neighbour-note” motifs are of some importance in this reading as well – they serve to mark the plagal cadences for attention.

The harmonic organization corresponding to this quite straightforward understanding of the passage is entirely different from that of the two Schenkerian accounts shown in Ex. 7a and Ex. 7c. And it is independently valid – since it is not a “tonal” reduction, this reading cannot be refuted by Schenkerian arguments. Whereas the Schenkerian analyses are strongly predicated on an encompassing authentic cadence and linear continuity, the reading proposed in Ex. 7d emanates from an altogether different perspective by taking primary account of symmetries and associative networks as forming factors in music. And it may be just as interesting and aesthetically rewarding, and it is just as legitimate, to pay attention to the ways in which fragments are combined, as it is to explain the supposed workings of “tonal” unity.

But it should be pointed out that the reading shown in Ex. 7d makes good sense also from a “tonal” point of view – if one dispenses with Schenkerian orthodoxy. Instead of focussing on the authentic frame of the passage, it pays equal and due attention to its plagal content, and the treble

line made up of the cadential motions forms an orderly descent from the sixth-degree e^2 .

Thus, in addition to the structural ambiguity emerging already within the confines of Schenkerian theory (7a and 7c), we have to accept another reading (7d) issuing from, and being defensible from, another theoretical agenda. The start of the mazurka is genuinely ambiguous in the sense that it allows of fundamentally different structural descriptions. Generally, as long as we allow ourselves access to more than one theory, to more than one approach to listening and analysis, we are free to enjoy and be enlightened by multiple structural accounts. In addition to hierarchical modes of tonal understanding, compositions may, for instance, emerge as associative networks or peculiarly ordered sequences. In this light ambiguity emerges both as an inescapable consequence of analytic freedom and as a most valuable asset when it comes to musical appreciation and interpretation. Obviously, you will play the start of the mazurka differently depending on whether you think of it in terms of 7a or 7d.

Before leaving the mazurka its first two bars merit attention since they bring further ambiguities.

Considering the right-hand part, the conventional, keep-to-the-treble approach offers an upper-line melody featuring in turn a low-register neighbour-note motion, a rising sixth and a falling-third descent to the tonic note. But listeners and pianists favouring smooth continuity are likely to find that a falling alto connection, starting from the fifth-degree $d\sharp^1$ and eventually reaching the third-degree b , brings a quite attractive, sonorous alternative (or complement); cf. Ex. 7e. Indeed, since these two cadencing bars are repeatedly used both as a close and as a start in the mazurka, it is advantageous to have both these options in mind when playing and listening – the upper-line reading has a closing quality, the middle-register one remains open. The initial phrase offers a puzzle picture that will hopefully survive all attacks by ambiguity-busting theories.

Furthermore, even the very first chord of the mazurka is ambiguous; cf. Ex. 7f. This altered chord may be thought of as replacing the six-four chord of the conventional dominant-suspension formula by introducing a lowered fifth, but it may also stand for a $C\sharp$ -minor subdominant with raised root and added seventh, for a chord turning the phrase into a full cadence. This ambiguity is primarily a matter for the pianist, who can see that the chord is

altered (and hence will give it all the expression it deserves), and who knows what the listener does not yet know, namely that the mazurka “after all” is a piece in G \sharp minor. To a first-time listener, prone to accept the most straightforward interpretation, the initial chord does not in the first place emerge as an altered chord – “after all”, and although its root is lacking, it rather sounds as an E 7 harmony. And to listeners in general, the most remarkable event is not the first, somewhat puzzling sonority, but the second chord, or rather the fact that the first chord is simply moved a poignant chromatic step downwards to another, now root-supported seventh-chord, a motion that the pianist may make them aware of by bringing out the fact that the first chord was actually an altered sonority.

Are all these complexities just due to the inevitable fact that the key is always more or less indefinite when a piece of music starts? Certainly not. What is required is also a composer knowing how to create ambiguities – and an analyst interested in multiple meanings.

That diverging descriptions may emerge and persist even within an “explicit” analytic paradigm like that of Schenkerian theory, and that they are even more likely to turn up when different analytic systems are applied, have just been shown. It seems that ambiguities arising from the fact that musical structures can be understood and analysed in many ways are frequent in the melodic domain, and again the second theme of Beethoven’s Fifth provides examples.

Heinrich Schenker has established the underlying “tonal structure” of this theme: a falling line e 2 –d 2 –c 2 –b 1 comes to the fore; cf. Ex. 8a.²⁴ Eugene Narmour, on the other hand, applying Leonard B. Meyer’s idea of “melodic implications” prompting the listener’s expectations, brings out a rising triad b 1 –d 2 –f 2 of accented notes as well as a supplementary rising diatonic motion d 2 –e 2 –f 2 ; cf. Exs. 8b and 8c. He also shows how these two patterns contribute to the further growth of the melody. In addition there is an implicative rising-fourth gap followed by a filling-in descent along the scale; cf. Ex. 8d.²⁵ Rudolph Reti, studying the “thematic process” within the movement and the symphony, observes an integrating affinity in terms

24 Schenker’s reduction first appeared in *Der Tonwille* 1(1921), 27–37 and foldout.

25 Eugene Narmour, *Beyond Schenkerism*, Chicago 1977, pp. 58–68 and 181–188.

of a partial-inversion relationship between the second theme and the transformed double motto preceding it; cf. Ex. 8e.²⁶ Finally, the phrase may be heard as a dialogue between a low-register and a high-register strand, the latter interrupting and delaying the completion of the former; cf. Ex. 8f.

Apparently, the second theme is replete with alternative sub-surface motions, but where is the one-and-only, all-embracing and enabling theory doing away with the ambiguities and leaving but one option to seriously consider? It seems that the situation is undecidable – the various readings just proposed derive from distinctly different and legitimate theoretical agendas, and it cannot very well be argued that Beethoven's theme as a matter of principle lends itself to one approach and not to any other. It is important to maintain that you are entitled to choose among theories and their attendant analytic methods, and to realize that the decision to rely on one method rather than on another may either be a rational choice or a matter of what you have learnt to consider as self-evident.

Theories may of course differ as to their merits when it comes to rigour and credibility as well as with respect to their aesthetic and perceptual relevance and their suitability for various purposes. Nevertheless, if more than one method is brought to bear on a certain passage of music, this is likely to produce divergent results, and the music will inevitably and rightly emerge as ambiguous beyond decidability, beyond simplification.

The multiple sub-surface patterns within the second theme actualize the problem of establishing the relationship between the various readings, between the musical experiences they describe. It seems more important to penetrate into such issues than to look for a theory with a potential to discard viable modes of musical understanding in order to establish that no ambiguity is present.

Agawu interchangeably (and probably synonymously) uses the words “multiple” and “competing” when referring to various readings that may be proposed, but fail to make for genuine ambiguity since when it comes to the crunch only one of them prevails. “Multiple” must reasonably be understood as referring to the basic condition of ambiguity: the presence, and

26 Rudolph Reti, *The Thematic Process in Music*, London 1961, pp. 165–192 and especially p. 175.

sometimes also the awareness, of more than one plausible mental organization of the musical events. “Competing” readings, on the other hand, seems to be a more complex issue, requiring further conceptual differentiation.

When saying that two readings of the same passage are *competing*, we may reasonably be taken to mean either or both of two things: that it is impossible to hear and also very difficult to conceive of the two readings at the same time, and/or that the readings are associated with musical effects emerging as contrary, not as just (slightly) different. *Complementary* interpretations may be hard to perceive while listening under normal conditions, but they can be thought of at the same time since they tend to derive from different theoretic perspectives; the musical effects of complementary readings may or may not be conflicting. (In other words, competing interpretations are musically incompatible whereas complementary ones are theoretically incompatible.) *Coexisting* readings, whether stemming from the same analytic perspective or not, are dependent on each other or support each other, perhaps so as to combine their effects, and they invite to being heard and understood simultaneously. Needless to say, these three categories are not excluding: a certain reading of passage might be placed under more than heading.

Let's turn to the second theme of Beethoven's symphony. Being derived from different theoretical perspectives, Schenker's falling-fourth structure (8a) makes up a complement to Narmour's rising-triad and rising-third implications (8b and 8c); considering their conflicting musical effects, 8a of course also competes with 8b and 8c. Reti's motivic affinity (8e) is clearly a complement to both Schenker's and Narmour's observations, and since its musical effect is obscure, there is no sense of competition. Several of the proposed sub-surface motions are coexistent: although theoretically a complement, Narmour's gap/fill motion (8d) supports Schenker's descending fourth (8a) by supplying its initial momentum, and Narmour's rising third (8c) prompts his ascending triad (8b). The rising-triad implication (8b) opposes the anchoring low layer in a meaningful way if the theme is understood as a dialogue in terms of register (8f) – a case of competing coexistence.

Ambiguity in the larger reality

A passage from the Scherzo movement of Schubert's Piano Sonata D. 845 also merits close study for what it may disclose about the mechanisms of ambiguity; cf. Ex. 9a. It is briefly discussed in a paper by Carl Schachter, and from the way he comments upon it, it is apparent that he considers the middle part of the passage to be ambiguous with respect to its key.²⁷

“But although music mostly keeps its promises, it need not do so in the obvious way we might expect; [...] its messages sometimes admit of more than one interpretation”. “Following a firmly established C major (itself a tonicized III in the home key of A minor), the passage continues the C harmony, but in a way that makes it sound like a V in F minor”. But “the expected F minor never materializes, for the chromatic pitches serve instead to prepare A♭ major”. But are mm. 29–36 also in F minor? Schachter's answer is in the affirmative, although not without qualifications: “hearing these measures as containing the V of F minor is part of our moment-by-moment experience of the piece”, but this experience is not “grounded in the larger reality” of the music. (*Unfoldings*, pp. 139–140)

An analyst to Agawu's liking is obliged to do away with either the C-minor or the F-major reading of the passage. Let's see how the two interpretations fare.

Apparently, the C-major option is preferred by Schachter when he points out that the F-minor experience fails to be “grounded in the larger reality” of the movement. And that much can readily be seen already in Ex. 9a: from the vantage point of finite-state hindsight, the F-minor reading of mm. 29–36 emerges as a redundant *cul-de-sac* on the way from C major to its sub-medi-ant A♭ major – certainly not an uncommon shift of tonal centre in Schubert's music. Indeed, you can remove these eight bars without harming the tonal “logic” of the music. And it is in fact evident even from the two parallel phrases themselves that they are in C major. They have first c¹ and then c as

27 Carl Schachter, “Analysis by Key. Another Look at Modulation”, *Music Analysis* 6(1987) 289–318; also reprinted in *Unfoldings*, pp. 134–160. This Schubert passage is quite pertinent for the present purposes, but I stumbled on it by mere chance when I turned over the pages in the book to find the “Either/Or” article.

organpoints in the left hand, and both of them close on an accented C-major triad, duly but swiftly preceded by its applied dominant. And the right-hand F-minor-sounding thirds along the way downwards are merely unaccented passing events transiently representing the minor subdominant of C major.

But F minor is certainly very close to emerge as a temporary tonic as can be demonstrated by just changing the cadences; cf. Ex. 9b. The passage may also be recomposed so as to introduce the F-minor-sounding thirds as downbeats, giving rise to six-four appoggiaturas demanding but being denied F-minor chords for final resolution; cf. Ex. 9c. The lack of an auxiliary C-major tonic is particularly evident in the low-register replica mm. 33–36. The first four-bar part of the passage is likely to be heard as an antecedent, implying a consequent issuing into F minor as shown in Ex. 9d. And venturing to change Schubert's music in a more radical way, the outlet into F minor might be withheld until after the *fortissimo* bars; cf. Ex. 9e. What all these examples show is that F minor is quite strongly implied in mm. 29–36, and that the balance between the C-major and F-minor readings is very delicate.

It furthermore appears that the element of harmonic ambiguity crucially depends on the syncopation of the left-hand organ-point notes. These second-beat notes are genuinely ambiguous since you cannot decide whether they are to be understood as bringing delayed support for the C-major-compatible thirds on the first beats or as anticipating the F-minor thirds on the third beats, suggesting six-four chords displaced to weak positions. This is demonstrated in Exs. 9f and 9g, in which the left-hand notes have been moved so as to clarify their harmonic function, paving the way for C-major and F-minor readings of the passage, respectively. F minor may be the less privileged interpretation of mm. 29–36, but as listeners we are likely to be aware of it.

What happens after the second double-bar in Ex. 9a is that neither the privileged C-major meaning, nor its slightly less preferred F-minor alternative is confirmed by being chosen to continue the music. It seems that it is the Eb⁷ deceptive turn of events that retroactively sparks off the ambiguity of the preceding passage, but the effect is reciprocal: by creating tonal suspense the ambiguity also heightens the sense of deception.²⁸

28 Recall the beginning of the Schumann song, where the continuation, retroactively opening up for the ambiguity of the initial chord, unexpectedly discloses a meaning that we were *not* aware of.

Although the passage's potential for harmonic ambiguity is still present in Ex. 9e, where the F-minor auxiliary tonic is eventually realized, it is less acute.

It should also be observed that by suddenly changing the harmonic route by introducing E \flat ⁷ issuing into A \flat major, Schubert exploits an inherent ambiguity that the listener did not suspect: the capacity of the pitch-class D \flat to be both a ninth over C major (m. 29) and a seventh over E \flat major (m. 37); cf. Ex. 9h. The parallelism between these two tonally different situations has the effect of bringing in the "larger reality". The *fortissimo* attack in m. 37 – starting what at first and very transiently may seem to be the third and quite violent attempt to proceed beyond the C-major cadence closing the first part of the Scherzo in m. 28 – associates back to the initial effort in m. 29, and it may, to listeners so disposed, suggest that the intervening episode, holding out the prospect of F-minor, was (is?) unnecessary at a higher level.

Thus, there are arguments both against and in support of the F-minor alternative, and the arguments for C major derive a good deal of their strength from considerations pertaining to the "larger reality". While Schachter seems bent to attach a comparable importance to the "moment-by-moment experience of the piece", thus making for a dialectic relationship between part and whole, it is less likely that Agawu would be as compromising. If the music is contemplated with a more encompassing "segmental level" in mind – a hierarchical, finite-state approach to listening is in line with his policy towards ambiguity – much idle talk is saved because the F-minor aspect of the crucial passage emerges not as transitory, but as dispensable.

It would be a great pity, however, to forgo the different harmonic options because they make for significant formal differences. The four-plus-four-plus-six-bar episode under discussion can of course be called a transition simply because it mediates between a section closing in C major and another section starting in A \flat major. But this is a superficial description, hiding the fact that the intervening ambiguity in terms of key gives rise to a sense of formal ambiguity and to musically vital differences in character. If mm. 29–36 are understood as a passage (perhaps) tending towards F minor, the modulation to A \flat major begins already after the first double-bar, and m. 29 becomes the point of departure for a long transition

starting with an eight-bar episode of uncertainty and subdued tension. If, on the other hand, these eight bars are taken as continuing in C major, the cadence in m. 28 is followed by a long releasing episode, and the modulation (the active part of the transition) becomes postponed until after the second double-bar where it starts by simply switching from C major to A♭ major, a change precipitately mediated by the E♭-major applied dominant of the goal key.

Thus, it is not quite true that the F-minor aspect of mm. 29–36 is merely a matter of “moment-by-moment experience” caused by some minor-sounding right-hand thirds; it does influence the “larger reality” of the music, and it is bound to affect the pianist’s interpretation. Generally, the dialectics between meanings pertaining to various “segmental levels” is an important and frequent source of musical ambiguity; such states of uncertainty involve the experience of the musical form and make up a category of ambiguity in its own right. It amounts to a gross simplification to think that meanings once entertained are just abandoned as soon as more encompassing perspectives emerge: new meanings do turn up, but the already established (or merely suggested) ones persist. Holding the opposite is tantamount to robbing music of some of its most valuable attractions.

Some general remarks; the politics of ambiguity

In order to link the previous discussion of specific examples to broader issues involving the scope of ambiguity in music analysis and eventually “the politics of ambiguity”, a number of citations from Agawu’s essay may serve as points of departure.

1. “My point of view [...] is that the concept of ambiguity is meaningless within the confines of an *explicit* music theory. [...] I hope to support it by showing, not that multiple meanings do not exist in tonal music (how could they not?) but that, once the enabling constructs of music theory are brought into play, equivocation disappears.” (p. 88)

The citation suggests that Agawu, unlike most of us, makes a distinction between “ambiguity” and “multiple meanings”. On his account, multiple meanings are those interpretations of a musical situation that may occur to a listener, whereas ambiguity obtains if and only if more than

one of these meanings turn out to be theoretically tenable. But – and this amounts to Agawu’s core claim and to what he presumably thinks that he has demonstrated – this will virtually never happen since “equivocation disappears” thanks to “the enabling constructs of [an *explicit*] music theory”.

It has been shown that all of Agawu’s specimen passages contain multiple meanings that survive theoretical scrutiny; indeed, on closer consideration more meanings and further kinds of ambiguity come to the fore. Adopting Agawu’s stance (and disregarding the fact that different theories may be brought to bear on the music) this outcome must be due to the fact that the theories resorted to in the present text were not “enabling” ones. They turned out to be useful for qualifying multiple meanings, for explaining them and making them plausible, instead of being tools for rejecting all but one of them. Presumably, the theories applied to the multiple-meaning passages were not sufficiently “explicit” – had they been fully explicit, ‘ambiguity’ would have emerged as a “meaningless” concept.

It seems that to Agawu an explicit theory, or perhaps simply a theory worth its name, amounts to a method that is always capable of doing away with multiple meanings. The idea of melodic implications, for instance, does not amount to a theory on this account; it is not explicit enough since it allowed of three different readings of the second theme in the Beethoven symphony. And although Agawu apparently thinks so, not even tonal reduction is sufficiently explicit: disregarding Schachter’s “straw” alternatives, there is at least one more reading of the beginning of the Chopin mazurka that is consonant with the theory.

It must be admitted, of course, that it has not been shown by the present writer that there are no, or cannot be any, explicit theories in Agawu’s sense. But presumably and hopefully no such theory will turn up. Within its confines, ambiguity would be ruled out, but it would also confine our musical discernment; the “enabling constructs” of such a theory would turn out to be disabling when it comes to penetrating analysis. What locks out also locks up; if everything must be sense, there is no sensibility.

There is in fact an analytic system well suited for dealing with situations involving uncertainty, expectation, and ambiguity. Many observations bearing on issues of ambiguity can be derived from the theory of “musical implication” as formulated by Leonard B. Meyer – an approach barely

mentioned in Agawu's study.²⁹ If not outright tendentious, this omission is at least symptomatic of Agawu's attitude: ever so many context-sensitive observations of how musical expectations work do not add up to a theory of the "enabling", stiff-upper-lip kind needed to do the disambiguating job.

2. "These attempts [attempts to analyse chromatic harmony, metric and hyper-metric structures, and formal and generic constraints] often encounter equivocal situations, equivocality being attributed to the phenomenon itself rather than to the tools with which the phenomenon is to be grasped. Yet, with few exceptions, theorists have been reluctant to embrace the notion of ambiguity as a phenomenon in its own right and to theorise it explicitly. Could it be that there is a basic contradiction between the explanatory impulse of theory and the resistance to explanation implicit in an ambiguous phenomenon?" (pp. 86–87)

Is musical equivocation to be attributed to the music, to "the phenomenon itself", or to the tools used when trying to understand it? Should the theories be blamed when ambiguity not only impends, but also persists? If the news is bad, are we to shoot the messenger? And what observations/conclusions are bad? Understanding "tool" in a wide sense, are we not always dependent on one tool or another when trying to grasp a phenomenon as slippery as music?

Speaking literally, an "equivocal" tool (whatever it is) certainly seems to be a worthless article; speaking figuratively, an equivocal (i.e. versatile) tool is most valuable. When it comes to music analysis, do not versatility of application and capacity of transcending given limitations emerge as assets, not as drawbacks, of a certain theory? Indeed, it may, contrary to Agawu's line of thought, be argued that a capacity of discovering and explaining several plausible meanings amounts to a valuable property of an analytic theory. If a theory provides, or allows of, but one reading of a passage that seems pregnant with different meanings, that theory should be questioned or be complemented by other approaches. Analysts ought to keep to the music (to the "phenomenon") and be sceptical of the theories, not because they fail to produce unequivocal readings, but because they miss ambiguities or kill them off.

In any case, the present text is (in all modesty) an exception to the alleged reluctance to "embrace the notion of ambiguity as a phenomenon

29 Cf. for instance *Explaining Music*, Chicago University Press 1973.

in its own right” and to “theorise” it. But as any endeavour to embrace anything in its own right, this one presupposes that ‘ambiguity’ – the thing to be embraced and theorized – should not be denied in the interest of some restrictive policy. And to the extent that “the explanatory impulse of theory” really involves discarding ambiguities, “the resistance to explanation implicit in an ambiguous phenomenon” emerges as the necessary self-defence of musical minds.

3. “More formally, we might say that a musical situation is ambiguous if and only if its two (or more) meanings are comparably or equally plausible, leaving the listener undecided about their future significance. While the matter of comparable or equal plausibility may seem unnecessarily binding to those who wish to revel in an endless play of musical signifiers, it is an unavoidable theoretical move insofar as limits have to be set and a context has to be specified.” (p. 89)

“In general, however, tonal structures, if they exhibit ambiguity, do so in an irreversible ambiguity-to-clarity order. The rhetorical premise seems to privilege a clear ending, leaving the most functional ambiguities for the beginning and middle. If an event or process termed ‘ambiguous’ persists, the fact of its persistence confers on it a referential status such that, as the work unfolds, ambiguity is not compounded but eliminated.” (p. 91)

“Clearly then, some inferences are historically plausible, others less so, some are stylistically pertinent, others less so, and some are theoretically sound, others not. In an ideally ambiguous situation, the interplay among potential meanings will fail to tilt the balance and thus produce a genuine state of undecidability in the listener. I do not know of any musical situation that elicits this sort of undecidability. Such situations are, of course, conceivable in the abstract, but they are quickly ‘disambiguated’ in concrete musical situations. Once a specified context and a specific metalanguage intervene, and given that we are always in context and always in (meta)language, the interpretation of a musical event as ambiguous in the strict sense becomes untenable.” (p. 90)

The common denominator of these passages is that they put the bar so high that the possibility of attaining a theoretically acceptable sense of ambiguity is virtually eliminated. One way of curing disease is to redefine illness.

It goes without saying that several unwarranted, far-fetched readings do not make for any significant sense of ambiguity, but on the other hand it has been claimed here that “comparable or equal plausibility” is not required for ambiguity.

If one does experience a sense of prospective ambiguity in a passage, the alternatives are sufficiently comparable, and – as the discussion of the various double mottos in the Beethoven symphony has shown – they may

be sufficiently comparable even when their probabilities are fairly unequal. Furthermore, the retroactively prospective, reflective type of ambiguity exemplified by the beginning of the Schumann song presupposes that the probabilities of the prospective meanings are quite unbalanced; otherwise there will be no sense of deception or surprise when the unprivileged option, making for the reflection, turns up. And equivocation is not necessarily a matter of “future significance” in a prognostic sense, a matter of which of the alternative meanings that will eventually come true. The extracts from the Mozart symphony and the Chopin mazurka exemplify varieties of ambiguity that do not fit in with this idea of future consequences; the ambiguities involved are encapsulated within their immediate contexts.

The core of Agawu’s second argument is that any ambiguity persisting long enough to achieve “referential status” [?] is bound to be “eliminated” “as the work unfolds”.

But firstly, the composer may remind the listeners of an ambiguity by alluding to it – Beethoven repeatedly uses his motto, as does Schumann his chord, in imaginative ways, exploiting and developing its initial sense of ambiguity. Secondly and generally, ambiguities are not eliminated because they sooner or later may fall victims to some clarifying continuation, making non-ideal listeners rejoice at getting their past, original experience of uncertainty being flattened. The double-motto start of the Fifth Symphony is both memorable and worth remembering as an ambiguous event *in spite* of the fact that the following passage promptly and beyond any doubt settles for C minor as the tonic. Furthermore, it seems too hasty a generalization to hold that “the most functional ambiguities” are to be found at the beginning and in the middle of a musical process; ambiguities involving a deceptive turn of events are quite effective when appearing close to the very end of a unit.

Agawu evokes “context” as the last resource when it comes to doing away with ambiguity. He is convinced that if just enough historical, stylistic, or structural contexts are brought to bear on a multiple-meaning situation, the balance between the alternative interpretations must eventually tilt in favour of one of the options, thus preventing a “genuine state of undecidability” from arising. Indeed, unless one “consciously withholds the texts of context”, “no two readings of a work, however similar, can ever terminate in undecidability”. (p. 106)

But turning to practice and in order to put an end to an otherwise “endless play” of contexts disqualifying ambiguity, “limits have to be set and a context has to be specified” even for contexts. In other words, it is necessary to distinguish relevant contexts from irrelevant ones.

A good listener is a listener who knows how to use context in a discriminating way, a listener that in the interest of his/her aesthetic benefit and structural understanding pays attention to contexts that may enhance ambiguity, rather than a listener that searches for any context that may destroy it. The structural context of a musical event includes (to a reasonable degree) its past as well as its future, and it has been shown here that ambiguity – true, phenomenal ambiguity – is fundamentally dependent both on what has happened and on what will happen. There is a crucial difference between the past and the future, however: as listeners we have some access to the former but not to the latter, which we only know of in terms of more or less likely hypotheses. Analysts studying scores have unlimited access to both the past and the future of any event, and particularly if they are also theorists they tend to make indiscriminate use of this advantage. But they should in the first place be good listeners, and those who take the future for a fact are not fit to find ambiguities, let alone enjoy them.

4. “In one sense, the progression from background to foreground is a progression from an ambiguous, lifeless and abstract proto-structure to a concrete, unambiguous and unique structure. In another sense, however, the foreground, in its particularity, is multiply interpretable, and therefore requires the postulation of an unambiguous background in order to be deciphered.” (p. 91)

This quasi-paradox is extracted from a section in Agawu’s essay that is meant to clarify the notion of ambiguity in general by means of observations stemming from linguistics and the philosophy of language, but the wording has a distinctly Schenkerian flavour.

The reference to language is unfortunate, however, since (by and large) music is a non-referential and certainly a non-propositional kind of art; language, on the other hand, is a vehicle for everyday communication that may also be used for artistic purposes. Ambiguity is undesirable and rare in ordinary conversations whereas it is fairly common and intentionally cultivated in literature – as it is in music.

Noam Chomsky’s example “Flying planes can be dangerous” does indeed have two meanings that can be disentangled by showing that the

sentence may have two different underlying syntactic structures, but in an ordinary conversation this utterance is not at all ambiguous since it would be promptly disambiguated by the context as well as by prosodic differences. In literature and music, by contrast, such formulations are carefully chiselled by the authors/composers, and the readers/listeners take a pride in noticing and enjoying the ambiguity. Agawu is inconsistent when generously acknowledging the possibility and existence of linguistic ambiguity (no matter its function and context) while questioning, virtually dismissing, the application of the concept ‘ambiguity’ to music. Indeed, considering the lack of semantic content in music, the scope for equivocation should be greater in music than in literature.

In Act II, Scene 4 of Shakespeare’s *Romeo and Juliet* – i.e. an everyday conversation in a play – Mercutio says “for the bawdy hand of the dial is now upon the prick of noon”. It is hard to imagine a literary scholar using “explicit” linguistic theory to dismiss the ambiguity of Mercutio’s utterance, or appealing to the forthcoming fact that the alert nurse gets annoyed and says “Out upon you” – certainly a disambiguating rejoinder, singling out one of the meanings of the preceding line. Turning to the greater context, we know that Elizabethan theatre excelled in puns (some of which were obscene), but are we equally sure that (say) the Classical and Romantic composers shunned ambiguities?

While Schenker had the guts to pursue tonal analysis as recursive prolongation – using Agawu’s words, his graphs show an analytic process running from the “ambiguous, lifeless and abstract proto-structure” towards the “concrete, unambiguous and unique structure” – other humbler minds have to tackle tonal analysis as a matter of reduction, proceeding in the opposite direction from surface to deep structure. But why must you, when facing a “multiply interpretable” foreground, assume that understanding “requires the postulation of an unambiguous background”? Should you not, considering that the foreground situation is multiply interpretable, at least consider the possibility that there might be two (or several) backgrounds, as was the case in the Chopin mazurka? How can you exclude the possibility that some foreground ambiguities may be rooted in diverging backgrounds? Indeed, if you are engaged in a genuine, non-biased bottom/up analysis, why should you postulate anything at all as to the deep-layer outcome?

If you come across a foreground that seems equivocal, the question of which background you are to postulate becomes most crucial: should you choose the fear-of-flying-with-airplanes or the fear-of-walking-near-the-airport deep structure? If you don't want to retreat from analysis – which may be worse than retreating from theory – try both options, and don't forget to ask yourself whether Schenkerian tonal reduction-as-prolongation, postulating but a few standard deep-layer solutions, is the only or the best approach.

5. “First, spurred on by some of the more radical developments in French and American literary theory, especially those that place plurisignification, indeterminacy and undecidability at their centre, recent thinking in analysis has begun to embrace the liberal and exploratory motivations of literary theory. A second development is the completion – to the extent that such things are ever completed – of the process of canonization, enabling us to begin interrogating the canon. [...] A period in which tonal music was understood as subtending single meanings ('essences', 'basic shapes' and 'fundamental structures') has now been supplanted by a period in which music's multiple meanings or inherent ambiguities dictate the terms of theory and analysis. And a retrieval of that multiplicity necessarily entails an embrace of methodological pluralism.” (p. 87)

This passage brings two clues that may explain the origin of Agawu's urge to dismiss or at least restrict ambiguity.

There are some indications in Agawu's text suggesting that he dislikes the brand of music criticism associated with literary theory, and perhaps he is not very fond of non-conformist music theory either – although it is hard to believe that anyone is not in favour of politically correct things like “interrogating the canon” and the benefits of “methodological pluralism”. It is true that these trends within music criticism/analysis are quite soft on equivocation, but Agawu's attack on ambiguity emerges as an overreaction. It is quite possible to discard readings produced by members of the “plurisignification” community – sometimes these interpretations are both far-fetched and pretentious – *and* to retain and defend ambiguity both as a frequent and valuable phenomenon in music and as an important concept in the study of musical structure.

Unfortunately, Agawu's attitude favours theories with normative claims, theories offering analytic methods that work like detergents. If the stance he recommends were adopted wholesale, ambiguities would be regarded as obstacles that must be overcome when theories are to display their power of

imposing order, rather than be cherished as subtleties of design to be identified and explained by means of analytical reflection. The policy towards ambiguity advocated by Agawu – strong, “explicit” theories are to be used to fend off multiple meanings – has little in its favour, and it may have repercussions on music as well as on analysis. Theories that are allowed to be stronger than the music dealt with cannot but produce impoverished readings, cannot but close the pores through which the music breathes. And the enforced one-sidedness of such analytic outcomes will spread from the trivialized music to the methods by which it has been mangled. Who cares about analysis when the results are barren and predictable?

Since Agawu and I have different priorities, his four theses for a policy of musical ambiguity will be reformulated as follows:

1. Analytic systems, whether “theory-based” or not, should not include mechanisms for resolving ambiguities; systems that do have such “enabling” powers should be very sparingly used in analysis since they might harm the music to be illuminated.
2. An analysis of an equivocal passage that “terminates in decidability” amounts to a grave failure in terms of understanding; to insist on decidability means a retreat from analysis.
3. Ambiguity exists as a concrete phenomenon, as an emergent quality of some musical passages, and a thorough, unbiased, and multi-faceted analysis is needed to reveal its causes as well as its effects.
4. In situations featuring multiple meanings, the alternatives are not necessarily “formed hierarchically”, and even when they are, this does not necessarily imply that the situations are “decidable”; and no matter whether the situations are eventually “decidable” or not, if there are “multiple meanings”, there is also a precious chance that the sense of ambiguity is retained as permanent quality of the music.

3 Mozart out of proportion. Searching for the Golden Section

As is well known since antiquity, a line can be bisected in such a way that the proportion between the longer and the shorter part equals the proportion between the whole line and its longer part. The mathematical value of this proportion, the “Golden Section”, is $(\sqrt{5}-1)/2 \approx .618$, and occurrences of this ratio, praised by idealistic minds as the most organic, balanced, harmonious, and beautiful co-existence possible between unequal parts, have been eagerly sought for, and found in, natural objects and processes. In addition there is a widespread belief that the golden section has often (or sometimes) been intentionally strived for, or just attained, when creating artefacts.

To other minds, more inclined towards empirical thinking and prone to take nothing for granted, alleged occurrences of this very ratio of asymmetry have rather aroused suspicion. Whereas its presence (and the importance of the Fibonacci series in general) in natural morphology is uncontested, the occurrence, function, and merits of the golden section in cultural products have been matters of debate. Is the golden section – the limit value for the ratio between two adjacent Fibonacci numbers – actually present in artefacts to a significant degree, and is it really tantamount to aesthetic perfection?

In an interesting and thought-provoking survey of results from three quite diverse fields, John F. Putz has brought this problem to renewed consideration.¹ In addition to his review of studies of rectangle perception, bipolar categorizations of people’s character traits, and structural properties in the

1 John F. Putz, “The Golden Section: A Natural Balance between Symmetry and Asymmetry?” Being a contribution to the Third Interdisciplinary Symmetry Congress of the International Society for the Interdisciplinary Study of Symmetry held in Washington, D.C., August 14–20, 1995; an extended abstract of his paper can be found in *Symmetry: Culture and Science* 6(1995), 435–438.

music of Bartók and Debussy,² he reports on an investigation of his own, dealing with the formal proportions in Mozart's piano sonatas.

After counting the number of bars in all movements in sonata (or quasi-sonata) form, he arrives at the conclusion that the double-repeat sign between the exposition and the development+recapitulation tends to bisect the movements according to the golden section. The agreement is in fact astoundingly close: when the proportions obtaining between these formal units are plotted in a system of co-ordinates, the regression line fitting the empirical values is virtually identical with the line for the golden ratio $\approx .618$, also running amidst the points.

Apparently, and as far as Putz's demonstration goes, there is a bisection closely approaching the golden section in the sonata-form movements of Mozart's piano sonatas. But there are several grounds for scepticism, and it is necessary to discuss the musical relevance of Putz's finding as well as to question the statistics upon which his conclusion is based.³ It must be pointed out, however, that the various critical observations to follow may be generalized far beyond Putz's study of Mozart sonatas.

Which proportions are musically relevant?

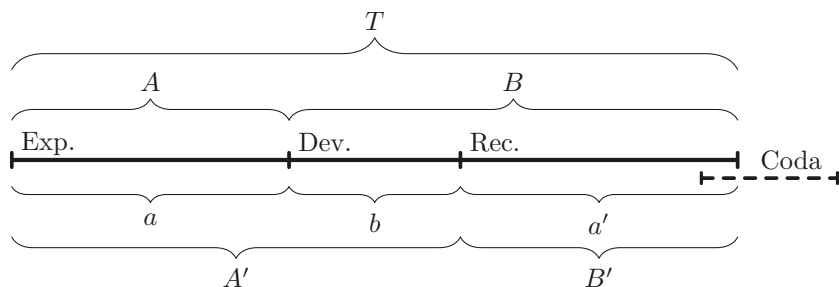
Putz's point of formal bisection is that of the double-repeat sign – still a standard feature of the sonata form in Mozart's days. While the golden-section proportioning (if any) is of course present also when you play the repeats, it seems very likely that the fact that the two parts of the movement are repeated will detract the listener's attention from the golden asymmetry. And if, as happens fairly often in present-day performances, the first repeat is respected whereas the second one is not, the repeated exposition will not only outweigh the development+recapitulation in temporal terms, it will also mean that the temporal proportion obtaining at the double-repeat sign

2 E. Lendvai, *Béla Bartók: An Analysis of His Music*, London 1971, and Roy Howat, *Debussy in Proportion: A Musical Analysis*, Cambridge University Press 1983.

3 For another essay, scrutinizing the application of the golden section to music, cf. Bengt Edlund, "Evidence and counterevidence. Making sense of Chopin's A-minor Prelude", ch. 2 in *Chopin. The Preludes and Beyond*, Frankfurt 2013, Peter Lang Verlag.

is likely to pass un-noticed by most listeners. Hence, the golden-section layout (if any) of Classical sonata-form movements is most conspicuous when both repeats are disregarded.

Furthermore – and this amounts to a more important objection – while the double-repeat sign indicates a quite salient moment in Classical sonata-form movements, it is not the only bisection point worth consideration; cf. Figure 1. Depending on the musical design of the movement in question and on the inclination of the listener, one may rather take another event to be the musically crucial point of formal bisection: the most often quite conspicuous beginning of the recapitulation, bringing the recurrence of the main theme and the reinstatement of the tonic.



$$\frac{A}{B} = \frac{B}{T} = \frac{\sqrt{5} - 1}{2} \approx 0.618 \quad \frac{B'}{A'} = \frac{b}{a} = \frac{b}{a'}$$

Fig. 1

This means that in addition to the A/B ratio between exposition and development+recapitulation calculated by Putz, there may be another equally valid proportion, namely the B'/A' ratio obtaining between exposition+development and recapitulation. And if the former proportion conforms to the golden section, the latter one will not do so unless the recapitulation equals the exposition in length, which is far from always the case. The recapitulations in Classical sonatas may be significantly longer or shorter than the expositions due to different modulation routes, and since

passages may be omitted or added to create variety – or indeed to achieve more convincing proportions. Recapitulations may also be supplemented by various rounding-off passages, sometimes by entire coda sections, in order to bring the movement to a satisfactory conclusion.⁴

On second thoughts, however, there is in addition to these two “outer” proportions also a pair of “inner” proportions meriting as much, or perhaps more, attention, and that may also exhibit the golden-section ratio. To the extent that the perfection in terms of proportions of a piece in sonata form is associated with the relative length of the development – and this appears to be a reasonable assumption, musically speaking – the most crucial proportions should be the “inner” ones obtaining between exposition and development (expressed as b/a to allow of golden-section assessment when dealing with Mozart sonatas, having usually relatively short developments) and between development and recapitulation (b/a').

Unlike the “inner” ratios, the “outer” proportions are opaque with respect to the relative size of the development since the longer part of these bisections is a compound unit consisting of development plus recapitulation, or exposition plus development. When it comes to the “outer” A/B proportion studied by Putz, and assuming a certain length of the exposition, one cannot tell whether a certain ratio is the result of an unusually long development and a quite short recapitulation, or *vice versa*. Thus (and taking the length of the exposition into account), Putz’s “outer” golden-section values might in fact conceal more or less dissatisfactory temporal relationships between the development and either of the thematic parts.

In addition to the four temporal relationships presented this far, there are two further proportions within the sonata form that may be of musical interest. One might also calculate the proportions obtaining between any part of the movement and the entire movement. In a movement where the “outer”, bisection-at-the-repeat-sign proportion A/B calculated by Putz agrees with the golden section, the longer development+recapitulation part necessarily has the same perfect relationship to the whole movement (B/T).

4 Sonata-form movements may have an introduction as well, but this is less relevant in the present context since introductions are most often clearly set off from the rest of the movement by differences as to character and tempo.

But it may be argued that the complementary, non-golden-section proportion ($\approx .382$) between the exposition and the entire piece (A/T) is aesthetically more important – the exposition is after all the first completed part of the movement that we hear.

Furthermore, some listeners might observe and compare the lengths of the exposition and the recapitulation (a/a'). This ratio reflects an altogether different, discontinuous kind of experience, but it is arguably relevant since the similarity between the exposition and the recapitulation is likely to make us notice the temporal effects of the (more or less substantial) structural differences between these parts. The A/B bisection given priority by Putz is of course opaque in this respect as well, which is regrettable because symmetries/asymmetries between expositions and recapitulations may be aesthetically pertinent.

Matters of musical perception

A problem common to both the “outer” and “inner” pairs of ratios is to make up one’s mind about which of the two possible formal proportions that is to be considered perceptually most salient and aesthetically important. When evaluating the effects of various rectangles, i.e. forms that appear simultaneously and can be readily compared with each other, it makes a difference if you are presented with lying or standing rectangles, and a corresponding, but arguably more crucial difference is bound to hold when dealing with temporal spans: the longer or the shorter part may be presented first.

Music takes place in time, and the musical substance is never actually present in its entirety so as to make straightforward comparisons and evaluations of formal proportions possible. The effect of a long passage of music, followed by a (perhaps more or less appended) shorter one, is quite different from that of a short (perhaps more or less preliminary) passage, followed by a longer one. Depending on the musical design of the movement, it seems that either the long+short or the short+long configuration will emerge as most salient.

But it seems reasonable to assume that the proportion that first reaches its point of bisection is likely to gain the upper hand when listening to a movement in sonata form. This means that of the two possible “outer” proportions, the one featuring the exposition vs. the rest of the movement

(A/B) will probably be most prominent. Recall, however, that (as already pointed out) the “non-Putzian” bisection point after the recapitulation might emerge as musically more salient, which speaks for the B'/A' ratio.

Turning to the two possible “inner” proportions, the same principle implies that the length of the development will be related to that of the preceding exposition (b/a) rather than to that of the ensuing recapitulation. The reason for this is the obvious fact that the perception of temporal proportions is bound to be retrospective: after having reached a point of formal demarcation, the length of the just heard passage is estimated and remembered, and then (perhaps) recalled and compared with the estimated length of the following passage.

Leaving issues of temporal proportions as such for questions of musical balance in a more comprehensive sense, another problem must be addressed. Relating any two musical passages on the basis of their lengths according to the notation is of course always possible and may perhaps also be illuminating, but it is in a sense like comparing apples and pears. When durational sequences made up of more or less equal beeps, or of short sound sequences differing in a certain respect, are compared in the psychological laboratory, the factor of sound content is within control. But musical passages and entire formal sections are not only much longer, they are also likely to exhibit substantial differences of various kinds along the route, and some of these differences may influence what we may call the information density of the music.

A development may be more or less eventful, more or less dense, than the exposition, and the information density within a development is likely to vary during its course. Episodes with tight motivic relationships, complex voice leading, quickly shifting chords, and frequent modulations tend to alternate with more sparse passages featuring long notes, presentation of themes, or displays of virtuoso figurations. Another “density effect” may apply when the length of expositions is compared with that of recapitulations. Even if a recapitulation is virtually identical with the exposition, it may seem shorter due to the fact that the material has been heard before.

The density of information is likely to influence the perceived duration and hence our sense of temporal proportions, and this fact cannot but raise questions about the musical relevance of seemingly objective methods of establishing formal proportions by, say, counting bars. Needless to say, it

is of course futile to abandon counting bars (or beats) in favour of measuring the lengths of formal sections by means of a stopwatch. Nothing is really gained by exchanging musical units for physical duration; quite to the contrary, it means bringing in the additional factor of interpretation, including tempo fluctuations.

Matters of statistical assessment

As a background for the ensuing discussion of statistical problems, we will calculate the values of Putz's A/B golden-section proportions as well as the B'/A' , b/a , and b/a' ratios.

Distinguishing between full-fledged sonata-form movements (usually first movements) and other movements (mostly in slower tempos) coming more or less close to the sonata scheme, Tab. 1a and 1b give for each Mozart movement the number of bars in the exposition, development, and recapitulation, as well as in the exposition+development and the development+recapitulation.⁵ The remaining columns present the ratios for the various proportions, starting with the two "outer" proportions and proceeding then to the two "inner" ones. At the bottom are given the arithmetic mean values (AM) and the standard deviations (SD) for these ratios.

Later on in the history of the sonata, the sonata-form movements not only grew longer, but several other modifications, affecting the temporal proportions, were also introduced. The substance of the expositions began to be more freely used in the recapitulations (thus broadening the scope for both deletions and additions), the developments tended to be more elaborate and also longer in relation to the surrounding parts, and the recapitulations often issued into extended codas. A comparison with another body of works might therefore be of some interest.

In Tab. 2 are entered ratios pertaining to the main sonata-form movements of the first fifteen piano sonatas by Beethoven. In movements featuring a substantial and more or less self-contained coda, the lengths of the recapitulation and the coda are entered separately as well as added together. Consequently, all ratios involving the third part of the sonata

5 In two cases it is impossible to determine where the development ends and the recapitulation starts.

Tab. 1a:

| K: Mov. | Exp. | | Dev. | | Rec. | | Putz | | | |
|----------|----------|----------|-----------|--------------|---------------|------|-------|--------|-------|--------|
| | A | | B' | | A' | B | A/B | B'/A | b/a | b'/a |
| | <i>a</i> | <i>b</i> | <i>a'</i> | <i>a + b</i> | <i>b + a'</i> | | | | | |
| 271: I | 38 | 19 | 43 | 57 | 62 | .61* | .75 | .50 | .44 | |
| 280: I | 56 | 26 | 62 | 82 | 88 | .64* | .76 | .46 | .42 | |
| 281: I | 40 | 29 | 40 | 69 | 69 | .58 | .58 | .73 | .73 | |
| 283: I | 53 | 18 | 49 | 71 | 67 | .79 | .69 | .34 | .37 | |
| 284: I | 51 | 20 | 56 | 71 | 76 | .69 | .79 | .39 | .36 | |
| 284: III | 102 | 69 | 106 | 171 | 175 | .58 | .62* | .68 | .65* | |
| 309: I | 58 | 35 | 62 | 93 | 97 | .60* | .67 | .60* | .56 | |
| 311: I | 39 | | | | 73 | .53 | | | | |
| 310: I | 49 | 30 | 54 | 79 | 84 | .58 | .68 | .61* | .56 | |
| 330: I | 58 | 29 | 63 | 87 | 92 | .63* | .72 | .50 | .46 | |
| 330: III | 68 | 27 | 76 | 95 | 103 | .66 | .80 | .40 | .36 | |
| 332: I | 93 | 39 | 97 | 132 | 136 | .68 | .73 | .42 | .40 | |
| 332: III | 90 | 57 | 98 | 147 | 155 | .58 | .67 | .63* | .58 | |
| 333: I | 63 | 30 | 72 | 93 | 102 | .62* | .77 | .48 | .42 | |
| 457: I | 74 | 25 | 76 | 99 | 101 | .73 | .77 | .34 | .33 | |
| | | | 86 | | 111 | .67 | .87 | | .29 | |
| 533: I | 102 | 43 | 94 | 145 | 137 | .74 | .65* | .42 | .46 | |
| 545: I | 28 | 13 | 32 | 41 | 45 | .62* | .78 | .46 | .41 | |
| 570: I | 79 | 53 | 77 | 132 | 130 | .61* | .58 | .67 | .69 | |
| 576: I | 58 | 40 | 62 | 98 | 102 | .57 | .63* | .69 | .65* | |
| | | | | | AM | .63* | .70 | .52 | .49 | |
| | | | | | SD | .06 | .08 | .12 | .13 | |

Dev.:Rec.

Coda

scheme are calculated in two ways – the coda is left out of account in the upper values, and joined with the recapitulation to form a compound unit in the lower values.

Before continuing, the relative merits of regression analysis and the mean value/standard deviation approach should be shortly discussed. In the generalizing regression analysis the line is less influenced by values deviating substantially from the mainstream tendency of the proportion under consideration than by values close to it. The arithmetic mean values, when

Tab. 1b:

| K: Mov. | Exp. | Dev. | Rec. | | | Putz | | | | | |
|----------|------|------|------|-----|-----|-------|------|-------|------|------------------------|------|
| | | | A | B' | A' | B | A/B | B'/A' | b/a | | b/a' |
| | | | A | b | a' | a + b | | | | | |
| 279: II | 28 | 14 | 32 | 42 | 46 | .61* | .76 | .50 | .44 | | |
| 279: III | 56 | 30 | 72 | 86 | 102 | .55 | .84 | .54 | .42 | | |
| 280: II | 24 | 12 | 24 | 36 | 36 | .67 | .67 | .50 | .50 | | |
| 280: III | 77 | 30 | 83 | 107 | 113 | .69 | .78 | .39 | .36 | | |
| 281: II | 46 | 12 | 48 | 58 | 60 | .77 | .83 | .26 | .25 | | |
| 282: I | 15 | | | | 21 | .71 | | | | Dev.!Rec. | |
| 282: III | 39 | 22 | 41 | 61 | 63 | .62* | .67 | .56 | .54 | | |
| 284: II | 14 | 9 | 16 | 23 | 25 | .56 | .70 | .64* | .56 | | |
| 310: II | 31 | 22 | 33 | 53 | 55 | .56 | .62* | .71 | .67 | | |
| 333: II | 31 | 19 | 32 | 50 | 51 | .61* | .64* | .61* | .59* | | |
| 533: II | 46 | 26 | 50 | 72 | 76 | .61* | .69 | .57 | .52 | | |
| 576 : II | 23 | 20 | 24 | 43 | 44 | .52 | .56 | .87 | .83 | Exp.!Rec. Rec.!Coda | |
| | | | | | AM | .62* | .71 | .56 | .52 | | |
| | | | | | SD | .07 | .08 | .15 | .15 | | |

combined with standard deviations, give a straightforward idea of the statistical variation, and make it possible to assess the outcome of each movement.

Taking a cursory look at the tables, it appears that the dispersion of values is alarmingly great, and this holds especially for the “inner” proportions, being arguably more relevant and interesting since they take account of the relative length of the development. Hence, some movements included in the basis for the regression analysis are quite far from exhibiting golden-section proportions.

Generally, the standard deviations associated with the mean values for the four proportions are substantial, and this raises a question of far-reaching importance. Considering the aim of the investigation – the reflection, or perhaps even the reproduction, of the golden ratio in the temporal design of *individual* sonata-form movements – and the conditions pertaining to aesthetic evaluation – we know too little about how large-scale temporal

Tab. 2:

| Op: | Mov. | | Exp. | Dev. | Rec. | Coda | | | | | |
|----------|------|-----|------|------|-------|--------|------|-------|------|-------|-----------|
| | A | | B' | | A' | B | | | | | |
| | a | b | a' | c | a + b | b + a' | A/B | B'/A' | b/a | b/a' | |
| 2;1:I | 48 | 52 | 52 | | 100 | 104 | .46 | .52 | 1.08 | 1.00 | |
| 2;2:I | 122 | 103 | 112 | | 225 | 215 | .58 | .50 | .84 | .92 | |
| 2;3:I | 90 | 48 | 79 | 40 | 138 | 127 | .70 | .57 | .53 | *.61* | |
| | | | 119 | | | 167 | .54 | .86 | | .40 | |
| 7:I | 136 | 52 | 124 | 50 | 188 | 176 | .77 | .66 | .38 | .42 | |
| | | | 174 | | | 226 | .60* | .93 | | .30 | |
| 10;1:I | 105 | 62 | 117 | | 167 | 179 | .59* | .70 | .59* | .53 | |
| 10;2:I | 66 | 70 | 66 | | 136 | 136 | .49 | .49 | 1.06 | 1.06 | Dev.:Rec. |
| 10;3:I | 124 | 59 | 122 | 39 | 183 | 181 | .69 | .67 | .48 | .48 | |
| | | | 161 | | | 220 | .56 | .88 | | .37 | |
| 14;1:I | 60 | 30 | 64 | 8 | 90 | 94 | .64* | .71 | .50 | .47 | |
| | | | 72 | | | 102 | .59* | .80 | | .42 | |
| 14;2:I | 63 | 61 | 63 | 13 | 124 | 124 | .51 | .51 | .97 | .97 | |
| | | | 76 | | | 137 | .46 | *.61* | | .80 | |
| 22 | 68 | 59 | 72 | | 127 | 131 | .52 | .57 | .87 | .82 | |
| 27;2:III | 64 | 37 | 57 | 42 | 101 | 94 | .68 | .56 | .58 | .65* | |
| | | | 99 | | | 136 | .47 | .98 | | .37 | |
| 28:I | 162 | 106 | 169 | 24 | 268 | 275 | .59* | *.63* | .65* | *.63* | |
| | | | 193 | | | 299 | .54 | .72 | | .55 | |
| | | | | | | AM | .60* | .59* | .71 | .71 | |
| | | | | | | SD | .53 | .71 | .71 | .63* | |
| | | | | | | .09 | .08 | .23 | .22 | | |
| | | | | | | .05 | .17 | | .26 | | |

proportions in music are perceived – it borders on nonsense to undertake statistical generalizations, no matter how they are made.

Turning to the ratios entered in each column, the values for the four different proportions vary quite considerably in numerical terms, but there is no way to interpret ratios deviating from the golden section. Nobody can tell how much a temporal proportion may deviate from .618 before the golden section is gone – together with its would-be aesthetic effects. Calculating averages, as well as using regression analysis, involves a risk

of including (clear?) cases of non-golden bisections into the statistical evidence for the general presence of golden-section proportioning. Having this in mind, what can we make out of these tables?

To stipulate an interval within which the temporal proportions found in the various movements are to be considered “hits” with respect to the golden section ($\approx .62$) is of course arbitrary, but let’s preliminarily accept ratios between $.65^*$ and $.59^*$ (i.e. $.62 \pm .03$) as being close enough to the golden value. Counting hits according to this criterion in the column for Putz’s A/B bisection in the two Mozart tables – which means that the evidence for a pervading golden-section proportioning is restricted to movements that may *perhaps* be considered to exhibit golden-section bisections – we get the relative hit frequencies 7 out of 19, and 4 out of 12, respectively, which is not very impressive.

But it may be argued that the enigma of the golden-section ratio $.618\dots$ does not tolerate much bargaining. Let’s therefore assume that only mean values of $*.61^*$, $*.62^*$, and $*.63^*$ in Tabs. 1a and 1b are accepted as evidence of Putz’s conclusion that a golden-section ratio characterizes Mozart’s piano sonatas as far as the exposition vs. development+recapitulation is concerned. This more rigorous ($\pm .01$) criterion further reduces the basis for his conclusion to 5 out of 19, and 4 out of 12, respectively.

When applying this rigorous criterion to the other “outer” proportion, there is virtually no support for a generalization to the effect that the golden section is present in the movements. When studying the columns for the B/A’ exposition+development vs. recapitulation bisection, there are very few hits (2 out of 19, and 1 out of 12, respectively). The mean values are substantially higher (0.70 and 0.71) than for Putz’s A/B proportion, indicating that the recapitulations tend to be somewhat longer than the expositions.

As to the two “inner” bisections b/a and b/a' , taking account of the relative length of the development, hits are quite rare no matter which column you study. The mean values slightly exceed $.50$, implying that the development is approximately half the length of the exposition or recapitulation, generally speaking. The standard deviations are quite substantial, however, and if you take a look at the bar count of the various movements, you can readily see why. There are several movements featuring developments that are much shorter than half the length of their expositions/recapitulations as well as several developments that are much longer.

Turning to the comparison sample of early Beethoven sonatas in Tab. 2, and leaving first the coda sections out of account, the mean values of both “outer” proportions come fairly close to the golden-section ratio. The mean ratios of the Beethoven sonatas are 0.60 and 0.59, respectively, whereas those of the Mozart sonatas are .63/.62 and .70/.71. But even if the generous allowance interval of +/-0.03 is adopted, the actual hits again turn out to be very few. As regards the two “inner” proportions, involving the length of the development in relation to the length of the surrounding thematic parts, both of them exhibit the same, non-golden mean ratio (.71). This result suggests that the expositions and the recapitulations tend to be about equally long, and that many movements feature quite extended developments – for a listener at home in Classical music it does not come as a surprise that Beethoven’s developments are significantly longer than Mozart’s.

When, on the other hand, the codas are added to the recapitulations, the mean ratios of the two “outer” bisections become markedly different, and they also deviate quite substantially from the golden section (.53 and .71, respectively).

In general, the standard deviations pertaining to the various ratios are considerable, reflecting the diversity of temporal proportions within Beethoven’s early sonata-form movements.

Conclusions

It appears, then, that ratios fairly (or quite) close to the golden section do occur with some, not very great and presumably non-significant, frequency within the Classical sonata-form movements studied, and also that this proportion turns up in various bisections. As regards Putz’s A/B exposition vs. development+recapitulation ratio in particular, it must – since a compound unit is involved – again be pointed out that the golden-section proportion, perhaps exhibited in a few movements, conceals a variety of formal proportions within the three-part sonata-form scheme. Compare, for instance, the perfect golden-section A/B proportions and the highly divergent b/a ratios for the first movements of K. 545 and K. 570.

As far as Mozart’s alleged use of the golden section in the piano sonatas is concerned, there are admittedly a few individual sonata-form movements in which one (or several) bisections give rise to ratios agreeing with, or at least coming fairly close to, the golden section. But these “hits” do not warrant

Putz's conclusion: "Mozart's sonatas for piano seem to be divided remarkably near to the golden section [...] and, given Mozart's love of numbers, there may be good reasons for this". (p. 436) The few hits or quasi-hits that can be found in some movements may very well be sheer coincidences. If Mozart really had a keen mind for numbers – and for the golden section in particular – more specimens, and also more exact realizations, of this particular temporal proportion would be expected.

This much about statistics and cautious assessment of results, but the musical questions remain and are just as crucial. Is temporal proportioning according to the golden section really a conspicuous quality when listening to music? And does it add appreciably to the aesthetic value of the music?

The first movement of the Sonata K. 333, for instance, is a "golden hit" with respect to the A/B proportion between exposition and development+recapitulation, whereas the Sonata K. 310 exhibits a golden-section b/a relationship between development and exposition. Granting that the first movements of K. 333 and K. 310 are both excellent pieces: if we think that the "inner" golden section of the latter movement is preferable to the "outer" golden section of the former, is this evaluation due to the fact that we have learnt to appreciate long developments, or does it indicate that "inner" bisections are aesthetically more relevant than "outer" ones?

The second movement from K. 333 is extraordinary since ratios reasonably close to the golden section turn up for all four bisections. Is this slow movement the very acme of proportional beauty? Would its exquisite temporal (im)balance be gone if it had, say, two more bars in the development? And would its formal proportions be even more perfect if we nipped off the appended final bar of the recapitulation, thus making for an astounding series of golden ratios: .62, .62, .61, and .61? It is certainly a perfect piece of music, but its qualities are hardly to any appreciable extent a matter of its proportions.

Musical beauty is first and foremost grounded in the musical substance – a substance that might in turn influence our perception and evaluation of a work's large-scale temporal proportions.⁶ Thus, it is not the array of

6 This is not to say that formal proportions in terms of duration are aesthetically ineffective. For instance, many of us are likely to have felt impatient when listening to overlong cadenzas of the pianists' own making in Mozart's piano

close-to-golden-section ratios that turn us on in the second movement of K. 333. We are more likely be attracted by everything else that this music offers, such things as the shocking transition to the development, a stroke of genius that suddenly replaces certainty by poignant uncertainty, that uses the very moment after the double-bar bisection to open up a rift in the pleasant reality so far held up before our ears.

concertos; lengthy cadenzas that, contrary to those written by Mozart, threaten to destroy the formal proportions of the movements. Generally, we do sometimes feel a certain aesthetic discomfort when a musical section exceeds or falls below its proper size.

4 Hidden repetitions and uncovered parallelisms

Introduction

We often hear – or see – similarities between and within works of music: affinities indicating kinship in terms of style or genre, similarities betraying influence or reference, recurrences binding movements together or integrating the musical process. It is sometimes argued that these resemblances must not necessarily be consciously apprehended in order to be effective, and it is also assumed that they may come about without the composers' intentions.

But the widespread belief in the presence and various functions of similarity relationships forms a contrast to the lack of consensus as to how they should be discovered and as to how significant relationships are to be distinguished from irrelevant or fortuitous ones – complex problems having no simple general solutions. In practice, then, the methods of analysis vary and so do the criteria determining what is eventually to be accepted as valid similarities. No wonder that it sometimes happens that the ingenuity of the analysts and the laxness of the trade combine to give rise to findings that concurrently amaze and invite to scepticism.

When demonstrating a similarity between two passages, shared traits are brought out while differences are left out or slighted as being unimportant. Highlighting points of agreement and filtering away discrepancies are acceptable moves, it may be argued, as long as the operations do not seem arbitrary or seriously affect the musical substance. But showing similarities may involve conflicts: notes that are conspicuous in virtue of their metric position, melodic function, or harmonic stability sometimes disappear while inconsiderable notes are raised to analytic prominence. Indeed, it happens that the devices resorted to in order to demonstrate similarities radically transform the musical essence of the formulations in ways that distort the very basis for apprehending the resemblance. Notes may get new meanings when related to another tonal context, for example, or they may assume new rhythmic or motivic functions when metric and formal demarcations are disregarded. In such cases the correspondence

emerges as understandable only as an esoteric relationship between abstract pitch patterns.

It is of course not sufficient to just direct attention to a few discrepancies in order to overthrow a similarity – after all, any resemblance that is not altogether trivial must be allowed some degree of variance, perhaps even in essential respects. Musical similarity commands a price that is set according to one's theoretic beliefs, and the cost will always be too high for pedants. And yet, the discomfort felt when being faced with some alleged similarities deserves to be taken seriously as a legitimate reaction and as an indispensable sign of warning to the effect that the observation might be invalid.

The crucial and asymmetric point is that it is easier to discover similarities than to dismiss them. Once a resemblance has been shown, once it “is there”, it is a hard and ungrateful task to argue that it does not count. But falsification is the necessary counterpart to discovery in a sound methodology, and the feasibility of falsification is intimately related to the principles of discovery.

To identify and critically discuss the methods and criteria actually used when establishing similarities between musical passages, and to make an effort at formulating the rules of this activity more explicit, are important tasks since argumentation in terms of similarity is at the core of much musicology. But critical engagement in methodological matters does not imply that there is no scope left for musical intuition in the art of discovering similarities (or in the art of musical analysis generally). On the other hand, and keeping the dialectics going, it may be argued that there should after all be some rules even in an art.¹

1 This may be the proper place to account for some particulars concerning the present text. It was originally written back in the late 1980s, and Richard Cohn's important article published in 1992, meant both good and bad news. Good news because he arrived at much the same conclusions as I did, and because his paper was so well argued – I did and do admire it – and bad news for the same reasons. As a consequence, and although my point of departure and my aims differed (and differ) from Cohn's, I simply entrusted my own critical essay to the desk drawer. However, putting in order is sometimes the corollary of putting away, and almost thirty years after its formulation I decided to enlarge and revise my unfortunate text. I will not give an account of Cohn's study here, but I will on occasion refer to it, and a short discussion of some of the issues that he brings up is to be found in the closing section. Otherwise, I have

Vague affinities and obvious recurrences aside – slightly varied motifs turn up in most themes, and developmental or transitional passages usually abound with ideas that, more or less transformed, are used over and over again – the observations of similarities in the analytical literature are still legion. Even if a critical investigation were limited to recurrences within movements, a vast material of more or less concealed similarities of various kinds and aesthetic significance would have to be examined. The task to be undertaken here must therefore be a more modest one: to study cases of a particular type of similarity that Heinrich Schenker called “*verborgene Wiederholungen*”, “hidden repetitions”. Other terms that are sometimes used to refer to this aspect of the musical structure are “parallelisms” and “recurrences”, but these designations also have a more general application beyond the restrictions imposed on the concept of ‘hidden repetitions’ within Schenkerian theory.

To get a sample of manageable size, the hidden repetitions to be scrutinized mainly stem from two essays specifically devoted to this kind of similarity: Charles Burkhart’s “Schenker’s ‘Motivic Parallelisms’” and John Rothgeb’s “Thematic Content – A Schenkerian View”. A few additional examples are taken from Burkhart’s “Schenker’s Theory of Levels and Musical Performance”.² Several of Burkhart’s and Rothgeb’s examples originally derive from Heinrich Schenker.

stayed fairly close to my original conception, although reading Cohn’s excellent study cannot but have clarified my views. Thus, I am much indebted to “The Autonomy of Motives in Schenkerian Accounts of Tonal Music”, *Music Theory Spectrum* 14(1992)2, 150–170. Cohn’s work is put within a more comprehensive framework in Richard Cohn & Douglas Dempster, “Hierarchical Unity, Plural Unities: Toward a Reconciliation” in Katherine Bergeron & Philip V. Bohlman (eds.) *Disciplining Music. Musicology and Its Canons*, Chicago 1992, pp. 156–181. A companion study to present one, also from the 1980s, “*An das ferne Verwandte. Common Ideas and Ideas in Common*”, is to be found in the next chapter of this volume.

- 2 Charles Burkhart, “Schenker’s ‘Motivic Parallelisms’”, *Journal of Music Theory* 22(1978), 145–175; John Rothgeb, “Thematic Content: A Schenkerian View” in David Beach (ed.), *Aspects of Schenkerian Theory* (New Haven 1983), pp. 39–60; Charles Burkhart, “Schenker’s Theory of Levels and Musical Performance” in *Aspects of Schenkerian Theory*, pp. 95–112. There are further studies presenting or commenting upon “hidden repetitions” from the 1980s, but Burkhart’s and Rothgeb’s articles make up a representative sample;

In the next four sections the notion of ‘hidden repetitions’ will be presented together with a number of reflections of pertinence for this phenomenon or for musical recurrences in general. In addition to providing a background, the purpose is to arrive at a few basic qualifications to be used in the critical study making up the bulk of the present investigation.

Burkhart and Rothgeb on hidden repetitions

Burkhart and Rothgeb circumscribe the phenomenon of ‘hidden repetition’ as follows. As these citations show there are some divergences between their views as to its nature.

Although the existence of motivic parallelism in Schenker is made possible by his concept of structural levels, the idea is not itself a systematic construct [...] or a systematic technique. [...] Rather, it is more in the nature of a compositional feature – an element of design. (Burkhart 1978, p. 146)

The concept of transformation is distinct from parallelism (as I have defined it) because in the former both pattern and copy lie wholly on the surface, while the latter always has a sub-surface component. (Burkhart 1978, p. 155)

But it is not true that parallelisms are an automatic by-product of the triadic tonal system or – more to the point – that they are an automatic by-product of a theory that sees musical structure in terms of levels. Although parallelisms can be isolated thanks only to the theory of levels, they are *not* an inevitable manifestation of that theory. Rather they are manifestations of the composer’s freedom [...] (Burkhart 1978, p. 167)

First, it [the phenomenon of concealed repetition] is inextricably bound to his [Schenker’s] theory of structural levels and the compositional unfolding of triads. (Rothgeb, p. 40)

Apparently, both writers hold that the phenomenon of “hidden repetition” as a matter of definition is connected with the principles of Schenkerian theory, and that such parallelisms can be discovered only within the hierarchic representations produced by tonal analysis. This means that at least

for another specimen and another discussion, cf. Janet Schmalfeldt, “On the Relation of Analysis to Performance: Beethoven’s Bagatelles Op. 126, Nos. 2 and 5”, *Journal of Music Theory* 29(1985), 1–31, and Bengt Edlund, “Interpreting Bagatelles”, respectively. Needless to say, the presentation/discussion of this kind of parallelisms has not ceased since then, but the present text must abstain from covering the whole story.

one and often both of the configurations making up the parallelism are to be found on a subsurface layer.

But whereas Burkhart makes a distinction between prolongational structure and compositional design, Rothgeb seems to deny this duality – on his account, the tonal structure emerges as an all-embracing, self-contained system. Burkhart stresses the necessity of Schenkerian analysis when it comes to identifying “motivic parallelisms”, but their presence in a work is not simply an outflow of the tonal prolongation – hidden repetitions are optional features brought about by composers exerting their freedom. Turning to and endeavouring to explicate Rothgeb’s succinct statement, the strictly hierarchic origin of “concealed repetitions” and the method to detect them emerge as two sides of the same coin – such recurrences are structural in an emphatic sense, and since they derive from the prolongation, they must be demonstrated by means of strict reduction.

Neither Burkhart, nor Rothgeb care for any other kind of subsurface parallelism than “hidden repetition” – Burkhart merely mentions “transformations” taking place on the surface. This can be understood in two ways: either there are no subsurface parallelisms beyond those accessible by means of Schenkerian analysis or, if such subsurface similarities perhaps exist, they are either devoid of musical interest or analytically invalid, i.e. they can only be unsatisfactorily shown by means of illegitimate reductive operations, which in turn implies that they do not constitute or belong to proper layers within a hierarchic tonal structure.³

A second set of citations from Burkhart and Rothgeb brings further information on how to establish hidden repetitions. Again some differences turn up, and again Rothgeb takes up a stricter and also more radical stance.⁴

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- 3 Rothgeb, when dissociating himself from David’s reading of Mozart’s *Jupiter Symphony* (cf. the discussion in the closing part of this study) apparently opts for the latter alternative. Cohn (1992) formulates Rothgeb’s position as follows: “nonstructural entities (those that fail the *Satzprobe*) have no ontological status or epistemological value”. (p. 164)
 - 4 Cohn (1992) points out that a difference between a flexible and a strict approach to subsurface recurrences can be traced throughout the Schenkerian tradition. Schenker himself eventually claimed that hidden repetitions are subordinate to tonal prolongation, and more recently there has been a controversy between Rothgeb and Carl Schachter on these matters, the latter advocating a more flexible attitude.

They [Reti and Rufer] will point to sub-surface configurations of notes and claim that, by virtue of a vague resemblance in general shape, these configurations are organically related, but they feel no need to support their claims with criteria of a systematic nature. In particular, they make no attempt to relate melodic phenomena to the domains of harmony and tonal structure. Schenker's starting point is a theory of tonal structure that accounts for both melody and harmony and the interaction of the two. Because the melodically particular arises from systematically defined constants, he can analyze it in terms of those constants with consistency and precision. (Burkhart 1978, p. 146)

[...] individual notes of a motive may have a harmonic function in the copy different from that which they have in the pattern. Indeed, a parallelism is all the more interesting when this is the case. (Burkhart 1978, p. 149)

It is obvious that the more one admits the possibility of divergence from the exact intervals of the pattern, the riskier the business of finding parallelisms becomes. The most convincing cases are those that span clearly articulated formal units. I particularly emphasize the point that the uncovering of divergent copies requires particular attention to the harmonic milieu. (Burkhart 1978, p. 155)

A Schenkerian approach requires that such simplification – the selection [...] of relatively few tones as a basis of association from relatively many – be founded on fixed and undisputable principles of relation (ultimately those of basic counterpoint) between simple and complex tone-successions. In other words, a Schenkerian approach encourages the discovery of the relationships (possibly unexpected) by 'reading through' diminution to underlying shape, but with the restriction that the 'reading' process must be informed by principles that are independent of any specific configurations one may believe 'ought' to be present. (Rothgeb, p. 41)

Proposed thematic relationships must bear scrutiny in the light of the Schenkerian theory of structural strata, along with the evidence provided by immediate features of the musical surface. [...] Because Schenkerian theory specifies the "*strictly logical precision of relationship* between simple tone-successions and more complex ones" [Schenker, *Free Composition*, p. 18], it supplies an indispensable testing ground for thematic hypotheses; more importantly, it promotes the hearing and identification of relationships wherever and however they may be manifested. This, it seems to me, is what differentiates a Schenkerian approach essentially from investigations that set out with the interrelatedness of all 'themes' as an initial premise, and adjust their methods of interpreting diminution as the occasion demands. (Rothgeb, p. 42)

[...] the true loci of association, the concealed repetitions that cut across formal boundaries, thematic entities, and voice-leading strata. (Rothgeb, p. 40)

Particularly Rothgeb stresses that Schenkerian analysis is not just the most appropriate, but also the one and only method of detection, and the reason is that the notion of tonal music as a system of hierarchically ordered

prolongational layers is fundamental for the very idea of ‘hidden repetition’. (Recall that he defines this type of recurrence as a parallelism obtaining between pitch configurations at different hierarchic levels.) Hence, the discovery of hidden repetitions presupposes strict tonal reduction – it cannot and must not be a matter of simply selecting notes – and unexceptionable reduction governed by the rules of correct voice leading is at the very core of Schenkerian analysis.

The discovery and validation of hidden repetitions must therefore be guided by these very rules; such similarities only come to the fore in the successive voice-leading graphs produced in the reductive process. Consequently, the main criterion of a valid subsurface similarity relationship is that the selection of notes has been undertaken in a way that conforms to strict counterpoint; in other words, the detection must sustain the “*Satzprobe*”.

[Allowing of a critical remark, it seems that, unless “hidden repetition” is in fact the only kind of subsurface parallelism in tonal music, this line of argument has more than a smack of circularity. Detection *is* validation. But Rothgeb’s requirements notwithstanding, the Schenkerian practice apparently allows of considerable analytic freedom when identifying hidden repetitions. In a later section we will return to the *Satzprobe* since it introduces a set of qualifications to be used in the critical evaluation of hidden repetitions.]

Burkhart holds that “individual notes of a motive may have a harmonic function in the copy different from that which they have in the pattern”, and that parallelisms are “all the more interesting” when the notes have different harmonic functions. His advice, that one should pay “particular attention to the harmonic milieu” in order to avoid wrong conclusions, cannot but emerge as paradoxical.

Whereas Burkhart prefers cases that “span clearly articulated formal units”, Rothgeb accepts similarities that “cut across formal boundaries, thematic entities, and voice-leading strata”; indeed, the Schenkerian method “promotes the hearing and identification” of relationships “whenever and however they may be manifested”. [He certainly promises quite a lot on behalf of Schenkerian analysis.]

The three arguably important and yet “cut-acrossable” structural phenomena mentioned by Rothgeb are among the ones that are negotiable

within Schenkerian analysis – they belong to the secondary elements that, when needed, have to yield to harmony and counterpoint in the reductive process. [But to the extent that “cut-acrossing” involves analytic licentiousness with regard to the “evidence provided by immediate features of the musical surface”, Rothgeb in fact declares that some licentiousness is admissible – which of course amounts to a paradox, considering his otherwise very strict analytic policy.]

Common to both Burkhart and Rothgeb is their dissociation from current approaches in the quest for thematic interrelationships, and it seems fair to understand their articles as demanding a more solid ground for such studies. According to these two authors, applying Schenkerian methodology when it comes to subsurface recurrences means putting an end to a miserable practice of *ad hoc* selection of notes. True reduction emerges as a safeguard against the temptation to see relationships that “ought to be present”. In short, they hold that Schenkerian analysis precludes the element of arbitrariness met with in many a pursuit of thematic similarities – a pledge that will be tested in the scrutiny to follow.⁵

Conventional tonal motions

Convincing musical similarity is also a matter of statistics. A common and quite reasonable methodological rule runs like this: if the core of a parallelism is made up of a highly conventional formula or a tiny motivic fragment, the resemblance might just have come about by chance. Therefore the similarity – no matter how close it is – will emerge as trivial, as too frequent a phenomenon to report.

Turning to practice, statistical criteria can of course not be strictly applied since the frequencies of short, everyday musical formulations are unknown, and since there are conventions of diverse sorts when it comes

5 The fact that the present investigation is a scrutiny of the Schenkerian approach to concealed recurrences does not imply that a corresponding critical study of what analysts like Reti and Rufer have proposed should not be undertaken. Such a scrutiny cannot be made in the same way as the present one, however; these “as-occasion-demands” analysts have been wise, or shrewd, enough not to proclaim infallible and immutable principles of detection and validation.

to tonality, style, personal idiom, and individual works.⁶ But the obvious conclusion is nevertheless to avoid accepting conventional and/or minimal formulations as valid parallelisms. Such similarities should be regarded as insignificant unless their musical pertinence is supported by further substantial evidence – the recurrences of a certain formulation may, for instance, suggest a certain extra-musical content or emerge as an element within a broader compositional plan.

As a consequence of this, neither Schenkerian fundamental lines, nor standard voice-leading configurations (such as neighbour- or passing-note motions) should be accepted as hidden subsurface repetitions or, for that matter, as significant recurrences at all. If Schenker was right about tonality as an all-pervading force in music, a force manifesting itself as recursive prolongations of a fundamental structure by means of local fundamental structures or a restricted set of harmonic or contrapuntal stereotypes, these very configurations will by default turn up at many hierarchic levels.

Furthermore – and this holds true no matter whether Schenker was right about the way tonality manifests itself – such simple tonal configurations are quite likely to turn up frequently during the reductive process because the method producing the subsurface layers in Schenkerian analyses is strongly predicated on these very patterns. This link between the normative character of Schenkerian theory and the structural content of the layers emerging in the analysis cannot but give rise to an evil circle when it comes to determining what may count as valid, significant recurrences. If these tonal configurations were not privileged as outcomes throughout the analytic process, they would turn up less often in the graphs, and in virtue of being “uninvited guests” they would be more interesting and also more convincing as similarities.

Thus, if the Schenkerian approach to reduction is adopted, certain conventional hidden repetitions – “automatic by-product[s] of a theory that sees musical structure in terms of levels” – will abound, and they will, whether following upon each other or being nested within/upon each other, tend to be vacuous as similarities. The subsurface parallelisms that really count,

6 Some recurrences, for instance patterns making up idiosyncratic compositional habits, may readily be identified by experienced listeners.

analytically and perceptually, are likely to reside in the “extra-structural” elaborations, rather than in the layered duplicates of standard structural motions, musically trivial as they will often turn out to be.

Burkhart takes notice of this problem but his views seem to be divided. On the one hand, he clearly advises against undertanding fundamental structures and other standard patterns as parallelisms; on the other hand, he does in fact accept quite simple configurations as valid recurrences, configurations that could very well either be parts of fundamental lines or represent immediate and quite simple prolongations of them:

My objection to mixing up the two [*Ursatz* parallelism and motivic parallelism] is that the motive involved – the *Urlinie* – is of so universal a nature, and its transference to lower levels so – one might say – automatic, that *Ursatz* parallelism is virtually irrelevant to the subject of motivic parallelism, which focuses upon the ‘free’ and the unique rather than the general. In the present example, the relevant point is that the *elaboration* of the 3–2–1 is paralleled in the *elaboration* of the 3–2–1. (Burkhart 1978, p. 153) (cf. Ex. 18)

In general, the simpler a design is, the more it tends to appear in many pieces. [...] Perhaps the most frequent are the filled-in third, the turn, and, especially, the upper neighbor-tone formula. Another frequently found one is, like the Mozart example just discussed, that which starts with the upper neighbor tone, then continues to fall in steps; e.g. 5–6–5–4–3. (Burkhart 1978, p. 167)

Evaluation and perception of hidden recurrences

Although similarities are most often evaluated within purely analytic discourses, they should also stand up to empirical tests; they should preferably survive as musical phenomena. Especially when the analytic arguments for or against a certain finding are inconclusive, we must rely on our broader musical discernment, asking ourselves whether or not the proposed parallelism amounts to a worthwhile observation. What can we make out of it as listeners and musicians? Is the association convincing, meaningful, valuable?

In order to be credible as an intentional feature of a composition, a parallelism should comply with our notions as to how composers compose, and especially with our idea of how a certain composer is likely to work. If a similarity seems far beyond genetic explanation, we are prone either to discard it as a coincidence or to ascribe it to the keen-sightedness of the analyst rather than to the ingenuity of the composer. The latter alternative does not

necessarily imply that the relationship is devoid of musical pertinence, but how are we to assess a similarity that we take to be an analytic construct?

One important factor is of course the plausibility of the analytic demonstration as such: if the analysis appears to be far-fetched or arbitrary – or excessively smart – the relationship is likely to emerge as musically irrelevant. But the crucial point is whether the similarity enriches our understanding of the music. A network of recurrences, complex and yet orderly, bold and yet credible, may produce aesthetic value in its own right, irrespective of what we think of its cause and nature.

There is no reason to squarely deny the possibility that we may be subliminally affected by recurrences that we are unaware of, but it appears that we tend to assign greater value to similarities that we can hear. This is not meant to unduly exaggerate the importance of spontaneous and immediate recognition, but rather to acknowledge the possibility that a penetrating analysis may make us hear and appreciate new aspects of music works, and that this is one of the things that makes analysis worthwhile. Indeed, even if we remain incapable of actually perceiving a certain similarity relationship that has been demonstrated to us, and are left to just think of it as a fact, the aesthetic experience of the music may be heightened.

The experience of parallelisms in music is not entirely understood, but Leonard B. Meyer's "formula" for assessing the phenomenal pertinence of "conformant relationships" (i.e. similarity associations) may serve as a useful guide.⁷ His "equation" may seem crude, but it does actualize a number of crucial factors, and it gives an idea of their combined effect on the listeners' chances of recognizing similarities. Thus, the "strength of perceived conformance" is directly related, not only to the degree of "similarity" between the formulations concerned, but also to the "individuality" and "regularity" of the model. The two last-mentioned factors may appear to be in conflict, but especially if the temporal distance between the two passages is long, the model must be syntactically regular in order to be remembered. On the other hand, the chances to recognize parallelisms are inversely related to the "temporal distance" between the passages and to the "variety" of the intervening, distracting events. With regard especially

7 Cf. *Explaining Music*, Chicago 1973, p. 49 and the preceding discussion.

to the layered type of subsurface recurrences highlighted in Schenkerian theory – hidden repetitions may involve quite extended formulations – one might add “difference of temporal format” as a further factor diminishing the chances of recognition.

Musicians rarely have opportunities to bring out recurring formulations, but keen interpreters will nevertheless appreciate adequate analytical demonstrations of parallelisms, since new aspects of a composition’s design may indirectly lead to appreciable differences in performance. Indeed, it may sometimes be an apt test of the significance of an alleged recurrence to ask oneself whether this insight might somehow alter the way the music can or should be played.

The Satzprobe

Since Burkhart and Rothgeb make no secret of their theoretical affiliation, it can safely be assumed that they think that their findings qualify as “hidden repetitions”. Particularly Rothgeb’s explication of the foundation of concealed parallelisms leaves no doubts at this point: selection of notes according to Schenkerian principles is the only way to arrive at analytically acceptable subsurface recurrences.⁸ The first and foremost thing to check is therefore whether Burkhart’s and Rothgeb’s hidden repetitions actually comply with the reductive principles of Schenkerian theory. Can their findings be sustained when it comes to voice-leading criteria, do they pass the *Satzprobe*? This test requires that the subsurface motifs involved in genuine hidden repetitions have been derived by means of impeccable reductions, that the structural layers emerging in the analysis conform to the “laws” of tonality. If an alleged “hidden repetition” fails to pass the *Satzprobe* criterion, it is (as it were) reduced to an “uncovered parallelism”.

The *Satzprobe* also implies that both members of a hidden repetition must bear the same structural description, otherwise the similarity will emerge as compromised. This additional, “same-description” requirement might at first

8 Cf. again his critical comments on David’s analysis of the *Jupiter Symphony* – comments amounting to a concession that there may after all be other kinds of (subsurface) recurrences than hidden repetitions, similarities that must be dismissed due to their shaky, non-systematic structural foundation.

seem to be an unwarranted extension of the *Satzprobe*, but it is in fact a corollary to it. Since the selection of notes must be undertaken in strict adherence to current voice-leading norms so as to guarantee that both members of the parallelism are genuinely “structural” in the sense that they make up stages within a true, impeccable reduction, any “structural” divergence between them must be taken as evidence against the presence of a concealed repetition. If “structure” in the systematic and quite emphatic Schenkerian sense is the very basis of theoretically valid subsurface motifs, “structural” differences between members of a proposed hidden recurrence must be disqualifying. Whereas Schenkerian theory allows formulations making up a hidden repetition to be quite different in various respects, they cannot very well differ also with regard to their “structure”, i.e. with regard to the very property that makes it legitimate to consider them as significantly similar in the first place.

Cohn (1992) traces this problem from Schenker’s early writings all the way to the views held by his followers, and eventually he arrives at the conclusion that, at least as far as mature/strict Schenkerian theory is concerned, identical structural descriptions must be adopted as an essential condition for the validity, indeed the presence, of hidden repetitions. Cohn is therefore prepared to answer this question in the affirmative: “If an entity depends for its status on its mode of derivation, then does the mode of derivation become part of the description of the entity?” (pp. 158–159) And he states the “same-description” requirement as follows: “Accordingly, assertions of similarity between two entities would need to pass their own type of *Satzprobe*. If the entities share surface characteristics but have different structural descriptions, [...] the hypothesized relationship would fail the test and be dismissed”. In such cases the “similarity is based only on surface properties – what Schenker frequently refers to as *Erscheinung*”. (pp. 159–160) Given Schenker’s outlook, it should be added that *Erscheinung* is no doubt to be understood a depreciatory category, signalling that the observation is not worthwhile, that it is devoid of value in a serious analysis.

Furthermore, if the hierarchical claims of Schenkerian theory are fully accepted, the *Satzprobe* criterion has a further corollary, that of “layer contiguity/homogeneity”. This requirement states that in order to make up a “structure”, i.e. an element within a true reductive layer, all notes of a member of a hidden repetition must attach directly to the layer on which

its structurally primary notes reside. In practice this requirement means, for instance, that neighbour-notes, passing-notes, and appoggiaturas of a hidden repetition have to belong to the adjacent lower level; these secondary notes cannot be appended to notes that are themselves, and in the first place, subordinate to the primary ones, i.e. to notes that are not involved in the parallelism. If this principle is violated, the result will be an *ad-hoc* layer, and the “hidden repetition” will be a structurally heterogeneous several-layer product, failing to pass the *Satzprobe*.

Taken together, the *Satzprobe* and its two corollary requirements demanding same description and layer contiguity/homogeneity, make up a quite narrow needle’s eye. It may, for instance, seem unreasonable to strictly maintain the “same-description” and “layer-contiguity/homogeneity” criteria when the size of the members of a proposed parallelism differs greatly in length. To the extent that similarity associations between formulations belonging to widely separated layers, i.e. associations involving incomparable temporal formats, are meaningful at all, it may be argued that these requirements must be negotiable. But on the other hand, if they are tampered with, it is inevitable that the rigorous Schenkerian notion of ‘hidden repetitions’, of analytically valid subsurface parallelisms, becomes compromised. If the restrictions securing comparability and solidity from a Schenkerian point of view are sacrificed, the hidden repetitions will deteriorate into more or less arbitrary subsurface recurrences, will sink into the deplorable morass of wanton similarity associations that the strict theory of structural layers were to prevent.

It can of course be argued that other notable subsurface similarities may occur than those acknowledged as “hidden repetitions” according to Schenkerian theory. One cannot simply exclude the possibility that notes may be selected in other defensible (or even not-so-defensible) ways, and still give rise to meaningful formulations making for convincing, perhaps quite conspicuous similarity associations. In short, there may be subsurface recurrences in addition to, or instead of, those turning up when penetrating music by means of Schenkerian analysis. If it can be shown that Burkhart and Rothgeb in their pursuit of “hidden repetitions” reject or miss musically meaningful subsurface parallelisms that emerge as analytically plausible, the alleged absolute superiority of Schenkerian analysis when it comes to the detection and validation of subsurface recurrences cannot be sustained. An analytic method

is not infallible if important observations considered to fall within its domain fail to be made, or must be discarded as a matter of principle.

Irrespective of their merits in terms of strict voice leading, it may be argued that hidden repetitions, if they really are to be valid, should be convincing, or at least relevant, as musical phenomena. How else can they contribute to the unity of the music work?⁹ This means that “hidden repetitions” do not only have to comply with the various *Satzprobe* criteria of analytical solidity just presented, they must also – as must any parallelism, subsurface or not – pass a test of musical significance. Diverse abstruse would-be similarities that are likely to go unnoticed, and that nobody is likely to be interested in, should be disregarded.

In what follows the hidden repetitions proposed by Burkhart and Rothgeb will be scrutinized. We will in turn consider parallelisms linking adjacent sections, associations between remote sections, motifs permeating the musical design, and finally recurrences encompassing large passages of the works in question. The word “model” will be used to denote the member of the similarity that turns up first, or that otherwise may be regarded as primary; the other member(s) will be called “copy (copies)”.

In some cases alternative (more or less subsurface) parallelisms will be proposed. Whatever they amount to, they are not to be judged as “hidden repetitions” according to Schenkerian standards. The present writer has not signed any contract making him a disciple of Schenker, and it is sufficient if these alternative readings emerge as analytically more plausible and/or musically more interesting than those advanced by Burkhart and Rothgeb.

Hidden repetitions as concealed links

According to Schenker, hidden repetitions may be used to link together two adjacent sections of a composition. Beyond the surface there is a motif closing the first section and then turning up again to start the second. This

9 Cohn (1992) draws attention to the role of hidden repetitions as an important source of unity and coherence in Schenker’s theory; hence the endeavours in his later writings to construe this phenomenon, hitherto considered to be an independent aspect of the musical design, as an integral part of the hierarchic tonal structure.

artifice has an obvious function, and many such linking repetitions are in fact not very hidden at all – the similarity emerges clearly at, or just beneath, the surface. But analysts are of course more interested in cases where such recurrences are concealed; indeed, the notion of hidden repetitions may (as we shall see) lead to the discovery of quite dubious “*Anknüpfungen*”.

Following Oswald Jonas, Burkhart (1978, pp. 147–148) cites a passage from the first movement of Mozart’s Piano Sonata K. 545 as a “modest example” of “motivic parallelism”. The last two bars of the main theme immediately recur as the underlying framework for the up/down scales in mm. 5–8; cf. Ex. 1a.

The reduction laying bare the copy is quite evident – that the d^1 starting m. 9 does not belong to the hidden repetition will soon become clear – and seemingly uncontroversial is also the derivation of the barely subsurface model in mm. 3–4. But from a Schenkerian point of view it might be objected that the two members making up this similarity bear different structural descriptions, a fact that is covered up by the omission of the bass voice; cf. the added notes. The a^2 over c in m. 3 belongs to a six-four appoggiatura chord and demands a resolution on g^2 , and from a higher-level perspective it emerges as an upper neighbour-note to the g^2 in m. 1, whereas the structurally non-corresponding a^1/a^2 in m. 5, having patent F-major root support, is quite stable. And no matter whether we prefer to call the f^2 in m. 4 a dissonant resolution-note or a passing-note, it lacks the quasi-root support of the f^1/f^2 in m. 7. On the other hand and despite the parallel motion in m. 5–8, the resemblance between the two passages is strengthened by the fact that the falling bass progression of the copy can be found in the model as an inner voice proceeding on weak beats.

What ultimately makes you accept this not very concealed recurrence – whether it deserves to be called a “hidden repetition” is most questionable considering the careless reduction of mm. 3–4 – is that it really works as a link between the initial theme and the scale idea. Imagine a right-hand melody in m. 3 featuring $f^2-e^2-g^2$. This variant may be inferior for various reasons, but the point here is the loss of continuity it brings: the start and further course of the ensuing up/down scales would emerge as less convincing.

It should be pointed out, however, that mm. 1–9 might also be described using L. B. Meyer’s concept of melodic implication. The distance between

c^2 and a^2 in mm. 2–3 opens up a gap that “wants” to be filled-in stepwise down to c^2 , but the irregular and incomplete descent that follows in mm. 3–4 is not satisfactory; hence the need for second, almost pedantic (and eventually unsuccessful) attempt to arrive at the tonic note. This explanation of the link emerges as preferable to the Schenkerian one, involving an erroneous analysis of the model.

Rothgeb’s first example (pp. 42–43) is extracted from the *Courante* of Handel’s Suite No. 8 in F minor. According to his reading, two falling filled-in thirds provide continuity across the cadence in m. 20; cf. Exs. 2 a/c.

To begin with, falling thirds (filled-in or not) are quite common coins in the tonal economy. Turning to this specific case and to Exs. 2 b/c, the first falling-third motion, providing the melodic cadence to C minor in mm. 19–20 and serving as the immediate model for the alleged hidden repetition, features a six-four-chord appoggiatura e^2 and then its d_4^2 resolution over the dominant, whereas its alleged subsurface copy in mm. 21–23, moving at a slower pace, brings a harmonically quite stable A_b -major e^2 followed by a passing d_b^2 , forming a dissonance in relation to the intervening E_b -major sonority as well as within the prolonged A_b -major chord. In other words, the first, appoggiatura note of the model attaches to the second, dominant note within an authentic cadence, whereas in the copy the second note attaches as a passing event equally to the first and the third notes within a prolonged relative-major chord. Hence, Rothgeb’s hidden repetition, which does not present itself very readily to the listener, fails on account of the “same-description” requirement.

Rothgeb also points out that the resuming figuration after the double-bar may be understood as a “free inversion” of the beginning of the piece; cf. Exs. 2a/b.

This is an apt observation, but it means that the inversion relationship – and not any hidden imitation – is likely to provide the primary and decisive recurrence phenomenon at the start of the second part of the *Courante*. But in order to demonstrate this affinity relationship according to Schenkerian standards, mm. 1–3 and 21–23 should be reduced in the same way; cf. the added brackets. The rhythmically patent inherent motion of the model passage, and also its subsurface progression, if mm. 1–3 were subjected to strict tonal reduction, the result would be the rising third $f^1-(a^1)-g^1-ab^1$. Turning to the “free inversion” copy starting the second part,

the correspondingly derived strong-beat motion brings $c^2-(a^b)^1-b^b^1-c^2$, i.e. essentially a lower neighbour-note figuration. The high-register descending third $e^b^2-d^b^2-c^2$, which “ought to be present” in order to make this distant *Anknüpfung* in terms of inversion come true, leads a precarious off-beat existence in m. 21–23, a fact that is obscured in the reduction 2c featuring downbeat dotted minims. Being the uppermost motion, the slowly falling third from e^b^2 is marked for some attention, but salience is hardly a decisive reductive criterion in Schenkerian analysis. The copy of Rothgeb’s long-distance motivic link is derived against the grain of the music as well as of the hard-core Schenkerian theory to which Rothgeb commits himself. According to his belief, the tonal structure should determine the motivic content, not the other way around.

Whatever importance one might attach to “hidden repetitions” as a good-making factor in tonal analysis, outside the Schenkerian fence it is of course quite legitimate to simply compare the beginnings within Baroque two-part forms and look for reminiscences – it may be quite rewarding. Turning to the keyboard and this Handel suite, it is feasible to play mm. 21–23 so as to remind the listeners of the start of the piece, but very difficult to convey an association back to the quite different falling thirds just before the double-bar: the remote, overall “free inversion” may work, but not the immediate link.

Rothgeb (p. 44) also finds a descending filled-in third $f^2- -d^2$ on both sides of the cadence in m. 36 of J. S. Bach’s G-minor *Sinfonia*; cf. Exs. 3 a/b.

Again, descending filled-in thirds are very frequent motions in tonal music, but this fact does of course not *per se* preclude that such thirds may be used so as to yield significant linking effects. But the problem in this case is that the similarity is questionable, not least from a Schenkerian point of view.

Starting with the model, i.e. the 3–2–1 third allegedly involved in the cadence, the second-degree e^2 in m. 35 is a dissonant note having very weak tonal and rhythmic support – it is an off-beat added sixth over a weak-beat subdominant. But cannot this e^2 be taken as an anticipated note, “pre-representing” the dominant as suggested in the reduction 3b? No, because this note is an “incomplete neighbor-note” (or indeed an “échappée in its purest form”), and because – no matter what Schenker once stipulated about falling fundamental lines in cadences – a straightforward reduction

of mm. 34–36 obviously features a closing 1–7–1 motion $d^2-c\sharp^2-d^2$, not a hard-to-hear hemiola-like descending third $f^2-e^2-d^2$ at odds with the metre as well as the underlying harmonic progression.

Hence, the model simply fails to pass the *Satzprobe*: if the “fixed and undisputable principles of relation (ultimately those of basic counterpoint) between simple and complex tone-successions” are applied, mm. 34–36 does not allow of what “ought to be present” – i.e. a structural 3–2–1 descent (as theoretically becomes a cadence) and a falling-third model ready to recur so as to make for a linking hidden repetition in mm. 37–40.

But don’t the f^2-d^2 and $e^2-c\sharp^2$ surface motions within the cadence tip the situation over in favour of a subsurface falling third? No, because melodic inflections are clearly subordinate to inherent voice leading and harmony when it comes to Schenkerian reduction. Besides, from a perceptual point of view these two falling thirds, starting from non-identical weak beats and issuing from the tonic and ending on the dominant, respectively, do not match very well. Rothgeb’s analysis, allegedly representative of Schenkerian practice, is actually quite un-Schenkerian.

In his introduction, Rothgeb contrasts the Schenkerian approach to thematic relationships to, for instance, the one met with in Johann Nepomuk David’s analysis of the similarity between the fourth-movement *cantus firmus* and the second theme of the first movement in Mozart’s Symphony K. 551; cf. Ex. 27a. From his Schenkerian desk Rothgeb “disallows” David’s reading because three notes in the thematic contour are “incomplete neighbor-notes (échappées in their purest form)” and since still another note is just a passing-note. “Proposed thematic relationships must bear scrutiny in the light of the Schenkerian theory of structural strata, along the evidence provided by immediate features of the musical surface. [...] a hypothesized relationship [...] that is incompatible with the levels in the sense that [the Jupiter example] is should be dismissed as spurious”. (Rothgeb pp. 41–42)

Consequently, and turning to Rothgeb’s reading of mm. 34–36 in the Bach *Sinfonia*, already the model for the hidden repetition must be “dismissed as spurious”: since it accepts a surface *échappée* note as structural, it does not “bear scrutiny in the light of the Schenkerian theory of structural strata”. There is a general insight to be gained from Rothgeb’s own goal: the Schenkerian method is superior enough to allow its practitioners double standards.

As to the copy in mm. 37–40, it features e^2 instead of e_2^2 , extends over four bars, and is subdivided so as to form a descending sequence of two falling seconds, each bringing a local 4–3 motion coordinated with harmonic progressions from applied dominants to secondary tonics in a way that produces local suspensions. This is indeed a radical transformation of the would-be falling-third in mm. 34–36, describing a single authentic cadence: the notes, supposed to be corresponding, have acquired entirely new tonal and syntactic functions. Perceptually, it might be questioned whether this faint affinity is substantial enough to give rise to a similarity association, and from a Schenkerian point of view the harmonic and voice-leading differences between model and copy are patent; quite patent are also (as far as “immediate features of the musical surface” matter in Schenkerian analysis) the formal and rhythmic differences. Consequently, the two members of this alleged hidden repetition grossly fail to satisfy the “same-description” criterion: the tonal structure of the copy is entirely at variance with that of the model.

Turning to statistics, the kind of sequencing met with in mm. 37–40 is quite common in Baroque music, and this very *Sinfonia* features another variant of it in mm. 17–22, turning up after a cadence from which a descending third may be more convincingly derived; cf. Ex. 3c. It might be argued that mm. 37–40 are reminiscent of mm. 17–22, rather than of the immediately preceding and questionable falling third in mm. 34–36, and that both passages are to be heard and explained as specimens of a stock type of sequencing met with in this and in countless other Baroque pieces. Needless to say, the passage mm. 15–22 does not bring a linking hidden repetition either – the three-times-two-bar copy has an altogether different structural description than its two-bar cadential model.

According to Rothgeb (p. 52), the passage-work closing the exposition of the first movement of Mozart’s Piano Sonata K. 576 can be reduced to a falling third $c\sharp^3-a^2$, which – after showing up twice at the surface as a closing melodic fragment – serves as a link between the exposition and the development; cf. Ex. 4. Rothgeb presents this example as follows: “It occasionally happens that a succession of tones that either belongs to the general voice leading or is otherwise relatively ‘incidental’ in a work is elevated to the status of a motive by virtue of a compressed repetition”.

There is nothing that makes Rothgeb's reading exclusively Schenkerian, unless all observations of motions beneath the surface are patented. The mechanism of the linking *per se* is an undeniable fact – a swift falling third is duplicated so as to highlight the major/minor contrast across the double-bar – but what about the reduction disclosing the extended $c\sharp^3$ – a^2 subsurface model for the compressed falling thirds emerging at the surface? It does not seem very probable that anyone would extract the final notes of the two scale-passages and connect them so as to form a model for the following copies. Instead, since the two rapid passages quite straightforwardly start on e^2 and reach $c\sharp^3$ and a^2 , respectively, the compressed echoing motif should rather read e^2 – $c\sharp^3$ – a^2 ; cf. the added lower brackets. Rothgeb's subsurface model emerges as a pretentious observation bringing out the analyst rather than the composer.¹⁰

But the three-note linking motif appearing at the surface must also be put within a larger context. Stylistically, it is one of many conventional echoing melodic formulas that are used in Classical music to balance off an accented arrival, extending it into the following weak beat or bar. A close relative to it is in fact introduced already in m. 26, where it has the same function as in m. 57, and a true replica occurs in the third movement of the Piano Sonata K. 322; cf. Ex. 21g. Turning back to the design of the first movement of K. 576, the closing figuration matches very well with the fanfare-like opening of the main theme, and in the development it takes on a thematic character – a long passage (mm. 81–96) is entirely built upon it. There is no contradiction involved when claiming that this motif is both conventional and thematic since this extremely witty movement excels in using clichés in inventive ways. What Rothgeb has discovered with Schenkerian ado is no more (and no less) than a specimen of surface motivic work.

Thanks to Rothgeb's "Schenkerian view", the shift between the exposition and the development in the first movement of Mozart's Piano Sonata K. 333 emerges as linked by a subsurface parallelism: "The last cadence

10 Why did Mozart write two slightly different passage-work phrases in the first place? Who knows, but it is a fact that this movement (and many others in Mozart's output and in Classical music generally) features numerous two-bar units that are immediately repeated in identical or almost identical form – elements of redundancy making this music attractive and accessible.

of the exposition not only grows out of what has preceded it in the second theme group (in particular the many occurrences in different guises of 6 as an upper neighbor to 5) but prefigures the first theme itself as it appears, transposed, at the head of the development” (p. 44); cf. Ex. 5a.

To begin with, the pre-figuration feat is substantially diminished when it is considered within its full context. The fact that the beginning of the second theme is reminiscent of the start of the first theme – which is just as fond of the sixth degree as its second-theme offshoot – is not mentioned by Rothgeb, although this observation is crucial if one wants to understand the thematic design of the movement; cf. Ex. 5b. The model in m. 62–63 does not actually grow out of “what has preceded it in the second theme group”; it puts an end to a four-bar “coda” appended after a long concluding section (mm. 38–58), which is thematically independent and yet pays some more or less emphatic visits to the sixth degree before the appoggiatura d^2 in m. 62. Thus, the movement abounds with prominent sixth degrees, and therefore it cannot come as a great surprise when the first theme (not a very remarkable choice when starting a development) turns up after the double-bar, duly transposed to the dominant key and starting from its sixth-degree d^2 .

Turning to the similarity relationship linking the first and the second theme, it is a most straightforward, non-Schenkerian, all-on-the-surface affair – Ex. 5b shows that it is just a matter of adding an initial fifth-degree note. But what about the alleged Schenkerian hidden repetition at the formal shift shown in 5a? It must be objected that this faint affinity is seriously flawed. Unless all four notes of the simultaneous thirds are used and reordered, the model is incomplete – the basis of the similarity with the restated first theme cooks down just conventional 6–5 and 2–1 appoggiatura fragments.

Rothgeb (p. 50) mentions two short excerpts from the beginnings of two Beethoven piano sonatas as further instances of linking by means of “contraction”, i.e. by means of recurrences in which the model is a subsurface configuration.

In the Sonata Op. 26 six notes selected from the first phrase of the variation theme are immediately (and quite precipitately) sequenced one step higher to provide a flying start for the second phrase. The analysis, originally stemming from Heinrich Schenker, is shown in Ex. 6a.

The promotion of the rhythmically insignificant, passing-note-like c^2 in m. 4 to structural status is certainly a Schenkerian trait. This note is admittedly a resolution, but at the same time it must be pointed out that on the next level, and along with its supporting A_b -major chord, the c^2 functions as an appoggiatura in relation to the following b^1 over the closing E_b -major dominant chord. But no matter how warranted this objection may be in terms of tonal reduction, it is theoretically undesirable because it does away with the third-degree *Kopftön* crowning the *Anstieg* of Schenker's comprehensive *Ursatz*.

But this passage contains another, more plausible and more salient, linking similarity, a just slightly concealed recurrence involving not a contraction, but an expansion. It emerges quite readily if one just takes due account of "the evidence provided by immediate features of the musical surface", if one pays attention to a prominent note in the theme that the Schenkerian reduction, "promoting the hearing and identification of relationships wherever and however they may be manifested", has removed out of consideration, the accented appoggiatura d^2 in m. 4; cf. Ex. 6b. According to this reading, the concluding four-note motif of the first phrase reappears, forming an inner-voice hemiola rhythm in mm. 5–6. This parallelism is supported by the observation that the rhythm, the harmonic properties, and especially the appoggiatura/resolution quality of d^2-c^2 are by and large retained from the model to the subsurface copy. Whether or not this quite convincing linking relationship counts as a hidden repetition in Schenkerian sense is immaterial.¹¹

Turning to Rothgeb's second Beethoven example of linking by means of contraction, selected notes from the very beginning of the Sonata Op. 110 are quickly repeated to form a short connecting cadenza. This parallelism was probably first noticed by Oswald Jonas; cf. Ex. 7.

The extended, subsurface model is straightforwardly present in mm. 1–4, and yet it is contestable as a Schenkerian structure. Whereas its first two notes are selected from mm. 1–2 in a way that may give them status as members of a subsurface structure, all subsequent notes of the theme (excepting

11 Later on we will return to this theme; cf. also Bengt Edlund, "Disciplining reduction and tonalizing interpretation", ch. 2 in *Questioning Schenkerism*, Frankfurt 2015, Peter Lang Verlag, where it is thoroughly studied.

an insignificant sliding note) are recruited to form the rest of the model despite the fact that \mathfrak{d}^2 and \mathfrak{f}^2 in m. 3 are subordinate neighbour-notes. The model starts as a subsurface structure and is finished as a heterogeneous quasi-surface configuration, and one must conclude that it does not qualify as a genuine reductive layer. The “layer contiguity/homogeneity” criterion is not satisfied, which means that it must be called in question whether this concealed relationship is a hidden repetition in Schenkerian sense.

Indeed, there is nothing very Schenkerian about this “reduction” – Rudolph Réti, for instance, looking as was his habit for common melodic contours, might have selected the very same notes. But as a matter of fact he did not: there is another “subsurface” reading of the theme, a reading that discloses far more important similarity relationships within the sonata; cf. Exs. 12 a/d.

Turning to perception, there is on the whole nothing very controversial in the models that Rothgeb considers to be copied in Op. 26 and Op. 110 – the motifs to be hidden are mostly made up of salient notes. But whether the proposed parallelisms are significant or merely coincidental is impossible to tell. The swift copies – an ornament and a cadenza-like transition, respectively – are not likely to give rise to any spontaneous similarity associations back to their extended would-be models, and the associations are too strained to make much musical sense even if you know about them.

With reference to Schenker and discussing Beethoven’s Piano Sonata Op. 101, Burkhart (1978, p. 169) mentions “an astonishing relation between the twenty-bar Adagio section and the melody of the first Allegretto movement’s opening two measures”, a passage that also returns as a reminiscence immediately after the Adagio.

Schenker himself just states that “*Zum Inhalt hat es den Grundgedanken des ersten Satzes wieder, T. 1-2*”, and he presents three layers mediating between the transplanted notes of the *Allegretto* theme – what we may call the “generative shape” if we accept his analysis – and the complex *Adagio* section with the words “*Hier seien die Wege gezeigt, die Beethovens Phantasie genommen*”.¹² This is not the place for a detailed criticism of

12 Schenker’s analysis of Op. 101 is to be found in the corresponding volume of his *Erläuterungs-Ausgabe* of the late Beethoven sonatas, re-edited by Oswald

Schenker's analysis, apparently claiming a privileged insight into the composer's mind. The subsurface copy of this hidden repetition, if any, is so deeply embedded in the *Adagio* that the relationship is devoid of musical sense. It cannot be appreciated by the listener, and it emerges as a most implausible construct. When looking at Exs. 8 a/b, showing the net result of the analysis, one marvels more at the analyst than at the composer, marvellous as *he* was.

Let's leave this dubious discovery for another hidden-repetition observation made by Schenker, for an immediate recurrence that seems to have prevented him from noticing another and bolder concealed recurrence. As is shown in Exs. 8 c/d, there is a well hidden and yet quite convincing resemblance linking the initial two bars of the *Allegretto* reminiscence and the first four bars of the ensuing final *Allegro*, an association that apparently escaped Schenker.¹³ While he observes the surface similarity between the three-note, falling-fourth motif first appearing in m. 4 of the transition, a motif that is insistently repeated four times in rising sequence, and the two-bar motif starting the following *Allegro* (cf. the lower brackets), he fails to notice that the rising five-note motion in mm. 1–2 of the serene *Allegretto* is resolutely answered by a bisected, bluntly accented sub-surface falling retrograde in mm. 1–4 of the *Allegro* (cf. the upper brackets).

Both Schenker's falling-fourth surface parallelism immediately linking the *Allegretto* transition with the *Allegro*, and the integrating rising-sixth/falling-sixth relationship between the initial *Allegretto* movement and the final *Allegro* are readily demonstrable and perceptually pregnant – although retrogrades never quite go home. These recurrences contribute significantly to the overall coherence of the sonata and lend an irresistible dramatic impetus to the moment of transition.

Parallelisms involving retroversion (or inversion) do not belong to the Schenkerian paradigm of tonal reduction, and consequently such

Jonas (Wien 1972, Universal Edition 26.301) – the pertinent pages are 52–53, 58, 63, and 65.

13 Unless not the following, fairly vague description can be taken as a reference: “*Der rasche, ja beinahe pünktliche Rhythmus im Auf und Nieder erinnert an den des ersten Stückes, nur daß hier anders als dort die fallende Linie das erste Wort hat. (Ob nun der Gegensatz auf einen psychologischen oder programmatischen Grund zurückzuführen sei, bleibe hier unerörtert.)*” *Erläuterungs-Ausgabe*, p. 64

similarities are left out of account by both Schenker and Burkhart. Evidently, Schenkerian analysis does not amount to a complete kit for discovering sub-surface recurrences; it does not (quoting again Rothgeb's heralding words) "promote the hearing and identification of relationships wherever and however they may be manifested".

Rothgeb (p. 55) shows a hidden parallelism in the first movement of Beethoven's Symphony Op. 55. According to his analysis, the transition mm. 74–83 is contracted so as to form mm. 88–91, the second phrase of the ensuing theme; cf. Ex. 9a. The observation originally stems from Schenker, and Jonas describes it as an example that "clearly illustrates the influence of background on foreground".

It must first of all be pointed out that Ex. 9a is incomplete in a way that makes it useless for assessing the alleged parallelism as well as for finding alternative readings; it is also misleading with respect to the first phrase of the "second theme". It does not include the harmonic dimension of the music, which is necessary if one wants to subject a hidden repetition to the *Satzprobe* or to check whether the two members of a proposed similarity bear the same structural description. As to the "second theme", only a complete and correct representation of the music makes it possible to discover the important recurrence that is involved in the passage. The following discussion therefore refers to Ex. 9b.

If we take a look at this amended picture of the music, a number of observations cannot but present themselves. Two complete harmonic cadences come to the fore; both of them feature root-position IV chords after the tonics, but the antepenultimate member is different (I^{64} and II, respectively). Considering the melodic similarity, the one-bar subdominant clearly corresponds to the two-bar subdominant. Likewise and turning to the penultimate dominants, the short descent in m. 90 obviously corresponds to the long one in mm. 81–82. The subsurface melodic content of mm. 73–76 returns in mm. 83–86, which recurs in varied form in mm. 87–90. Hence, what we have in the whole passage is not a transition and a "second theme", but rather a thematic period, featuring a florid ten-bar antecedent and an eight-bar consequent divided into two similar phrases.

Rothgeb's bracket starts only from g^2 in m. 75, but the model should reasonably begin already from f^2 ; the latter note is supported by a passing

second-inversion tonic chord within a harmonic progression that tonicizes the E \flat -major subdominant – the top-note g² is therefore highly consonant. Turning to Rothgeb's copy in the second phrase of the theme, its first note f² in m. 88 is supported by a root-position supertonic or (rather) from a second-inversion V⁷ chord growing out of the supertonic. The following top-note g² occurs over a root-position V⁷ chord, and it emerges as a dissonant upper neighbour-note introducing a suspension. Hence, the two members of Rothgeb's parallelism bear different structural descriptions. Furthermore, the d² in m. 81 of the model cannot very well be selected as structural since this note (which "ought to be present") is in fact a dissonant passing-note within the prevailing V⁷ harmony. Thus, Rothgeb's analysis fails not only to pass the "same-description" criterion but also the *Satzprobe*.

But beyond Rothgeb's defect hidden repetition and outside the Schenkerian subsurface protocol, there are more interesting concealed recurrences within the passage. Taking due account of the harmonic progression from tonic to subdominant, a clear affinity between mm. 73–76 and mm. 83–86, the first phrases of the antecedent and consequent, comes to the fore. Preferably starting only at the second beat of m. 84, the similarity in the treble involves two voices/instruments, and it does not emerge unless one pays due attention to the oboe, outdoing the first clarinet's d² by introducing f² and eventually proceeding to f \sharp ² and g², concurrently with the resolution to c²/c³.¹⁴ The crucial oboe line is left out by Rothgeb in Ex. 9a.

Since mm. 73–83 as well as mm. 83–91 bring full tonic-to-tonic harmonic cadences, a large-scale parallelism, more convincing than the one proposed by Rothgeb, presents itself. Within the eight-bar copy, the first violins' entry on e² in m. 87 over the supertonic emerges as the start of a second attempt to reach and then release the g² left in the air in m. 86. It is a most significant detail that the oboe (having been silent for a while) suddenly joins the first violins at the g² in m. 89; only then is the copy completed.

14 The fact that the second clarinet's f¹ introduced in m. 83 is doubled by the f² of the oboe in m. 84 is by no means rendered insignificant by the fact that the d² of the first clarinet is later reinforced by the flute's d³ in m. 85. It seems that the Schenkerian notion of "covering notes" is not always an asset – it may cover important events.

Obviously, one should not delete any parts when studying this passage since Beethoven's instrumentation provides a better guide to its concealed secrets than the Schenkerian gaze.

As a specimen of linking by means of sequential, overlapping repetition Rothgeb (p. 45) cites a passage from Chopin's Mazurka Op. 24, No. 1; cf. Exs. 10 a/b. As shown in Rothgeb's reduction, the crucial motif, consisting of an upper neighbour-note motion overlapping with a descending filled-in third, is first repeated a third below; then, a further third below, it bridges the gap between two sections of the piece.

For several reasons this reading strikes as unwarranted. It is most doubtful whether the first note of the linking motif really belongs to it – it would account much better for the music to understand the repeated middle-register triplets, from which the initial f^2 of the model is recruited, as a drone. Rothgeb's "motifs" certainly "cut across voice-leading strata", but if we pay more respect to what is given in Chopin's text, we will find a top-voice line describing a long descent starting from the sixth-degree g^2 – before arriving at b^1 , there is a midway resumption from e^2 ; cf. Ex. 10c. After the double-bar the melody starts once again, now from c^2 , the sixth degree of the new E_b -major tonic.

It is hard to accept Rothgeb's descending-fourth reading of the first two bars of the new section since it is quite far-fetched and disregards "the thematic entities" in order to extract the desired hidden *Anknüpfung*. This is certainly not just a case of "change in diminution, occasioned by the return to the dotted rhythm of the opening" as Rothgeb maintains. Already the array of repeated statements of a dotted surface motif in mm. 34–37 – statements alternately set in the dominant and in the E_b -major tonic, and all issuing from c^2 and producing in turn a^1 , g^1 , a^1 , and e^2 as final notes – indicates a quite different melodic and tonal organization. Recall that the alternative subsurface structure of mm. 26–28 shown in 10c consists of a sequence of two falling seconds, leading from g^2 down to d^2 , followed by another similarly sequenced motion from e^2 to b^1 in mm. 30–32. This fundamental difference precludes any aural recognition of Rothgeb's hidden copy in the new section, and the difference is amply corroborated if we listen or look further ahead in the mazurka. The whole E_b -major section up to m. 48 builds up tension by exploiting the sixth-degree c^2 as an upper drone.

Rothgeb's strained reading of mm. 33–34 in terms of four falling thirds could not possibly have come about without a wish to show a hidden repetition that “ought to be present”, and his analysis does not amount to a defensible tonal reduction.

Hidden repetitions and distant associations

As the thematic connection between the first and last movements of Beethoven's Op. 101 shows, parallelisms/hidden repetitions may also be used to inform the music with associations linking together more or less remote parts of a work. But in order to be effective, it may (as Meyer's formula for conformant relationships suggests) be argued that the similarities involved should be substantial and reasonably conspicuous. In Op. 101, Beethoven evidently considered it to be wise to refresh the listeners' memory by providing a glimpse from the first movement immediately before the final *Allegro*; cf. Exs. 8 c/d.

Burkhart (1978, pp. 155, 156) gives an example from the first movement of Beethoven's Piano Sonata Op. 2, No. 1. This hidden repetition was also noticed by Ernst Oster, and the similarity between the passages may have occurred to other observers as well, although they presumably construed the parallelism differently.

According to Burkhart/Oster the turn motif from m. 2 in the first theme is reflected in the closing theme of the exposition/recapitulation; cf. Ex. 11a. But the correspondence between, say, mm. 140–142 and m. 2 is rhythmically most counterintuitive, and it does not take account of the important intervening motion up to c^2 in the closing theme. The difference between the very quick turn-like ornament over the root-position tonic chord in the main theme and the exposed cadence in the closing theme is evidently no impediment to Schenkerians in pursuit of hidden repetitions but, needless to say, the similarity fails entirely due to different structural descriptions. Both Oster and Burkhart have adopted Schenker's agenda, but tonal reduction is apparently not a safeguard against invalid similarity associations, nor is it (as we will see) exhaustive when it comes to uncovering subsurface recurrences.

Let's turn to Ex. 11b and rely on mm. 7–8 as a model. The vehement final cadence first straightforwardly incorporates just the falling fifth c^3-f^2

(mm. 146–147); concurrently the fifth is demonstratively filled in and augmented in mm. 146–152. It also turns out that m. 5 and mm. 144–145 can be aligned in a convincing way. Are these musically obvious correspondences “hidden repetitions”? Who cares?

The remarkable thing about the opening phrase of Beethoven’s Piano Sonata Op. 110 is not that it may perhaps be rapidly echoed in the immediately ensuing cadenza-like transition, but that it anticipates the fugue subject; cf. Exs. 12 a/b. This observation has been made by Rudolph Réti,¹⁵ and his thematic contour seems no less musically justifiable than the “ought-to-be-present” exercise offered by Rothgeb/Jonas to demonstrate an immediate contracted repetition; cf. Ex. 7. If Réti omits the initial note of the first-movement theme, and if there is no note in his contour that corresponds to the fifth note of the fugue subject, this is compensated for by the fact that his reading reflects the two intertwined rising implications along the scale (a^1-b^1- and d^2-e^2-) inherent in the theme. These implications are pursued one step further in the fugue subject so as to produce an additional and crowning rising fourth c^1-f^1 . The fugue subject to come might very well sound familiar as a result of this hidden and yet straightforward parallelism associating back to the beginning of the sonata and making for a strong sense of thematic integration.

Furthermore, as Donald Mitchell has pointed out,¹⁶ the fugue subject may also be extracted quite convincingly from a middle voice in the last three bars of the first movement, a prefiguration (set a fourth below) that of course also makes up a reminiscence of the opening theme; cf. Exs. 12 c/d. Like Réti’s thematic contour, Mitchell’s selection of notes has nothing to do with Schenkerian reduction, and yet this additional announcement of the fugue is both patently present and highly meaningful; the first movement’s initial and final prefigurations of the fugue subject mutually support each other.

It should be observed that Schenker in his thorough analysis of the Sonata Op. 110 has nothing to say about the obvious similarity between

15 And presumably by others; cf. Rudolph Réti, *The Thematic Process in Music* (London 1961) p. 90

16 Donald Mitchell in his Prefatory Note to Réti (1961) p. vii

the first-movement theme and the fugue subject; nor does he identify the thematic reminiscence at the very end of the first movement.¹⁷ Perhaps his theory prevented him from hearing and identifying such things, or perhaps he was too presumptuous to acknowledge them? Anyway, Rothgeb's promotional talk, hailing Schenkerian analysis as an "indispensable testing ground for thematic hypotheses" and as an aid to "hear and identify relationships wherever and however they may be manifested", cannot but emerge as unwarranted.

In order to settle a local articulation problem in m. 61–62 of the third movement of Beethoven's Piano Sonata Op. 7, Burkhart (1983, pp. 99–102) makes use of a subsurface parallelism. He reads the notes e^2-g^2 in m. 62 and then the a^1 in m. 68 as an altered and drastically enlarged copy of the swift $e^2-g^2-b^1$ motif first appearing in m. 4; cf. Ex. 13a. Consequently, he advises pianists to play so as to separate the e^2 in m. 62 from the preceding note.

But it is impossible to accept this hidden repetition since conclusive arguments speak against it; cf. Ex. 13b (the slurs stem from Beethoven). Burkhart's model is taken from the initial antecedent, whereas his alleged copy clearly belongs to an extended consequent, set in the parallel minor – it starts back in m. 43. The polarity between antecedent and consequent in the A¹ part of this Scherzo is unmistakable: the antecedent eventually draws on a downbeat rising-falling motif (x), whereas the consequent just as obviously eventually exploits an upbeat falling-rising motif (y), followed by an overlapping x motif. Turning to mm. 55–58 in the consequent of the A² part, there are no overlapping (x) motifs, so why should there be an enlarged motif (x) in 62–68? The reason for the absence of motif (x) is that the crucial passage mm. 55–68 is modelled on mm. 13–14 in the first consequent. If one pays due attention to Beethoven's slurring, it is clearly motif (y) that occurs three times in mm. 55–57 and then twice in varied

17 Schenker does discuss the Coda of the first movement at some length, and he even compares two earlier versions of its final bars, showing how the interior voice is introduced, but apparently without realizing that it brings an allusion to two main themes of the work; cf. *Erläuterungs-Ausgabe*, Wien 1972, Universal Edition 26.304, pp. 48–49.

form in mm. 58–68. As a result the E_b-minor consequent loses track completely and lands on a₄[♯]; eventually the music finds its way back by means of the (y) motif.

The obvious conclusion as to the performance of the passage is to preserve the already established upbeat phrasing. Thus, in m. 58 as well as in m. 62 the e₂[♯], being the final note of a y motif, should be connected to the preceding note and be separated from the following one. Burkhart's analysis supposedly applies Schenker's theory of hierarchic levels, but to what use when his reading of the motivic content, and hence of the subsurface parallelism, emerges as mistaken to the point of leading to a misinterpretation when playing the music?

Hidden repetitions and structural unity

Hidden repetitions might also be used to impart unity to musical works by permeating the structure in diverse ways.

Rothgeb (pp. 48–50) observes that an enlarged statement of the first three notes of the *comes* entry soars above the three voices in mm. 5–6 of J. S. Bach's F-major *Sinfonia*; cf. Exs. 14 a/b.

This hidden repetition makes very good sense, analytically as well as musically. The copy is quite exposed in the top register, and the crucial notes f², e², and a² appear on strong beats; indeed, the first note of this enlarged copy is brought out as the goal note of a rising sequence of a set of thematic fragments, d²–e²–f². Checking with m. 2, it turns out that the model and the copy go with the same falling-third a–g–f counterpoint in the bass. From a Schenkerian point of view, the prominent top note a² of the copy serves to remind the listener of the third-degree *Kopfton*.

Following Schenker, Burkhart (1978, p. 248–149) cites a short passage from the Minuet of Beethoven's Piano Sonata Op. 2, No. 1 as an instance of a permeating recurrence. The four-bar double neighbour-note model extracted from the right-hand theme is answered before its completion by a contracted turn-like copy in the left hand; cf. Ex. 15a. It is in the context of this example that Burkhart adds that “individual notes of a motive may have a harmonic function in the copy different from that which they have in the pattern” and that “a parallelism is all the more interesting when this is the case”.

This nested recurrence is fairly difficult to disentangle aurally, and it may be argued that Burkhart's reading does not bring out the sense of parallelism/imitation subtly involved in mm. 1–4 in a very convincing way.

From a Schenkerian point of view it may be desirable to regard the first four right-hand bars as a prolongation of $a^{\flat 1}$, effected by a double neighbour-note motion. But there is another, more inspiring way of conceiving the right-/left-hand affinity, an alternative reading that keeps closer to the surface and to the motivic design of the passage, and that separates the model from the copy in a way that makes the passage readily understandable as an imitative structure rather than a nested one; cf. Ex. 15b. The addition of a virtual g^1 in the right hand is supported by the left-hand part in mm. 28–30 (cf. Ex. 15c) and also by the sequential passage mm. 15–18 (cf. Ex. 15d). In this light the first two bars of the theme bring two similar three-note motifs describing a falling sequence of rising seconds; jointly they make up a subsurface falling-appoggiatura motion $b^{\flat 1}-a^{\flat 1}$ just beneath the surface. And if the virtual third-beat g^1 in m. 1 is added, it becomes evident that the two rising-second motifs prompt the turn-like echo in the left hand – notice that the overall rhythm of the main notes is preserved. If the pianist so wants, this imitative relationship can be rendered quite clearly. (The left-hand entry can of course also be understood as just a counterpoint in contrary motion to the melody in mm. 3–4.)

Burkhart is quite right when pointing out that, according to his reading, the $b^{\flat 1}$ in m. 1 makes up a dissonant upper neighbour-note to $a^{\flat 1}$ within the context of the four-bar F-minor tonic, whereas the left-hand b^{\flat} in m. 3 belongs to a dominant seventh-chord turning the following a^{\flat} into a dissonant passing-note. This is fine, and it may very well be considered “interesting”, but it also makes up a theoretical flaw since this difference means that the “same-description” requirement is violated, a fact that cannot but diminish the validity of this similarity – if it is to be understood as a “hidden repetition”. Cohn (1992, p. 160) calls Schenker/Burkhart's concealed recurrence in question for this very reason: the two motions “bear quite different structural descriptions”, and hence the similarity association between them does not comply with Schenkerian standards.

Rothgeb (pp. 46–48, 55) applies Schenkerian analysis, including its parallelism-detecting capacity, to the flights of musical fancy found in the beginning of the second movement of Sonata No. 2 from the first collection of C. P.

E. Bach's Sonatas for *Kenner und Liebhaber*. The score and a reduction in three layers of mm. 1–8 appear in Exs. 16 a/d; Ex. 16e shows a set of recurrences in mm. 3–7 whereas the reduction in Ex. 16f is a close-up graph of the first three bars.

À propos his analysis of the F-major *Sinfonia* discussed above, Rothgeb quite aptly refers to the “titanic contrapuntal powers” of J. S. Bach. It seems that Johann Sebastian's son had a protean faculty for melodic invention, a fact suggesting that analysts dealing with his music had better proceed in a less hierarchical manner and be less prone to assume long-term structural connections as working hypotheses. One should rather try to explain what happens in a piecemeal manner, identifying patterns of minimal ideas that an improviser might repeatedly use in order to keep the music going. Carl Philipp Emanuel composed much of his keyboard music for both *Kenner und Liebhaber*, but the analytic *Connoisseurs* of our time should perhaps consider whether it might not be more rewarding to deal with his music in a more amateurish way.

Anyway, Rothgeb establishes that mm. 3–7 make up a subsurface falling motion in terms of parallel tenths obtaining between treble and bass. But does this undeniable middleground fact give decisive support for the three-member hidden recurrence shown in 16e (rising sixths followed by overlapping falling thirds), a set exhibiting great differences in pitch content, metric position, and rhythmic pace, and that “cuts across voice-leading strata”?

As regards the enlarged copy of the rising-sixth-plus-attached-falling-third motion supposed to appear in mm. 5–7, the similarity is substantially reduced by the intervening g^1 and by the slow pace. One might also ask whether the structural support from the parallel bass line has not been forfeited at this stage. However much the d^b in the bass is shown as being prolonged for three bars in 16d, the notes of the extended rising sixth in the treble actually appear over the notes of a falling scale issuing from d^b in the tenor register. Furthermore, do these recurrences at all make up a hidden repetition in Schenkerian sense? According to 16d, all notes belong to the surface.

(In conspicuous contrast to the relentless right-hand activity of the preceding four bars, mm. 5–6 turn out as a *longueur*. The diminution machine is switched off, as it were, until it is suddenly turned on again in m. 7, bringing a quite complex cadence issuing into the dominant. It seems as if

the composer, perhaps wanting to challenge the keyboard players, left two bars incomplete.)

Rothgeb also holds that “the seeds of the motivic events [...] lie in the contraction of the ascending third $f-g-ab$ (bars 2–3) into eighth-note values in bar 3”; cf. 16f. “The first ascent is carried out by two successive applications of reaching-over; these produce third arpeggiations, which in turn evoke the sixth arpeggiation of bar 3 [...]”

But the slow rising third is less regular than the reduction suggests (cf. 16a) – the intervening c^1 is left out – and the $ab^1-c^2-f^2$ sixth in m. 3, “evoked” in some unexplained way by the rhythmically unequal thirds, does not observe the given “voice-leading strata”; observations that cannot but diminish the plausibility of the relationship. Furthermore, the slow ascent is not “carried out” by rising thirds produced by “reaching-over”; g^1 and ab^1 rather emerge as the accented end-notes of falling upper-neighbour-note seconds; cf. the added brackets in 16f. And taken together the ab^1-g^1 and b^1-ab^1 motions rather make up a double neighbour-note figuration around the third-degree – perhaps a same-register copy of what happened in the preceding bar. The falling second is obviously the constructive interval throughout the first four bars – cf. the added brackets in 16a and also Rothgeb’s slurs in m. 2 of 16f – and it turns up regularly, as an improviser would prefer. (Notice the clarifying ornament in m. 4 bringing out the falling second d^2-c^2 .) This pattern of falling seconds, emerging at the surface, explains the melodic process quite well and much better than Rothgeb’s overly sophisticated and improbable system of “hidden repetitions”. This music is a *Liebhaber* affair.

As to the entirely subsurface hidden repetition involving two falling thirds shown by the brackets in 16c, Richard Cohn points out that the first “represents a composed-out-3-line”, whereas the second rather makes up “the resolution of a neighbor tone followed by a stepwise descent at a higher level”. Hence, the “same-description” criterion is not satisfied. (Cf. Cohn 1992, p. 164 – the observation was originally made by Allan Keiler.¹⁸)

18 Allan Keiler, Review of Beach (ed.) *Aspects of Schenkerian Theory in Music Analysis* 3(1984); pp. 282–283.

Presenting Schenker's analysis J. S. Bach's E \flat -minor Prelude BWV 853, Burkhart (1978, p. 148–149) points out that a subsurface “motive of a filled-in third runs throughout the work”, but that “the surface has relatively few filled-in thirds, and that those that do occur there have no very significant motivic connections with the subsurface ones”; cf. Ex. 17 showing Burkhart's reduction.¹⁹

Keeping to the copies, it can be accepted that the four descending thirds in mm. 5–13 represent the same idea – the second note in each of these not-very-far-beneath-the-surface motions introduces the decisive seventh in local dominant-to-tonic progressions. But it is questionable whether the extended subsurface b^1 – a^1 – g^1 in mm. 1–4 is the model from which they derive. The would-be four-note rather than three-note “model” makes up a double neighbour-note motion as opposed to its alleged copies, featuring three-note passing motions. The model spans a full cadence, in which the subdominant gives structural status to the first-beat c^2 in m. 2, making it at least as important as the dominant-supported a^1 introduced only on the third beat of m. 3. The model and copies of Burkhart/Schenker's set of concealed recurrences do not meet the “same-description” requirement, which amounts to disqualifying evidence when it comes to hidden repetitions.

Rothgeb (pp. 55–56) identifies a set of concealed parallelisms in the first movement of Beethoven's Piano Trio Op. 97. The model consists of an ascending sixth characterized by the dual fact that it may be described as a rising third overlapping with a rising fourth, and that the top note is followed by a skip to a lower note; cf. Exs. 18 a/c.

On the whole, the similarities are analytically convincing, and they might evoke a feeling in many listeners that the three passages are related. This is to a considerable extent due to the surface fact that the model's division into a rising third and a rising fourth is preserved in the copies. A further shared aspect is of tonal nature – all these sixths rise, in local terms, from the third degree to the upper tonic note. There are some differences between the recurrences, of course, but they are not sufficient to overthrow the basic resemblance: the top note in the model is unaccented, not so in the copies

19 Schenker's analysis is to be found in *Der Tonwille* I, p. 38–45.

featuring downbeat arrivals; the interval down to the final low note is different, and the copy shown in 18b lacks this note altogether.

The enlarged, subsurface motion in 18b is the only one of the parallelisms that needs tonal reduction to emerge, but it works quite well: mm. 43–46 are readily understandable as an outgrowth of a¹ due to the duplication of the rising third that first issues into and then regains this note. But the f^{♯1} in m. 34 may be questioned; whereas it makes for the desirable rising third, it is rather the f^{♯1} in m. 39 that should go with the g¹ in m. 41.

In a footnote (p. 50) Rothgeb draws attention to Schenker's observation of a hidden repetition involving three ascending thirds in the theme of the first movement of Beethoven's Piano Sonata Op. 26.²⁰ In addition to the four-bar model a^{b1}–b^{b1}–c² in mm. 1–4 and the immediately following, very contracted upbeat copy b^{b1}–c²–d^{b2}, there is a further, quite extended rising third stretching from c² in m. 17 to d^{b2}–e^{b2} in mm. 25–26; cf. the slurs in Ex. 19. These parallelisms form a rising sequence, whose members in turn issue from each note in the fundamental ascent – otherwise put, the starting notes make up an enlarged recurrence of the *Anstieg* in mm. 1–4, being itself the first of the rising-third motifs – and whose members in turn lead to the third-degree *Kopftön* (c²), its upper neighbour (d^{b2}), and the neighbour-note's upper auxiliary (e^{b2}), respectively. This scheme appears to be a perfect example of mutual support between fundamental structure and hidden repetitions. Indeed, the third concealed repetition makes up the structural *raison d'être* of the entire middle section – but when it comes to the crunch, Schenker's reading amounts to the claim that the tonal hinge of the B-section is the insignificant alto d^{b1} in m. 26, a local, falling passing-note forced to represent the would-be structural upper neighbour-note d^{b2} of the theme.²¹

20 Heinrich Schenker, *Der freie Satz* (Wien 1935, Universal Edition); the pertinent sketches are 85, covering the whole theme, and 119:18, 56:1c, and 110: a5, showing fragments.

21 Cf. William Drabkin, "Schenker, the Consonant Passing Note, and the First-Movement Theme of Beethoven's Sonata Op. 26", *Music Analysis* 15(1996), 149–189, presenting and discussing the debate between Schenker and his pupil, Felix Eberhard von Cube.

As already pointed out, the similarity between the subsurface content of the phrase mm. 1–4 and the quite contracted copy starting with the swift turn figure is far from convincing; cf. 6 a/b. This goes of course even more for the resemblance between these two ill-matching rising thirds and the huge third spanning the entire middle section – a connection that emerges as a most implausible construct with very scant support in the music.²² The c^2 in m. 17, belonging to the domain of the applied dominant of $B\flat$ minor, is not a very good start for a copy carrying such a heavy structural burden, and the $d\sharp^2$ in m. 25 is merely the (altered) leading-note up to the heavily tonicized $E\flat$ -major $e\sharp^2$, the rhetoric goal of the middle section. Schenker's set of hidden rising thirds does not make up a worthwhile reading of the music, and his nonsense analysis of the theme scores quite low even as a specimen of tonal analysis.

As shown by the brackets in Ex. 19, the middle section of the theme in fact features a most complex web of motivic associations back to mm. 5–8, associations having nothing to do with Schenker's fundamental structure, nor with his hidden-repetition thirds.²³ Schenker's commitment to his idea of music as a tonal hierarchy and his notion of the "structural" nature of "hidden repetitions" evidently prevented him from discovering this scheme.

Burkhart (1978, pp. 61–167) makes an attempt to explain the apparent lack of thematic content in the development section of the first movement of Mozart's Piano Sonata K. 330. According to his analysis, three hidden motifs occur frequently in the first and second themes of the exposition, and he then demonstrates that these motifs also permeate the development. Burkhart's conclusion is that the movement "in a subsurface sense is a 'monothematic' sonata form".

As a first general objection, it must be pointed out that the motifs extracted by Burkhart – a falling triad (t), an upper neighbour-note motion

22 This is also the opinion of David Beach, a devoted Schenkerian, voicing his critique of his Master as follows: "in the end I think we must use our ears as well as our minds in making analytic decisions"; Beach, David, "The Analytic Process: A Practical Demonstration", *Journal of Music Theory Pedagogy* 3(1989) 1, p. 45.

23 For a further discussion of this theme, cf. Bengt Edlund, "Disciplining reduction and tonalizing interpretation", ch. 2 in *Questioning Schenkerism*, Frankfurt 2015, Peter Lang Verlag

(x), and a descending filled-in third (y) – are far too short and far too ubiquitous to serve as a ground for the point he wants to make; cf. Ex. 20a. This problem is aggravated by his quite lax similarity criteria.

Let us first turn to the neighbour-note (x) motif and the first theme, sketched in Ex. 20b. It seems to be better in keeping with natural listening to identify motif (x) in the low-register g^1 – a^1 – g^1 in mm. 4–6 than to let it begin with the initial top note in m. 1 and then pick out the next highest notes in mm. 5 and 6, where an entirely new idea is introduced. But when this idea is varied in mm. 9–10, it becomes evident that motif (x) can do well without its first note. In the second theme, cf. Ex. 20c, Burkhart again stretches the insignificant (x) motif over a phrase boundary, this time in order to questionably recruit a last note for it (mm. 19–21 and 23–25).

The falling-third (y) motif, first identified in mm. 7–8, is extended to a filled-in descending fifth in mm. 11–12, 13–14, and 15–16, passages that all correspond to m. 7–8. In this context the (y) motif emerges as incorporated into the falling-triad motif (t), which most often appears disguised as a descending scale, cf. mm. 1–2 in the first theme and m. 19 in the second.

Later on, in mm. 26 and 28 in the second theme, another motif turns up, an idea that Burkhart does not consider to be important. But it seems that this starting motif deserves at least as much attention as the closing (y) motif in mm. 7–8 and 25–26. Since it is made up of a filled-in rising third, it either makes the motivic integration even more tight by introducing the inversion of motif (y) or casts further doubts as to the analytic validity of this motif.

To sum up, we have not only Burkhart's (t), (x), and (y) motifs, but also a "ty" mixture of motifs (t) and (y), two fragmentary "x¹" and "x²" versions of motif (x), and an inverted (y) motif, "yi" – all of them tiny, conventional motions; cf. 20a. The analysis emerges as methodologically precarious, no matter whether you think of it as a Schenkerian subsurface reading or not.

Burkhart's analysis of the development section is sometimes very strained and all too directed towards finding motivic reminiscences (ultimately deriving from the first theme, reminiscences that ought to be present. The final conclusion, then, is that the movement features two distinct themes in its exposition, and that none of them is prominent in its development. The undisputable motivic associations in the development are to be found in mm. 65–66 and 72–73 – the rising (yi) motif from mm. 26 and 28, disregarded by Burkhart, occurs in rhythmic augmentation – and in mm. 79–81

and 81–83, being expanded chromatic variants of the falling (ty) motif as it appears in mm. 13 and 15.

Rothgeb (pp. 57–60) discusses a formal peculiarity in the third movement of Mozart's Piano Sonata K. 332: why is there no counterpart to the exposition's mm. 22–35 in the recapitulation? His short answer runs: because this passage is used as a Coda. But he also offers a quite complex explanation, illustrated by several examples; cf. Ex 21 a/d. A long (perhaps lengthy) argumentation is necessary to refute Rothgeb's analysis.

Let's first consider mm. 34–49, cf. Ex. 21a, showing first the very end of the passage to be deleted in the recapitulation and then the following transitory section leading to the second theme. The closing formula marked by an asterisk – a falling third starting at a^1 and bringing then an appoggiatura and its resolution – completes the preceding c^2 – b^1 – g^1 – f^1 motions in mm. 32 and 33 by providing the left-out note. According to Rothgeb this three-note falling-third model is immediately replicated in *forte* from a^2 and then pursued to form a falling fifth, using $c\sharp^2$ as a lower neighbour-note before returning upwards to g^2 , the starting point of another falling fifth.

The start of the transitory section on a^2/a^1 in m. 36 preserves the F-major third degree, “a relation not obscured by the fact that in the subsequent unfolding it is interpreted as the octave of a major triad”. But already the following seventh and even more the imitative left-hand entry on a/A in the next bar conspire to undermine F major, and the principal harmonic interpretation of a^2/a^1 will certainly not be “the octave of a major triad”, i.e. A major – this is an unwarranted inference presumably deriving from the full D-major chord appearing in the not-quite-corresponding m. 170. What we are most likely to hear in mm. 36–37 is D minor, the relative minor, emerging out of its fifth degree and presenting itself clearly in m. 39 after the leading-note $c\sharp^2$ has been heard.

Later on in 21a, Rothgeb makes far too much out of a very swift, chromatically rising second. The long $f\sharp^2$ in m. 40 is an accented member of a rhythmically regular ascent and also the leading-note of a tonicizing applied dominant, whereas the last-moment $g\sharp^2$ in m. 45 is harmonically insignificant since the third, now rhythmically enlarged, falling fifth (issuing again from a^2) takes place within a C-major environment established since m. 42. To say that the latter chromatic motion is “obviously a consequence” of

the former is therefore a gross exaggeration – at most there is just a glimpse of an imitation. It should be observed that the sense of G major in m. 41 is just as transient as was the sense of F major in m. 36. Already the right-hand f_2^2 reveals that C major is being introduced as an auxiliary tonic, just as was D minor in the preceding parallel unit. (In due time it will turn out that the second theme is set in C minor.)

When dealing with the recapitulation, Rothgeb attaches even greater importance to the chromatic rising-second motif; cf. Ex. 21c, where the “curly-bracket” motions in Ex. 21a assume a “beamed” structural significance. Transplanted to an entirely new situation in mm. 168–170, it is now enlarged so as to provide a bridge making the omitted “mm. 22–35” passage redundant, a bridge directly linking the swift melodic cadence (again lacking a^1) with the d^3 start of the transitory section. Rothgeb holds that “it is just the abruptness, the incompleteness, of this cadence that gives prominence to the chromatic succession $c-c\sharp-d$ (counter-pointed by $f-e-d$ in the bass) in bars 169–170”.

The bridging subsurface motif seems highly implausible, however: there is little ground for understanding the c^2 in m. 168, obviously heading for f^1 as it did in the exposition, as having any future linking obligations; the start of the supporting counterpoint (i.e. the root of the closing F-major chord) turns up long after the c^2 ; the leading-note $c\sharp^3/c\sharp^2$, quite surprising as it is, has of course nothing to do with what precedes it. Furthermore, at this juncture you have to take into account what the listener has reasons to expect, namely the sudden and quite unrelated jagged outbreak heard in mm. 22 – the fact that it does not turn up in m. 169 is certainly a most remarkable non-event.

Since already the enlarged model in mm. 168–170 is most questionable, the swift chromatic motion in mm. 179–180 cannot very well be “heard as a contraction” of it. What is true, however, is that the added chord in m. 169 with its three leading-notes is most emphatic, and that it highlights the forthcoming entry on d^3/d^2 over a D-major chord. This event emerges as a very important starting point, much more so than the otherwise corresponding, thin D-minor-rather-than-F-major a^2/a^1 in m. 36.

It is also necessary to take a closer look at Rothgeb’s voice-leading graphs of these passages. Turning first to the exposition (Ex. 21b), the structural a^2 is supported by $c\sharp^2$ and a – non-present notes bluntly establishing A major as a fact in the first bar of a passage obviously set in D minor. (As already

pointed out, this is likely to be the result of an illegitimate inference from the non-parallel m. 170.) At any rate, this amounts to a concession to the effect that the supposed F-major initial quality of the fresh entry on a^2/a^1 is gone; the F-major third degree is not preserved. Furthermore, the voice leading shows a falling third a^2-f^2 and a rising minor second $c\sharp^2-d^2$. Both motions are erroneous: what Mozart wrote is a falling upper-line fifth down to d^2 , after which he used $c\sharp^2$ as an inferior-level, last-moment lower neighbour-note introducing the applied dominant of D minor; the left hand actually features an imitative falling fifth from a , starting one bar after the right-hand descent. These corrective observations apply also to the parallel passages starting in m. 41 as well as in mm. 170 and 175 (cf. Ex. 21d) – taking note, of course, of the fact that in m. 170 there *is* in fact a full chord under the top note, a D-major applied dominant eventually giving in to G minor.

As a consequence of this, there are no three-member parallelisms in terms of subsurface falling thirds as indicated by the treble slurs in 21b and 21d; instead, there are three-member sets of descending fifths right at the surface. Nor are there any nested thirds starting from a^2 as suggested by the curly brackets in Ex. 21b. This reading borders on nonsense because the short member of this alleged parallelism interrupts the descending fifth in mm. 46–49, and because it downgrades the a^2 in m. 46 in favour of the f^2 in m. 48, thus making for the large falling third as well as for the beamed, even-larger falling fifth encompassing the entire section no matter the conspicuous presence of the succession of three falling fifths. In addition, Rothgeb's encompassing falling fifths obscure the obvious lower neighbour-note pattern $a^2-g^2-a^2$ linking the starting notes of the falling fifths.

Contrary to the appended summary sketch in 21b, the decisive descent towards the d^2 of the G-major dominant of C minor (to appear in m. 50) is released only in m. 46 where the pitch-class $B\flat$ gives in for $B\sharp$ as becomes C major (or minor). And there is no over-all falling fifth from a^2 to d^2 , nor is there a third-degree a^2 over an F-major I in m. 36 – there is in fact (and facts should be respected even in reductions) a D-minor fifth degree. The second-degree g^2 added by Rothgeb in m. 49 of this reduction is not a note but a sacrifice to the God of tonal reduction; m. 49 actually brings the final note d^2 of the last descending fifth heading for c^2 (c^1).

Rothgeb's harmonic analysis in 21b is misleading since it adopts a musically absurd rear-view-mirror perspective of the passage. When we hear a^2/a^1 in m. 36 we have no idea that the adventure of the transition will end up in C minor in m. 50, and consequently the passage should not be described as a series of progressions within C minor – nor for that matter as a progression within F major. What Mozart brings in mm. 33–50 is a modulation towards an unknown goal.

As to the recapitulation and to Ex. 21d, it is very hard to concur with Rothgeb's conviction that the d^3 in m. 170 is "a relatively long-range upper neighbor". Without the emphatic upbeat $c\sharp^3/c\sharp^2$ and without a supporting D-major chord, mm. 170–174 would rather be interpreted as a G-minor passage, and this is all the more true since the listeners have already heard a corresponding D-minor passage in the exposition. Turning to what Mozart actually wrote: due to the preceding augmented sixth- (or applied-dominant ninth-) chord, the right-hand octave clearly emerges not as an upper-neighbour-note, but as a primary event, as a starting eight-degree auxiliary-tonic event introduced by its leading-note. The emphatic upbeat chord in m. 169 quite effectively severs the entry on d^3/d^2 from the preceding cadence – as tonicizing, i.e. strongly forward-directed, dominant chords tend to do. Then, just as F major almost instantly gave in to D minor in the exposition, D major fairly soon yields to G minor in the recapitulation.

Thus, whatever top/down motivation the encompassing descent from c^2 to g^1 shown in 21d may have, the D-major-within-G-minor d^2 is not a neighbour-note – such an across-the-demarcation reading is not musically plausible, and analysis should not be misused to explain away as pedestrian what is truly surprising. Thus, just as in the exposition and as the three falling fifths (not thirds!) strongly suggest, there is a high-level, quite patent and connecting lower neighbour-note motion $d^3-c^3-d^3$ in the recapitulation, a motion that eventually in m. 180 turns the formerly fifth-degree d^2 of G minor into an unstable sixth-degree d^2 in F-major-to-become-F-minor. A further consequence of the rupture in m. 169 is that there is no reason to label the II and V chords as neighbouring chords – there is certainly no sense of a prolonged F-major I chord, but unmistakably a D-major start in m. 170, a start that will establish G minor.

Rothgeb's reductions makes the most of the differences between the two transitory passages, whereas it has been shown here that they are

essentially similar: in both cases, three descending fifths are held together by a superordinate lower neighbour-note motion, and this is not altered by the initial, emphatic and yet transient D-major tonicization of d^3/d^2 in m. 170, nor by the transiently tonicized F-major a^1 -over- f in m. 183. While Rothgeb's readings of the two passages look different, they have one thing in common: the encompassing lower neighbour-note motions, being a quite conspicuous feature of the music, are suppressed in favour of *Urlinie*-like descents. In other words, the actual musical design, including whatever concealed recurrences it brings, is subordinated to the overall *tonal* structure; the approach is top/down. An alternative, respectful and arguably genuinely analytic, way of dealing with music is of course to take due account of surface motivic associations when deciding what the *musical* structure is like.

Turning to a detail of pertinence in this context, Rothgeb holds that "the F-major chords in bars 179 and 183 are both genuine tonics, in contrast to the analogous C triads in the exposition (bars 45 and 48), both of which are passing-tone chords without structural connection to the tonicized C area"; he even talks about "a complete difference in significance". This is an exaggeration probably due to a conclusion backwards from the F-major chord in m. 183 to the one in m. 179 or, otherwise put, a result of looking at misleading graphs instead of listening to the music as it actually unfolds in time. Bars 36–45 and 170–179 are virtually identical, and the chords in mm. 45 and 179 are certainly not "passing" since both of them bring the end of the units of which they are a part and concurrently provide the harmonic point of departure for the units to come.

Mozart hardly inserted an extra bar (m. 183) in the last unit of the transition in the recapitulation in order to supply a tonic chord giving support for a third degree in Rothgeb's structural descent. To explain this extension of the final change from major to minor – five bars in the exposition, six bars in the recapitulation – two facts may be relevant.

Unlike the modulation in the exposition, the one taking place in the recapitulation only seems to modulate. If we start from the F-major first beat of m. 169 nothing much has happened when we arrive at F-minor in m. 185, and the circular "modulation" eventually involves a vacuous stage – the final change from F major to F minor just happens. Yet, from a musical point of view Rothgeb's all-F-major harmonic parsing in 21d is a

“spoiling-the-story” disaster. Only from such a disadvantage point are the two F-major chords “genuine tonics”.

Mozart (or his clever fingers) chose to vary the right-hand passagework already from m. 180 on. But “chose” is perhaps not the best word since had he proceeded in m. 182 as he did in m. 48, he would have run out of keys on his fortepiano. Furthermore, and given this shortage of keys, had he adhered as close as possible to the model in the exposition, the second theme in the recapitulation would have started in what may have seemed to be a too high register. The transfer one octave downwards could not be precipitate, so Mozart (or his fingers) had to come up with a solution featuring one extra bar: m. 183 with its initial root-position F-major chord making for analytic confusion two hundred years later. Rothgeb’s “I” chord cannot reasonably be very structural since this bar is an emergency solution. Two alternative “minus-one-bar” versions of the crucial passage, versions of which the first ends too high, are shown in Exs. 21 e/f.

At long last returning to the problem that Rothgeb set out to solve, why did Mozart skip mm. “22–35” (cf. Ex. 21g showing mm. 230–245) after m. 168 in the recapitulation? Well, one reason is of course that he could not keep this passage with its mid-bar ending because it would not leave any room for the unexpected, dotted-quaver augmented sixth-chord upbeat, which he apparently felt was necessary in order to drastically introduce the non-modulating counterpart to the modulating transitory section of the exposition. The simple cadence in m. 169 ending on the main downbeat was simply more suitable.

But there is a further, more interesting but equally non-Schenkerian explanation. Mozart might have thought that it would be witty to exchange one surprise for another – to use the mm. 22–35 joke once again at the same junction may have seemed very boring to a mercurial mind like his.²⁴ So why not save this episode, starting as a drastic intrusion but ending quietly, and use it to close the movement, attacking the listeners at a moment when they have no reason to expect that it will turn up? So in m. 232 it comes – after a cadence that is dramatically announced but too short to supply a convincing

24 He worked in the pre-Schenkerian era and didn’t know that he was to cause so much ado.

close of the music, and that consists of a metrically enlarged “copy” of the re-starting cadence in mm. 241–242, the “model” not yet played.

Large-scale integrating recurrences

Finally, there may be hidden repetitions that, enormously enlarged, encompass and hold together whole sections or indeed whole works, or serve as bridges between different parts of a work.

At the very beginning of the third movement of *Probestück* No. 4 by C. P. E. Bach, Rothgeb (pp. 51–52) finds a local upper neighbour-note motif which is expanded into a copy covering no less than eight bars; cf. Exs. 22 *a/c*.

The similarity, based on a tiny and most conventional tonal formula, fails as a “hidden repetition” since it violates the requirement that the structural description of the members must agree: the d^2 in m. 1 is a dissonant neighbour-note over the tonic whereas its alleged counterpart in m. 7 is a consonance over the subdominant within in a cadence to the dominant. As to Rothgeb’s argument to the effect that the ornaments “clarify” this subsurface relationship, it is not very convincing since the initial $c\sharp^2$ is marked with a mordent while the d^2 in m. 7 features grace-notes making up a *Praller*. The latter ornament also turns up on the $a\sharp^1$ in m. 7, the emphasized start of the third three-note group within the long descent from $g\sharp^2$, brought out by an *arpeggio* to $e\sharp^1$ likewise marked by an *arpeggio*. This sweeping gesture effectively embeds the would-be long-range upper neighbour-note d^2 . With or without ornaments, this “hidden repetition” is neither easy to discover, nor to accept as musically valid.

A better reason to attach importance to the d^2 in m. 7 is of course that it coincides with the arrival at the subdominant – reasonably keen listeners are able to keep track of the bass line slowly falling from the initial tonic. But meanwhile much happens in the treble; if there is in fact a route connecting the very first note of the piece with the distant d^2 in m. 7, the detours must be accounted for; cf. Ex. 22d.

A most notable feature is the exact and quite insistent repeat of a six-note phrase in mm. 3–5. What do these motions want? Both of them seem to head down for $e\sharp^1$, but the first time the swift descent is simply interrupted, and the second time the expected note is demonstratively avoided

by being replaced by d^2 – producing a discord that remains a dissonance even after the bass has begun its descent towards B. The resolution to $c\sharp^2$ of this unusual appoggiatura is only relatively consonant, and it apparently heads for b^1 , a motion that is temporarily arrested. The implied note soon turns up, but not quite as expected: putting an end to the series of lagging parallel sixths between treble and bass, b^1 immediately yields to $a\sharp^1$. But this happens only after a new, high-register line introduced by $f\sharp^2$ has reached its peak note $g\sharp^2$, an appoggiatura note that is promptly resolved to $f\sharp^2$, a motion that launches the long descent.

What happens *en passant* during the long descent? Well, announced by a *Praller* the frustrated and rhythmically extended fragment $d^2-c\sharp^2$ – from m. 5 is actualized by a compressed copy pursuing the motion down to b^1 . Then, owing to the second *Praller*, the two frustrated $a^1-b^1-a^1-g\sharp^1-f\sharp^1$ motions from mm. 3–5 get a slowed-down copy leading at long last down to $e\sharp^1$, satisfying a long-range implication.²⁵ Those who are fond of long-term recurrences might consider the idea that the descending melodic process from $d^2-c\sharp^2$ to $c\sharp^1$ in mm. 5–8 describing a ninth is reminiscent of the falling ninth from $c\sharp^2-d^2-c\sharp^2$ to b in mm. 1–3. Another ninth reaches from $f\sharp^2-g\sharp^2-f\sharp^2$ down to $e\sharp^1$.

Excellent composing – too good for analysts claiming that mm. 5–6 merely bring “*übergreifen*” exercises, and for people holding that Rothgeb’s reduction of mm. 1–8 (cf. 22c) is an enlightening one. Whereas there is a connection in the bass from the tonic ($f\sharp$ is first prolonged, then lead stepwise downwards) to the subdominant, there is no neighbour-note relationship between the initial $c\sharp^2$ and the d^2 in m. 7 – the latter note, belonging to a motion along the scale, just happens to be a semitone above the former. Nor is there really a bland inner-voice $b^1-a^1-g\sharp^1$ motion in mm. 7–8. One might perhaps hear a subsurface connection between the d^2 and the $c\sharp^2$ starting mm. 7 and 8, respectively, but the d^2 is in fact a member of a larger motion issuing from $g\sharp^2$ and reaching $e\sharp^1$.

The lesson to be learnt from all this is that whether you are engaged in tonal reduction or search for hidden recurrences, “cutting across

25 According to Rothgeb, the first *Praller* exemplifies C. P. E. Bach’s “organic use of ornamentation”. If ornamentation is a guide to subsurface connections, the present reading, accounting for both *Prallers*, is twice as good as Rothgeb’s.

voice-leading strata” should not be resorted to until you have carefully taken account of the strata as they emerge in the score – they might be more worthwhile objects of study.²⁶ In this particular case insights can apparently be gained by studying melodic implications.

Burkhart (1978, pp. 159–162), reworking an analysis by Schenker, observes that the development section in the first movement of Beethoven’s Piano Sonata Op. 2, No. 1 embodies the shape of the first theme; cf. Ex. 23 a/b.

On the whole, Burkhart’s reading seems convincing: the similarity is based on prominent notes in the development, and the model is a musically important, (barely) sub-surface contour comprising no less than eight notes from the theme, a contour that is transplanted, as it were, to the relative major and expanded so as to make up a structural upper-line connection covering the entire development.

Burkhart’s analysis might be underpinned by non-Schenkerian observations; cf. Ex. 23c. The music suggests a rising implication starting slowly from a^1 in m. 49 and b^1 in m. 52, gaining momentum by the passing a^1 – b^1 in mm. 55–57, and finally issuing into b^1 – c^2 in mm. 63–65. The ensuing descent is prompted forwards since it makes up an implication along the scale.

Yet, considering the beginning of the development, there are some problems in Burkhart’s analysis. Notwithstanding the fact that the A^b -major first-degree a^1 in m. 49 pursues the *Urlinie* third-degree reached at the end of the exposition, one might argue that the note of departure for a “hidden repetition” copy spanning the development should rather be the high-register c^3 in m. 50, the A^b -major note corresponding to the a^2 in m. 2 assigned motivic importance as the first note of the F-minor model. But the rising tendency in mm. 50–51 recalls the one in mm. 5–6, a fact that strongly suggests that the motion from c^3 to d^3 will be followed up by an e^3 corresponding to the c^3 in m. 7. But this rising implication is concurrently underscored and undermined in mm. 53–54 where the ascent, while insisting on the d^3 already achieved, gets stuck over left-hand chords indicating

26 Speaking of the hidden relationships in the first movement of Beethoven’s Piano Trio Op. 97 – a much more plausible set of similarities, cf. Exs. 18 a/c – Rothgeb judiciously speaks of “obvious foreground features” that should be preserved when it comes to concealed recurrences, and that, when absent, make the hidden repetitions invalid.

that the expectation of a further rise will be frustrated. In other words, Burkhart's initial a^1-b^1 motion emerges as separated from the rest of his copy: a deflecting and arrested high-register c^3-d^3 implication intervenes.

As to the close of Burkhart's hidden repetition, cf. 23b, it appears that the descending part of his enlarged copy brings sufficient tonal coherence all by itself. Burkhart's prolongation of the initial a^1 in m. 49 all the way to the first-inversion midway a^1 in m. 74 emerges as a dispensable concession to *Urlinie* thinking that actually hampers the idea that the large-scale continuity is brought about by the concealed recurrence. The final, actually non-existent deep-layer second-degree g^1 assumed in Burkhart's analysis indicates that the 3–2 *Urlinie* is imposed on the music. Theoretic prejudice aside, the seventh-degree e^1 – afforded by the large-scale “hidden repetition” as well as by the score – does the tonal job of providing the final treble note of a top-layer half-cadence just as fine.

A descending major/minor second is assigned great importance in Burkhart's analysis of Chopin's Nocturne Op. 15, No. 2 (Burkhart 1978, pp. 150–155), an analysis that in many ways is inspired by Schenker's reading of the piece. And neighbour-note motions do exert a strong and yet unobtrusive unifying effect in this piece: in addition to the initial $a\sharp^1-b^1-a\sharp^1-(g\sharp^1)$ motif, $(c\sharp^1-)-d\sharp^2-c\sharp^2$ turns up four times in the first sixteen bars; poignantly altered and reduced to a falling minor second, it crowns and then appeases the excitement of the middle section; it reappears as a major-second motion in mm. 49–58, and finally it gently persists as an unresolved dissonance in the coda, cf. Ex. 24.

It is also an interesting idea that the local *Urlinie* in mm. 1–2 may be reflected in the (interrupted) *Urlinie* of mm. 1–8: the b^1 in m. 4 heads a transposed version of the theme within this enlarged copy, a fact that suggests a kind of long-term neighbour-note relationship. On the other hand, the observation that the *Urlinie* in mm. 1–2 is replicated by that of mm. 1–16 (and by that of the entire nocturne) is trivial considering the hierarchic nature of Schenkerian theory.²⁷ But Burkhart is laudably clear when dismissing this kind of “automatic” recurrences: “*Ursatz* parallelism

27 Besides, mm. 9–16 is merely a varied repeat of mm. 1–8.

is virtually irrelevant to the subject of motivic parallelism, which focuses upon the ‘free’ and the unique rather than the general”. (p. 153)

But Burkhart also presents two large-scale parallelisms that emerge as much less convincing.

If the initial model is shortened to just the 3–2 descent, including the attached falling triad, this opening gesture may be taken to underlie the entire “new theme episode” mm. 17–24, but this time the transformation is more extreme both in terms of melodic diminution and harmonic progression, which makes for a tonal mismatch that cannot but severely affect the similarity. The note $f\sharp^2$, upper neighbour of $e\sharp^2$ (the third degree in the local $C\sharp$ -major tonality), is given four different harmonizations until it returns to $e\sharp^2$, being now the fifth degree in $A\sharp$ major; only then follows the descending triad. As a result, the $a\sharp^1-b^1-a\sharp^1-g\sharp^1$ neighbour-note/appoggiatura model from m. 1 collapses into just a twisted $e\sharp^2-f\sharp^2-e\sharp^2$ motion.

It is *à propos* this nocturne that Burkhart remarks: “It is obvious that the more one admits the possibility of divergence from the exact intervals of the pattern, the riskier the business of finding parallelisms becomes”. And he continues: “The most convincing cases are those that span clearly articulated formal units. I particularly emphasize the point that the uncovering of divergent copies requires particular attention to the harmonic milieu”. (p. 155) In the parallelism just discussed, it is questionable whether the initial model in m. 1, spanning a seventh and taking place over a $C\sharp^7$ chord, really constitutes a “clearly articulated formal unit”, whereas the copy in mm. 17–24 does make up a demarcated episode within the piece, but an episode that spans only a sixth due to the shift from $C\sharp$ major to $A\sharp$ major. This is certainly a new “harmonic milieu”, whose influence on the similarity is not accounted for although it invites to scepticism as to the validity of the parallelism. This “hidden repetition”, in which the “individual notes of a motive” “have a harmonic function in the copy different from that which they have in the pattern”, is perhaps more “risky” than “interesting”.

The rising-triad motif in m. 2, including the upper neighbour-note $d\sharp^2$, is boldly stretched so as to span from the top $c\sharp^2$ in m. 2 via m. 17/25 ($e\sharp^2$) and m. 33 ($g\sharp^2$) all the way up to the climactic $c\sharp^3$ s in mm. 39–41, a copy that subsumes the main theme section, the new-theme episode, and the middle section under one huge $C\sharp$ -major triad. This immensely enlarged hidden repetition of the rising-triad motif from m. 2, a copy covering mm. 2–39,

is far from literal since the compact model makes up a second-inversion F \sharp -major chord whereas the copy adds up to a widely dispersed root-position C \sharp -major chord. The would-be copy consists of notes having undeniable local prominence, and a rise from e \sharp^2 via g \sharp^2 to c \sharp^3 (a falling resolution from d \sharp^3) may perhaps present itself when listening to the middle section. But the c \sharp^2 in m. 2, topping its local triad, is too far-fetched, literally speaking, to connect to the first note of the new theme, the e \sharp^2 in m. 17, and to launch the huge C \sharp -major rising triad. And the listeners' attention might be distracted from the perceptible rise, starting only in the middle section, if the e \sharp^2 in m. 25 is thought of as being introduced already in m. 17, as Burkhart suggests.

It is possible that the idea of a hidden parallelism reaching back all the way to m. 2 might encourage pianists wanting to (or having already decided to) join the "new theme episode" and the *doppio movimento* section into a single central part of the nocturne. But is this a good idea, is it a good (and feasible) idea to somehow let the e \sharp^2 in m. 17 anticipate, prematurely announce, a rise that as far as one can hear starts only in m. 25?

In his discussion of Chopin's Impromptu Op. 36, Burkhart (1983, pp. 102–105) relies on a single interval to demonstrate a hidden relationship between a detail and the overall harmonic layout; cf. Ex. 25, a synoptic account of the motivic parallelisms.

Schenker and Burkhart are quite right when drawing attention to the strange transition to the F-major section resuming the main theme.²⁸ The chromatically falling sequence of inner-voice major seconds in mm. 59–61 does make for a precarious sense of continuity and may perhaps remind a listener of the very first d \sharp^1 –c \sharp^1 notes of the left-hand melody in m. 1. Later on, the falling minor second D–C \sharp in the bass leading into the F \sharp -major section starting in m. 73 is also regarded as related to the initial major-second motif. Furthermore, and certainly retrospectively from the listener's point of view, a minor-second relationship also obtains all the way from the bass D in m. 39 to the C \sharp in m. 73, "embracing the entire middle section of the work".

28 For a discussion of how to cope with this problematic transition, cf. Bengt Edlund, "Loyal disobedience. When is it OK not to play as written?"

The latter observation means that the similarity has become extremely attenuated – it is after all based on just two notes from the initial, but secondary melody in m. 1, an ubiquitous major-second model that is chromatically diminished to form a minor second and extended so as to serve as a harmonic bass link spanning no less than 34 bars. And does this huge falling semitone really manage to “embrace” anything from a tonal point of view? The D-major tonality introduced in m. 39 is replaced by G major in m. 53; in m. 61 the organ-point C representing F major takes over but its root is not heard until m. 67; from m. 69 the bass shifts to E standing for A minor, a local tonic that never appears in root position; in m. 73, finally, C \sharp turns up but it represents F \sharp major attaining root position only in m. 75. If “embracing” means something more than just framing in a very loose sense, can this bold tonal excursion really be tonally held together by a minor second made up of the root D and the non-root C \sharp ?²⁹

It seems far better to rely on local half-step connections; cf. the arrows in Ex. 25. The D in m. 39 as well as later on the C in m. 61 and (accepting a huge leap downwards) the E in m. 69 are approached by rising minor seconds, whereas the C \sharp in m. 73 is introduced by a restoring falling semitone.

The falling minor second extracted from mm. 39–73 and allegedly forming a “hidden repetition” exemplifies a kind of speculative connections sometimes encountered in Schenkerian analyses. When the formats are large and the ear is unable to fathom the music with certainty, you can claim just about anything. A less spectacular, but more accurate – a more meaningful, but less “embracing” – observation is that (as far as the bass is concerned) the modulating middle part of the impromptu is left just as it was introduced, namely by the same minor second. C \sharp –D is eventually undone by D–C \sharp , corresponding shifts that the listener may perhaps notice, and that you can bring out when playing.

Burkhart provides a further example of this kind: Schubert’s song “*Der Erlkönig*” (Burkhart 1978, pp. 157, 159–160). The prominent left-hand motif in the piano accompaniment – a rapid scale from the tonic up to the fifth, a quick visit to its upper neighbour, and then a falling triad – “also

29 Doesn’t mm. 39–72, heard in retrospect, recall what happens in the TV-series *Dallas*, when in “m. 73” Bobby (killed in an accident) after ever so many episodes just steps out of the shower?

appears as an enormous enlargement spanning virtually the entire song” by “treating several of its tones as temporary tonics”; cf. Ex. 26. Furthermore, “the rising keys, B-flat major, C major, and D minor, are exactly synchronized with the three increasingly insistent speeches of the *Erlkönig*”, although the third speech “instead of starting at once, is delayed until the sudden entrance of an E-flat major chord”, being “only the flat-II” within “the prevailing key of D minor”, a fact that makes the parallel “all the closer”.

This seems fairly acceptable, but how can you argue cogently against such a “hidden parallelism”, except by making a fuss about a missing second harmonic stage based on A. In defence, Burkhart claims that “it would be virtually impossible to elevate this note to the status of a tonic within the song’s basically quite conventional ‘key plan’”. Maybe so, but if the tonal layout of the song is “basically quite conventional”, this fact cannot but reduce the validity of Burkhart’s large-scale parallelism in terms of harmonic stages along a modulation route. On the other hand – and this argument (trivial as it is) perhaps makes up a better explanation – since Schubert was one *Erlkönig* speech short, one key simply had to be omitted.

But there is not very much that turns Burkhart’s discovery into an all-embracing “hidden repetition” in Schenkerian sense; observations of this kind have been made outside the Schenkerian tradition by various analysts. The various nature of the model and its copy render the *Satzprobe* criterion more or less irrelevant, but it must be admitted that the selected key areas are duly tonicized, and that the association between \flat as a complete upper neighbour-note in the left-hand melodic motif and $E\flat$ major as a member of a complete D-minor cadence makes some sense. Since the model and the copy are incomparable entities due to their entirely different functions and formats, and since it is all but certain what might count as a falsification of the proposed relationship, the validity criteria for this parallelism (and others of the same kind) will ultimately turn out to be subjective.³⁰ Whether or not you consider such recurrences credible and interesting depends on your attitudes to analysis and to music. Or, putting this in other terms: is your experience enriched by contemplating aspects of the tonal layout?

30 The only and ultimate verification of Burkhart’s hidden repetition would be to ask Goethe to add a further *Erlkönig* utterance to his poem and then to see how Schubert would revise his song.

Summary and discussion

Our critical investigation indicates that adherence to Schenkerian principles is far from an infallible safeguard against invalid, questionable, or far-fetched similarity relationships. Many of the proposed “hidden repetitions” did not score very high even by Schenkerian standards: many of them failed to pass the *Satzprobe* and/or the “same-description” and “layer contiguity/homogeneity” corollary requirements. It has also been shown that Schenkerian reduction is dispensable when it comes to detecting concealed recurrences – quite a few overlooked (or ignored) and yet substantial and musically meaningful parallelisms turned out to be present in the excerpts.

Furthermore, in some cases both the proposed model and its copy were made up of standard structural motions or standard diminutions of such motions, and just as when it comes to other conventional and/or minimal formulations, such trivial beneath-the-surface similarities tend to have little analytic validity and to carry little musical significance. To the extent that tonal music, as Schenkerian theory insists, consists of a hierarchy of simple structural motions and stock diminutions of them, “hidden repetitions” of this commonplace sort are bound to turn up all too often and will appear to be worn out as similarities.

While often neglecting other interesting recurrences, Burkhart and Rothgeb have mostly presented analytically contestable readings of little value. And they have again and again violated the very Schenkerian principles that they have proudly imposed upon themselves to follow – strict principles claimed to warrant methodological superiority – and that they urge others to adopt. This miserable outcome merits discussion, and along the route some tentative explanations and a not-so-tentative conclusion will be advanced.

Anyone familiar with Schenkerian analysis knows (or should know) that, at least when it comes to music of some complexity, the voice-leading connections recursively arrived at are seldom the only possible ones.³¹ Other

31 And further alternative readings are bound to turn up if the reductive criteria and top-down methodology characterizing Schenkerian analysis were abandoned in favour of more flexible approaches, if unprejudiced attention were paid to tendencies residing at the musical surface.

structural connections are conceivable, and they may be distributed differently onto the musical surface. Arguments for and against the various readings can be given, making the analyses appear more or less fitting or plausible, but sometimes the readings turn out to be genuine alternatives to each other, offering different and perhaps non-compatible insights into the music. A hidden subsurface recurrence is certainly an interesting feature, and therefore it is of course tempting to produce or settle for a reduction that brings it out, even if the analysis turns out to be a quite bad one by Schenkerian – or any – standards.³²

As is evident from the quotations in the introductory sections, both Burkhart and Rothgeb prefer parallelisms that are hidden in ways that require quite strained selections of notes in order to show up. And strained similarities are what Schenkerian theory may both supply and sustain. Its methodology offers devices and concepts that can be used to outwit the musical surface while purportedly paying respect to the tonal essence of the music; cf. for instance Rothgeb's willingness to accept motifs that "cut across formal boundaries, thematic entities, and voice-leading strata", and his *übergreifen* talk.

Indeed, bold discrepancies between surface and underlying structure is a ubiquitous and cherished characteristic of Schenkerian analyses that applies generally and not just when demonstrating hidden repetitions.³³ Far from indicating that there may be a serious methodological problem, or at least analytic failures, involved, radical discrepancies between surface design and alleged structure are often regarded as a merit of tonal analyses. Such

32 Burkhart (1978, p. 170) brings to attention a case where Schenker preferred one reading to another since the emerging structure reflected surface motifs more closely. The mutual dependence between concealed parallelisms and reductive choices is discussed at some length in Cohn (1992). Cf. also Bengt Edlund, "*An das ferne Verwandte*. Common Ideas, Ideas in Common", ch. 5 in the present volume. In this essay, dealing with Beethoven's song cycle Op. 98, are discussed various alleged similarity relationships, some of them presumably (or seemingly) relying on Schenkerian principles for detection and assessment.

33 Cf. Nicholas Cook, "Music Theory and 'Good Comparison': A Viennese Perspective", *Journal of Music Theory* 33(1989) 1, 117–141, and Bengt Edlund, "Schenkerian theory and better comparison: An out-of-the-way perspective", ch. 1 in "Questioning Schenkerism", Frankfurt 2015, Peter Lang Verlag

differences are considered to display the power of the composer's musical imagination as well as the potential of the theory, including the penetrating ingenuity of the analyst.³⁴ But it might of course happen that the potential of the theory is greater than the creativity of the composer.

"Hidden repetitions" by definition involve at least one subsurface layer, and Burkhart as well as Rothgeb claim that this fact grants Schenkerian reduction a privileged status as *the* analytical tool when it comes to discovering such similarities. In Schenkerian theory, the term "layer" refers to the content at a certain structural level emerging within a systematic and comprehensive hierarchical penetration of the tonal process embodied in a work or passage of music. This means that the idea of a subsurface layer is associated, not with just any selection of notes, but with "tonal reduction", a term implying that the selection is governed by strict principles, "ultimately those of basic counterpoint". True "layers" do not come about by just picking out whichever notes you want, and the conviction that the Schenkerian reductive approach occupies a place apart is therefore adduced as a hallmark of methodological distinction also when it comes to detecting subsurface recurrences.

But generally and frankly speaking, Schenkerian theory cannot claim any exclusive right to the idea of orderly or even defensible reduction – "reduction" now being understood in a wider sense as an analytic activity freed from normative constraints and from the duty to explain musical unity in terms of a prolongational hierarchy, ultimately built upon one out of a quite limited set of legitimate fundamental structures. Tones may simply have other meanings, functions, and potentials than those allotted to them in Schenkerian theory. The criteria regulating what makes up a permissible and meaningful reduction can and must always be reconsidered. Harmony and voice leading, ranking high within the Schenkerian methodology, can coexist on more equal terms with melody, rhythm, and formal articulation. And the reductive approach is there to be used for various analytical purposes, not just to demonstrate tonal unity.

34 A corresponding attitude is, for that matter, also to be found in, say, Réti's non-Schenkerian studies of thematic transformation, studies representing a kind of quests for similarities that Schenkerian analysts tend to consider as inferior.

Furthermore, it seems that a certain degree of analytic freedom is warranted when dealing with concealed recurrences, and hence that “note-picking” must not necessarily be considered an analytic weakness as far as finding similarities is concerned. In addition to the possible existence of genuine “hidden repetitions”, i.e. parallelisms involving “structural layers” in ways that satisfy whatever requirements Schenkerian theory may impose upon them, there are no doubt also subsurface (or partly subsurface) parallelisms of other kinds. And to demonstrate such similarities, some notes must be picked out and others be omitted – in a discerning and defensible way, but not necessarily according to the rules laid down in Schenkerian theory. We are, after all, dealing with products of creativity.

Apart from concealed recurrences that are true inter-layer phenomena in Schenkerian sense, why should “tonal” analysis be favoured, let alone be hailed as outstanding beyond competition or even be considered as infallible, when searching for parallelisms in general? To the extent that such (more or less) subsurface similarities involve configurations arising from the “free counterpoint” of the musical design, why should they always be best detected and assessed by means of an analytic method that is predicated on strict counterpoint, and that requires all similarities to pass the *Satzprobe* – by means of an analytic method devised to absorb and modify surface events and relationships in order to demonstrate the all-embracing presence of a certain kind of tonal unity? As long as we do not believe that the composers’ creative fantasy was entirely dominated and exhausted by efforts to unfold tonality by means of a hierarchic set of recursive prolongations, there is no reason to think that subsurface parallelisms as a matter of principle must be discovered and established by a method that primarily aims at describing the alleged workings of tonality.

It seems, then, that the claim of Burkhart and Rothgeb to the effect that Schenkerian analysis is (or must be) the privileged, indeed indispensable tool for the detection, demonstration, and evaluation of subsurface parallelisms (in general) must be rejected. There is no reason to subject every subsurface similarity to the *Satzprobe*, to make this Procrustean bed obligatory for all analysts. There is no reason why not non-Schenkerian approaches to reduction – or just musically discerning pitch selection – might be as adequate, rewarding, and safe a method when searching for concealed recurrences as Schenkerian analysis.

Rothgeb's criticism of David's *Jupiter* analysis

Rothgeb's critique (pp. 41–42) of Johann Nepomuk David's analysis of Mozart's Symphony K. 551 is clarifying, and also exposing, in many ways.³⁵ David claims that the second theme of the first movement “immediately uses all ten notes of the cantus firmus” of the fourth movement; cf. Ex. 27a. But Rothgeb does not hesitate to dismiss this similarity:

One need not refer to the lower voice [...] to sense that tones 5, 6, and 7 of the cantus firmus are represented in the music by incomplete neighboring tones (e*chappées* in their purest form), and that note 8 is represented by a passing tone. The theme by itself [...] makes clear that the upbeat to bar 5 stands for g, not a, and that the tonal succession in bars 5–6 must be heard as f–e–d, not g–f–e. A Schenkerian approach to the study of this music, without denying the possible relationship of this theme to other themes in the symphony, would disallow David's particular interpretation of it. A Schenkerian analyst who expected to find the whole cantus firmus in this theme would meet with disappointment and would be forced to abandon that expectation. (Rothgeb, pp. 41–42)

[Later on in the same context Rothgeb, partly echoing Schenker, continues with the following passage already cited:]

Because Schenkerian theory specifies the ‘*strictly logical precision of relationship*’ between simple tone-successions and more complex ones’, it supplies an indispensable testing ground for thematic hypotheses; more importantly, it promotes the hearing and identification of relationships wherever and however they may be manifested. (Rothgeb, p. 42)

It is quite evident that Rothgeb discards David's concealed parallelism because it does not pass the *Satzprobe*: four dissonant, harmonically non-supported notes are included in the contour of the second theme, and – it should furthermore be added – the copy is made up of notes from various structural layers. A genuine “hidden repetition” – i.e. a concealed parallelism in the Schenkerian, proper sense – consists of motifs that are founded on the fixed and undisputable principles of species counterpoint, on “the strictly logical precision of relationship between simple and complex tone-successions”, which in this case implies that only harmonically stable notes are allowed.

On the other hand, it must be pointed out that David's subsurface parallelism works quite well as a similarity association within the symphony;

35 Johann Nepomuk David, *Die Jupiter-Symphonie: Eine Studie über die thematisch-melodischen Zusammenhänge*, Göttingen 1960, p. 16

indeed, particularly the series of three dissonant “*échappées*” quite effectively marks the crucial notes for attention. Turning from perception to matters of creativity, and assuming for the sake of argument that Mozart first decided upon the last movement's *cantus firmus* and then wanted to prepare for it in the first movement. Why shouldn't he, creative and blissfully ignorant of Schenkerian theory as he was, have composed a second theme to be understood in the way that David's analysis suggests? Or for that matter, suppose that the second theme was composed first: can we exclude the possibility that Mozart heard it in David's way, and then came up with the idea to use its contour as a *cantus firmus* in the finale? In other words, it cannot be excluded that the notes singled out in Ex. 27a are the ones that “ought to be there”, if we had asked Mozart. The Schenkerian notion of permissible prolongation/reduction is tied up with strict counterpoint, but there is no reason to suppose that creative impulses are similarly constrained.

Hence, and if we stick to our intuition that the affinity demonstrated by David's ten-note common contour is a real and important one, it is simply not true that Schenkerian analysis “promotes the hearing and identification of relationships wherever and however they may be manifested”. Quite to the contrary, Schenkerian theory censors both ears and mind – ours as well as those of the composers – and forces us to ignore subsurface associations that, more or less hidden, are patently there. It turns out, then, that as a general method for detecting and validating similarities Schenkerian analysis is of limited value.

What would a theoretically unexceptionable first-movement copy of (or model for) the last-movement's *cantus firmus* look like? Well, in order to announce the fourth movement in a way that not even self-appointed Beckmesserian authorities on similarities can ignore, Mozart should have composed a second theme like the one shown in Ex. 27b – not a very good melody and not a very hidden allusion. It seems, then, that genuine “hidden repetitions” are likely to make up but a small fraction of the musically worthwhile subsurface similarity relationships. Schenkerian theory proudly claims a vast (but vacuous) realm of hidden repetitions; what it commands is merely the province of pedestrian products of prolongation. What else can you from people working in the spirit of the *Satzprobe*?

It should be pointed out that there is nothing wrong with Rothgeb's logic when he discards David's musically quite convincing similarity in terms of

common melodic contour. Given the intra-theoretic, quite pedantic and yet mistaken, Procrustean axiom that permissible selection of notes in order to identify subsurface recurrences is tantamount to impeccable tonal reduction ultimately heading for the *Ursatz*, Rothgeb's conclusion is in fact imperative. And imperative is also the regrettable consequence that the access to analytically reliable motivic recurrences, i.e. "hidden repetitions", is strictly reserved for the faithful who have seen the light.

"A Schenkerian analyst who expected to find the whole *cantus firmus* in this theme would meet with disappointment and would be forced to abandon that expectation". This pathetic abdication is necessary only for those who have registered a vow of chastity; on the other hand, such mortifications can be avoided if you consider sacrificing some of your most cherished analytic obsessions. Yes, the grass is greener beyond the fence, and if you are a horse stretch for it.

It has over and over again been found in this study that neither the *Satzprobe*, nor its corollary requirements prevent Rothgeb and Burkhart from establishing concealed parallelisms that "ought to be there" – often musically questionable parallelisms, as it has turned out. Taking his own practice into consideration, Rothgeb's dismissal of analyses, which like David's of the *Jupiter* symphony issue from another, less orthodox theoretic agenda, emerges as bullying criticism, and it is as devastating for his own credibility as a stone thrown in a glass house. What lacks in Rothgeb's attitude is not logic, but moral: reverence is combined with lip service. For the immaculate everything is clean, and the irreproachable is eager to administer the first blow.³⁶

Some comments on Cohn's essay

Before closing, some comments on Cohn's essay from 1992 are due. As its title indicates, Cohn's aim is to come to terms with the contradiction between the presence of autonomous motifs, including subsurface recurrences, on the one

36 Cohn (1992): "still others use Schenker's theory as a model for evaluating the work of others, but look to Schenker's analyses for paradigms on which to model their own analytic practice, heedless of the hazards of holding others to a standard that one does not oneself maintain" (p. 163)

hand, and on the other the core claim in (mature) Schenkerian theory to the effect that “the *Ursatz* alone is the source of compositional unity” and hence also “the source of motivic unity”. (p. 150) Leaving out of account a host of interesting and well-grounded points in Cone's argumentation, the outcome of his critical study agrees with the one arrived at in the present work. There is a gap between theory and practice, and the analysts do not always live up to what they teach – indeed, there are analysts (like Burkhart) who do not seem to embrace the Schenkerian core proposition whole-heartedly.

But Cohn proposes a move to close the gap:

The final option is to retain the analytic methodology, and the full power of Schenkerian analysis, but reassess the scope and status of the theoretical claims. This approach begins by acknowledging that [...] motivic relations create their own independent source of unity, interacting with the *Ursatz* hierarchy yet maintaining ultimate autonomy with respect to it. Motivic relations may still be congruent with voice-leading transformations in individual cases, [...] yet such congruences would no longer be deemed mandatory. To acknowledge the autonomy of motives is to abandon the proposition, so fervently held by Schenker in his final years, that the *Ursatz* is the sole source of unity. [...] Schenker's claim to have shown how all of the “secondary factors” fall under the control of the *Ursatz*, via harmony and counterpoint, must be regarded as misguided. (p. 169)

This is fine as far as it goes, but if the idea of making all “secondary factors”, including the “motivic relations”, subordinate to the *Ursatz* is “misguided” – doesn't this amount to a formidable mistake? – why bother about Schenkerian theory at all? To the present writer, who has seen many tonal reductions making him regret “the full power of Schenkerian analysis”, and to whom the idea of subordinating all “factors” to the *Ursatz* has always seemed unwarranted, unproductive, and claustrophobic, it appears to be a much better idea to make a fresh start and come up with a variety of reductive analysis that right from the start is less monistic, dogmatic, and top/down in its approach. Cohn's study is a bold and basic criticism emanating from an insider, whereas the present investigation comes from an outsider.³⁷

37 Cf. *Questioning Schenkerism*, Frankfurt 2015, Peter Lang Verlag. The present writer would, for instance, neither agree with Cohn's statement that “surely by now it is apodictic that most Schenkerian motivic claims are ‘musically real’, and that many are profoundly insightful about individual tonal compositions”,

But isn't there anything at all of value in the Schenkerian approach to subsurface similarities? Not much – excepting similarities discovered as by-products in the analysis – but if reduction is redefined so as to be a non-dogmatic technique relieved of the duty to prove tonal unity by demonstrating the presence of underlying *Ursätze* – which may be much more of a re-orientation than Cohn asks for – it might be of some relevance. Generally speaking, there is an interesting and important distinction to be made between similarities that are (mainly) a matter of surface affinities, and similarities that (mainly) reside in what in a wide, non-orthodox sense may be called middleground configurations. It is also obvious that an understanding of both local and long-range tonal connections – not necessarily the connections established in Schenkerian analyses – may often be crucial if subsurface parallelisms are to be fully understood and evaluated as elements in a compositional design.

Turning to the problem of verification/falsification, the tonal context and function of the selected notes are of course crucial when assessing the plausibility of subsurface resemblances. But the *Satzprobe* must be rejected since – if strictly and consistently applied – it makes for scant results. Subsurface similarities, being products of creativity, tend to vanish if the musical designs are washed with so powerful a detergent. Low-profile, non-Schenkerian reductive analysis – on the other hand – may be used as a complementary tool in the description and assessment of concealed parallelisms.

Much remains to be said on the topic of musical similarity, and the quest for reasonable methods of detection and criteria of assessment must continue. No wholesale answers can be given, as yet or perhaps ever, but two things seem certain: concealed recurrences are likely to defy uncovering as best they can, and the discovery of subsurface parallelisms will never go free from objections, will always have to be defended.

nor with assertions like “Schenker’s analyses are immeasurably superior to any produced before him” (Carl Schachter) or “Schenker’s theories are perfectly complete in themselves and thus require no modification” (David Beach) (Cohn p. 151). Outsiders are exempted from kneeling.

5 *An das ferne Verwandte*. Common ideas, ideas in common

“Of course, for a multitude of purposes and over many years countless musicological publications and other writings on music have discussed all sorts of recurrences and resemblances between pieces, but the absence of an accepted methodology has left this one of the least ‘scientific’ areas in music scholarship.”¹

“... so sind diese Ähnlichkeiten weder beabsichtigt noch zufällig, sondern unvermeidlich.”²

Being widely applied in various kinds of musicological investigations, the concept of ‘similarity’ is of paramount importance, and this fact turns the lack of methodological consensus into a serious deficiency. What we should search for in the first place is therefore not more recurrences of motifs or other musical material, but the rules according to which such recurrences are established – or rejected. One way to arrive at a set of principles regulating how similarities are to be assessed is to undertake thorough critical studies of how the quest for musical parallelisms has in fact been pursued in musicological practice. Such studies might also yield a better understanding of the different kinds of kinship that may be involved.

In the present study two investigations dealing with Beethoven’s song cycle *An die ferne Geliebte* Op. 98 will be scrutinized in order to lay bare the analytic methods used to discover similarities and to establish recurring formulations, which in turn are cited as evidence for more far-reaching conclusions. Needless to say, no final solution to the complex problems of musical resemblance will be offered, nor will any hard-and-fast principles be advanced that might control this vital methodological issue. But perhaps

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- 1 Christopher Hatch, “Ideas in Common: The *Liederkreis* and other Works by Beethoven” in Strainchamps & Maniates (eds.), *Music and Civilization. Essays in Honor of Paul Henry Lang*, pp. 56–77, New York 1984. The citation appears on p. 77.
 - 2 Heinrich Böll, from the preface of *Die verlorene Ehre der Katharina Blum, oder Wie Gewalt entsteht und wohin sie führen kann*, Köln 1974.

the following discussions may contribute to a heightened awareness of the pitfalls involved and to a revision of some analytic procedures.

Hatch: Recurring ideas

Issuing from a remark by Paul Henry Lang on Beethoven's methods of composition as they appear in his sketchbooks, Christopher Hatch studies the similarity relationships between musical "ideas" as they emerge in Beethoven's finished works, an undertaking that emerges as reasonable since "what the sketchbooks disclose, the works themselves also demonstrate".

The term "musical idea" is not explicitly defined. Hatch "searches out recurrences in Beethoven's work", and describes his method as "pragmatic": "fairly short configurations and progressions of tones are recognized provisionally as minimal musical ideas", and "for the sake of manageability" the quest for similarities is confined to pieces in the main key of Op. 98, E \flat major.

Theorists and analysts are said to be "skilled at tracing recurring ideas" while "every knowledgeable listener has on occasion noted that a given piece contains distinct echoes of others". Hatch regards these two observations as related to the subject matter of his own study: "Beethoven's reformulation of everyday musical ideas". His primary purpose is to "isolate and describe" a certain composition's "correlations" with other pieces, but he also wants to show how "correlated ideas reassert themselves" in the same work. "Behind all these instances – and outside this study – lies a question of ultimate interest: what causes an already expressed idea to resurface?"

This much about Hatch's points of departure and aims according to his introduction (pp. 56–57). We will now proceed to a critical discussion of the "correlations" that he asks his readers to consider.

Contours and inversions

The first set of recurrences involves the beginning of the first song from *Liederkreis* Op. 98, the song *An die Hoffnung* Op. 32, and the introduction to the first movement of the *Les Adieux* Piano Sonata Op. 81a (cf. Exs. 1a, 1b1, 1c1). According to Hatch, 1b1 and 1c1 share two traits that are also present in 1a: the harmonic progression I–vi and the descending parallel thirds b^1/g^1 – a^1/f^1 – g^1/e^1 . The latter two works also exhibit some further recurrent formulations

(cf. Exs. 1b2/1c2, 1b3/1c3, and 1b4/1c4), additional similarities summarized as follows: “sometimes the related ideas disagree in important respects”, and “yet the congruences between the several short passages come frequently enough to deserve passing mention at the very least, especially in light of their identical order and the correspondences in dynamic markings”. (pp. 57–59)

But the excerpts 1b1 and 1c1 feature quite exposed V chords that turn the following vi harmonies into deceptive cadences, while in 1a the vi chord just appears between I and ii⁶ in a cadence heading for V. And whereas in 1a the parallel-third descent takes place within the initial tonic, these thirds make up the right-hand essence of the cadences in the other two excerpts. It might furthermore be argued that only the initial two thirds from 1a recur in the piano figuration of 1b1, which just as well or rather brings the thirds $g^1/e^1-f^1/d^1-e^1/c^1$. And it is rather this lower sequence of thirds that turns up imperfectly in 1c1 – you have to accept a fifth instead of a third, and to recruit the bass note c to get the final “third” since the right hand actually plays a sixth; cf. the added brackets and lines.

The excerpts 1b2 and 1c2 do exhibit the same overall melodic contour, a similar overall bass movement from c to G, and the same dissonant suspension chord over G, but otherwise the differences are great indeed; cf. the hatched brackets. The stable harmonies and solid rhythm of the straightforward melodic rise and the simple trochaic ending of the sub-phrase from the song are musically incomparable to the threefold upbeat thrusts, the chromatic voice leading, and the accented final b_4^1 of the phrase from the sonata; the co-ordination between treble and bass is also different – the top note e^2 of 1c2 occurs over G, not over c.

The passages 1b3 and 1c3 also exhibit some similarities in melodic contour, but the differences are certainly great: 1b3 has several redundant bars, and it is subdivided into two melodic gestures, one short and one long, which turns the co-ordination between the two excerpts into a matter of choice; cf. the hatched brackets. Thus, the two passages of the song (1b2 and 1b3) cannot reasonably be thought of as parallels to the two fragments from the sonata introduction (1c2 and 1c3), of which the second begins by repeating the end of the first.

In 1b3 the two adjacent passages are linked by means of a common contour, involving a C-minor/C-major contrast, whereas 1c3 is extracted in a way that obliterates the second motto, i.e. the analysis misses the quite obvious and aesthetically crucial antithetic structure of the sonata

introduction.³ And it is not just the final deceptive cadences that are “quite divergent”; so are most of the other harmonies as well. Excerpt 1c3 begins by introducing dissonances over *g* whereas 1b3 features a major third topping a root-position C-major chord; the passing G-major/G-minor juxtaposition in the sonata introduction has disappeared in the song since the $b^{\flat 1}$ does not turn up in 1b3 until three bars after the $b^{\flat 1}$ as part of a second-inversion E \flat -major chord. On the other hand, the song excerpt does bring a culminating C-major/C-minor juxtaposition that bears some resemblance to the receding major/minor shift in the sonata. The “corresponding” dynamic markings are out of phase with the melodic similarities, and out of phase are also the form and the metre when the excerpts are compared. The insignificant g^1 in m. 20 of 1b3 is an unaccented note over a second-inversion chord embedded in a cadence while the “same” g^1 in m. 7 of 1c3 is the accented top note of the diminished seventh-chord starting the second motto.

The melody in 1b4 begins on c^2 and reaches e^2 whereas the similar, but disregarded, rising third in 1c4 issues from e^2 and heads for g^2 ; cf. the hatched brackets. The straightforward upper-voice descent $e^2-d^2-d^{\flat 2}-c^2$ in the song is reflected in the sonata introduction only if you pick out the initial and final notes from two clearly separated, sequenced motifs, and end up on c^2 . The harmonic progression of 1b4 differs significantly from that of 1c4.

Hatch further observes that “the tonal-modulatory circuits” in *An die Hoffnung* and in the *Les Adieux* introduction “have special significance” for the entire song cycle Op. 98. In the song Op. 32, C major is reached in m. 15, which happens in the fifth song in Op. 98 – and also (for a while) in the second song. The sonata introduction ends after sixteen bars with

3 In his Schenkerian analysis of the sonata introduction, Nicholas Cook (cf. *A Guide to Musical Analysis*, London 1987, pp. 86–87) joins m. 6 and 7 into a “single dominant upbeat” to the expected but non-realized E \flat -major chord in m. 8. But this reading seems quite far-fetched. The transition between m. 6 and 7 cannot reasonably be heard as anything else than a ripe dominant being deceived, and the unexpected quarter-note diminished seventh-chord suddenly arresting the motion on the first beat of m. 7 lets the listener (quite correctly) suspect that a second motto is about to come. Cook’s analysis of this introduction is commented upon and compared with that of Leonard B. Meyer in Bengt Edlund, “Prolongation vs. implication”, ch. 4 in *Questioning Schenkerism*, Frankfurt 2015, Peter Lang Verlag.

a shift from an $A\flat$ -minor triad to an $A\flat$ -major one whereas the third and fourth of the *Liederkreis* songs form an $A\flat$ -major frame around an episode in $A\flat$ minor. (Hatch p. 60)

These comparisons as to key sequence are made between a short and harmonically quite simple song and a short but boldly modulating sonata introduction, on the one hand, and a cycle of six connected songs on the other. This is hardly convincing, and the keys picked out by Hatch do not have identical positions or functions.

Hatch also points out that there is a resemblance between the sketch for the first vocal line in Op. 98 and the song Op. 32, and interestingly enough he gives two alignments of the sketch, of which one is described as “demonstrating an obvious similarity”, whereas the other shows “a much more far-fetched one”. (p. 59)

Indeed, the correspondence between the song excerpt in Ex. 2b and the sketch as shown in Ex. 2a2 is quite “far-fetched”, and one of the reasons is that the parallelism has the wrong pitch. As a result of this mismatch the common contour (if any) appears at different tonal levels above the $E\flat$ -major tonic.

The alignment 2b/2a1, approved by Hatch, illustrates quite well the kind of deviations that are sometimes considered to be acceptable when establishing similarities. The continued rise to $e\flat^2$ in 2a1, as opposed to the descent to g^1 , and then the following leap down to f^1 are not sufficient to overthrow the alleged resemblance in contour, nor is the absence in 2a1 of four harmonically important notes in the middle of 2b. The triad leading up to the $b\flat^1$ in 2a1 is lacking in 2b, presenting a stepwise motion eventually reaching $a\flat^1$. Is the 2b/2a1 similarity really “obvious”?

In order to demonstrate a similarity relationship between the sonata introduction and the first song from Op. 98, Hatch resorts to quite extreme manipulations. He starts with an internal parallelism in the introduction; cf. Exs. 3a and 3b – the brackets have been added. The chords on the strong beats in 3b are then picked out in the analytic reduction shown in Ex. 3c. Finally – after being suitably transformed by means of inverted counterpoint and transposition – these chords are shown to be present in the song, cf. Ex. 3d. Hatch formulates the relationships as follows: “by measures 12–16 of opus 81a the material of measures 9–11 will have been condensed and

the outer voices for the most part exchanged”; “transposed and reinverted, these chords sound much like the underlying harmonies in opus 98, song 1, measures 5–7”. (p. 60)

Turning first to 3a/3b, the resemblance is quite remote; cf. the brackets. The pitch-class identity of the four selected descending notes in the upper and lower voices in 3a and 3b, respectively, is hardly a very conspicuous trait. More noteworthy is the rising motion of the upper line in 3b, an ascent, spanning the diminished fifth d_4^2 – a^2 that obviously balances the previous descent from g^2 to c^2 in 3a.

The manipulation in 3c is entirely arbitrary, and it means that a plagal opening from the tonic to the first-inversion minor subdominant is exchanged for an authentic close from dominant to tonic – a formidable difference.

As to the relationship 3c/3d, the chords do not match convincingly. When resolved, the second pertinent chord in 3d makes up a diminished seventh-sonority, and the first chord is uncoordinated in a problematic way: the root of the $B\flat$ -major chord belongs to the closing dominant harmony of the song’s antecedent whereas its top note b^1 starts the melody of the consequent and is supported by d in the bass.

“A longer, if more veiled parallelism” is found between the second phrase in the first song from Op. 98 and the canzonetta *La tiranna* WoO 125. (p. 60)

The contour similarity between Ex. 4a and the essential notes of the florid passages in Ex. 4b is considerable, and yet it is doubtful whether this agreement between two $E\flat$ -major compositions makes up a correspondence worth considering. There are similarities in the bass parts too, although the important notes c and G are missing in 4b. But a more serious problem is the fact that these bass motions, conventional and devoid of melodic interest, only serve as a harmonic support; as evidence of a remarkable similarity relationship they are of little value.

The melody of the first song from the *Liederkreis* has a conspicuous feature: the sixth leap downwards in m. 3. But in the terzetto *Tremate, empi tremate* Op.116 (Ex. 5a) this falling sixth is not “noteworthy” at all since it is just a member of a conventional triadic motion supported by a tonic chord. The descending sixth in the initial melody of Op. 98 (Ex. 5b) is certainly more peculiar. The e^2 – g^1 sixth is first heard in the context of the $E\flat$ -major tonic until the c in the bass makes it ambiguous. As Hatch – and

Kerman⁴ – rightly observes, Beethoven exploits the possibilities of this interval when in later statements of this phrase he moves the vi chord forwards to the first beat of the bar, embedding the falling sixth within the C-minor chord. It is in virtue of this subtle potential for development that we may justify the characterization of this descending interval, *nota bene* as it appears in m. 3 of the first song of Op. 98, not only as “noteworthy”, but also as a “musical idea”?⁵

Deep-layer recurrences

In the terzetto Op. 116 “the opening of one section evidences strong rhythmic, melodic, and chordal similarities with the first nine measures of *An die ferne Geliebte*”, a fact that is said to emerge from two reductions which Hatch entrusts the reader to compare. (pp. 61–62)

But it is hard to find any substantial, musically valid evidence for the alleged resemblance. The simple chordal accompaniment on each beat in the terzetto has no counterpart in the *Liederkreis* song, cf. again Exs. 5a and 5b, nor have the trochaic sub-phrase endings occurring every second measure. The terzetto excerpt consists of a pair of two-bar units making up a complete cadence while the song starts with two four-bar half-periods forming three cadences, of which the first is directed towards the dominant and the two others (in the consequent) head for the tonic.

Far from giving support for any recurrent “idea”, the reductions 5a and 5b highlight the difference in complexity and design between the two passages. The melodic similarities are restricted to the notes b^1 , e^2 , g^1 , and a^1 appearing early on in the melodies, although in quite different contexts. Especially the a^1 's have divergent harmonic functions – in 5a this note resolves an appoggiatura over a IV⁶ chord whereas it acts as a neighbour-note over a root-position vi chord in 5b. The reductions demonstrate that the sub-surface motions of the two passages are completely at variance with each other. The balanced sub-phrases in the terzetto set

4 Joseph Kerman, “*An die ferne Geliebte*” in Alan Tyson (ed.) *Beethoven Studies I*, New York 1973, pp. 123–157.

5 Another noteworthy “idea”, the deceptively harmonized horn call in mm. 1–2 of the first-movement introduction of Op. 81a, is botched in a similar manner when it is taken to correspond to mm. 1–3 of Op. 98, No. 1; cf. Exs. 1a/1c1.

up two complementary implications in contrary motion, e^2-f^2 in the top register and b^1-a^1 , a^1-g^1 in the main register (cf. the added arrows); tendencies that are entirely absent in the first song of Op. 98.

Reduction is even more important in Hatch's endeavours to demonstrate a similarity between Op. 98, No. 1, mm. 1–9 (Ex. 6a) and two fragments from the variation movement of the Piano Trio Op. 1, No. 3, namely the beginning of the third variation (Ex. 6b) and the close of the second (Ex. 6c). Using Hatch's words: "here the whole strophe of song 1 is mirrored in the earlier work"; "in diverse ways the beginnings of all four phrases embody the same idea"; "in it a top-voice motion of scale steps 5–6–(5)–4 proceeds concurrently with a progression from I to II or IV"; "the appearance, in either the melody or the bass, of the bracketed C–D–E \flat , whose rise is coordinated with the top-voice neighbor C, serves to ally the phrases". (pp. 62–64)

The reductions appear in Exs. 6ar and 6br/6cr, respectively; the alleged common idea is shown in Ex. 6d. The (far from obvious) resemblance between the excerpts 6b and 6c is readily explained by the design of the movement's theme: its closing phrase associates back to its initial phrase.

Inspecting first the surface of the excerpts, the bass progressions in the second half of 6a and in 6c are identical, and it is also possible to extract from the rapid treble passage in 6c a contour resembling the contour of the melody of the consequent in 6a; cf. the added brackets and hatched brackets. But the antecedent of 6a does not have very much in common with 6c and particularly not with 6b. The ascending third "C–D–E \flat " cannot be considered very important for the proposed resemblance, and it is absent in 6b. In m. 2 of 6ar, it brings an expressive melodic rise, whereas in mm. 6–7 of 6ar and in 6cr it appears in the bass and merely brings a shift within a tonic chord.

In the antecedent of 6ar it is not convincing to describe the c^2 in m. 2 as an incomplete neighbour-note. In the local context its passing-note character is quite obvious, and a b^1 to complete the neighbour-note motion does not turn up within the entire half-period. It would be more plausible (on a level spanning the whole period and in order to find a comprehensive tonal connection) to assign neighbour-note status to the c^2 's in m. 4 – fourth-degree notes that are left out in Hatch's reduction, cf. the added

note – since they may perhaps be heard as connecting the b^1 's starting the antecedent and then the consequent. The note a^1 in m. 3 does not have an obvious descending structural relationship with the initial b^1 as shown by the beam in 6ar; its local context reveals that it is an upper neighbour-note to the surrounding g^1 's.

Turning to the reduction of the consequent of the song excerpt, the local neighbour-note c^2 in m. 5 is upgraded to a high-level neighbour-note in relation to the preceding b^1 and the b^1 occurring as the very last note in m. 6 in spite of the fact that the latter note is itself a local neighbour-note to the immediately surrounding a^1 's. It rather seems that the b^1 in m. 5 (perhaps harking back to m. 1 by means of the upper neighbour-note c^2) is connected to the a^1 in m. 6, a note that starts another local neighbour-note motif (cf. the added brackets) as well as pursues a descending deeper-layer line. The note a^1 in m. 8, needed to finish the “common idea” 6d, does not appear over ii or IV, but turns up transiently as a seventh (immediately falling to a fifth) over a V chord.

To sum up, the reduction of the song is at variance with Beethoven's music, and it does not even match Schenkerian standards.

The b^1 added by Hatch to the first I chord in Ex. 6br treacherously strengthens the function of c^2 as a neighbour-note (which is needed for 6d) by supplying a note to depart from; concurrently, an apparently transposed g launches a questionable supporting parallel motion in the tenor voice. There is no soprano b^1 over the tonic (only an appoggiatura b^1 over a IV chord), nor is there any g in the tenor. But there is a g^1 in the alto voice, and it is obvious that the fragment 6b/6br is in fact made up of four barely subsurface voices engaged in parallel downward motions as shown by the added lines.

In 6cr the upper neighbour-note c^2 is arbitrarily preferred over the lower neighbour-note a^1 when the common shape 6d is derived, and just as in the consequent of Ex. 6a the closing a^1 (or rather f^1) occurs over a V chord.

Thus, the allegedly shared idea shown in Ex. 6d is severely undermined, and it is particularly damaging that the neighbour-note function of c^2 is questionable in all four passages. Apart from the shortcomings of Hatch's reductions, one might also ask whether a sub-surface 5–6–(5)–4 motion is not too common a coin in tonal music to make up a “musical idea”.

Recurrent ideas within the cycle

In the first period of Op. 98, No. 1, the complementary character of the phrases is brought out both by the “obviously balanced cadences on V and I” and by “the matching use of descending thirds”. Thus “phrase 1 fills in the intervals B–G and A–F, while phrase 2 does the same with the ‘intervening’ C–A \flat and B–G”; “furthermore, phrases 1 and 2 are paired by the presence of free inversions. [...] Simultaneously the bass of phrase 2 outlines the original melodic shape”. (p. 64)

The four, systematically scrambled, descending third progressions are in fact quite different; cf. Exs. 7a and 7b. The first one is to be found in the initial gesture of the accompaniment, while the last one is made up of the swift, inconspicuous upbeat to the second sub-phrase of the antecedent. The intermediate descending thirds stem from the sequence making up the first part of the consequent; the first of them is actually finished at a \sharp^1 . Anyway, both these “thirds” are most likely to escape notice since we certainly prefer to hear the passage starting the consequent as a sequence of neighbour-note motions issuing from b \flat^1 and a \flat^1 , respectively.

It is highly implausible that Hatch’s four descending thirds (having also entirely different metric positions) would be picked up by a listener, and even more improbable that they would be understood according to the scrambled/nested sequence shown in Ex. 7b. There is simply nothing in the music inviting you to put them together in this temporally non-consecutive order – why should anyone dislocate the “second” third a \flat^1 –g \flat^1 –f \sharp^1 ? The only reason to propose the arbitrary arrangement 7b is apparently to arrive at a pattern similar to the “common idea” shown in Ex. 6d, and 7b is just as hypothetical and unwarranted.

Turning to the element of imitation in terms of inversions, cf. Ex. 7cr, the melodic contour in mm. 1–3 is admittedly a conspicuous melodic gesture. But its alleged inversed counterpart in the treble of mm. 5–7 is highly questionable. The melody of the consequent does not begin with the insignificant eighth-note c 2 but with the emphatic b \flat^1 , the ensuing falling motion is divided into two surface motifs, and it ends with a rising leap that is a “dead interval” occurring across a phrase demarcation. Nor is the proposed imitation in the bass convincing since it is just heard as a harmonic fundament. Furthermore, its rising fourth is obscured by an internal quasi-repetition,

and the first note of this would-be imitation, being the root of a closing V chord, belongs to the antecedent.

The piano prelude introducing the last, sixth song of *Liederkreis* “everywhere reworks the phrases of song 1”. Furthermore, a balance between the two halves of the prelude is achieved by the fact that “an answer is given to the opening four falling parallel thirds by the later four rising parallel sixths”. As to the descending parallel-third motion itself, it “ultimately derives from measure 1–2 of the cycle”, but it is also “prepared by the close of the preceding song”. (pp. 65–66 and p. 70)

There is no reason to deny the existence of an extended, free and yet metrically straightforward contour similarity between the first and sixth songs in *Liederkreis*, cf. Exs. 8a and 8b (showing the piano prelude of No. 6), and this resemblance no doubt has an important unifying function in the cycle. But the derivation of the parallel descending thirds in mm. 1–2 of the sixth song from mm. 1–2 of the first song is much less convincing; cf. the added brackets. In 8b the pertinent three thirds belong to a parallel motion of *four* harmonically decisive thirds underlying the whole first phrase, while in 8a the *three* thirds are disposed of during the first melody note b^1 , an E_b -major note which is not included in the thematic contour otherwise common to both 8a and 8b. Or, simply put, 8b starts with an extra, subdominant third (tenth) c^2/a^b *not* present in the initial, subordinate three-member descent in 8a.

The obvious reading of 8b is that the $b^1-a^1-g^1$ descent embedded in mm. 1–2 fills in the “noteworthy” e^2-g^1 falling sixth in 8a – a quite substantial difference. And it is far better to hold that the four parallel tenths beginning the sixth song derive from the falling-fourth motifs that repeatedly round off the fifth song; cf. the added brackets in Ex. 8c. This similarity is somewhat veiled due to the change of key and the altered tonal degrees, but the final alto descent $a^1-g^1-f^1-e^1$ is immediately followed by the $a-b-g-f-e$ bass motion starting the next song and supporting the $c^2-b^1-a^1-g^1$ contour of the upper line. This quite moving link presents itself readily to the listener.

According to Hatch, the initial sequence of descending parallel thirds/tenths starting Op. 98, No. 6 (Ex. 9a) belongs to a family of similar configurations. The trait amounts to “a method of enjambment between sections or movements” that consists of “embarking on descending parallelism from the

subdominant at the joining”. It can also be found in the String Quartet Op. 127 at the beginning of the first movement (Ex. 9b), in the Piano Trio Op. 1, No. 3 at the start of the third variation of its second movement (Ex. 9c), and in the Piano Sonata Op. 13, the third movement mm. 79–82 (Ex. 9d). (pp. 67–68)

The agreement as regards this particular structural trait between 9a, 9b, and 9d is substantial, whereas 9c does not quite fit in with the description since it in fact opens in the tonic. It is possible that Hatch within his E \flat -major domain of Beethoven’s output has discovered, perhaps not a “musical idea”, strictly speaking, but a non-trivial individual habit of forming. But more investigations are needed in order to establish this finding as an aspect of Beethoven’s style – the habit amounts to an initial undermining of the tonic by turning it into the dominant of the subdominant – and still more studies must be undertaken to establish whether Beethoven was the only one to make use of this trick. After all, parallel thirds, sixths, and tenths in descending as well as ascending sequence are quite frequent progressions in tonal music, and they are likely to occur in connecting (and starting) contexts as well as elsewhere.

But one cannot always be certain whether the first chord in such passages is in fact a subdominant – it may also, depending on the context, appear as a tonic. This is clearly the case in the A \flat -major episode from the sonata Op. 13 (9d) as well as in the third *Liederkreis* song (cf. Ex. 9e), where the very same parallel voice leading is to be found in m. 5 (and 7). The latter passage cannot reasonably be heard as a motion from IV to I since it is the third bar within a four-bar half-period, in which the first phrase has clearly anchored the music in A \flat major, and since the second phrase obviously leads to the E \flat -major dominant. And turning to 9a, the beginning of the prelude to Op. 98, No. 6, the situation is ambiguous. In this case the listener is likely to identify A \flat major as the tonic for at least two bars, an impression that may last even longer. The introduction of E \flat major as an unequivocal tonic seems to be postponed until m. 8, where it is just touched and then immediately left for a new start in A \flat major.

As to the *Pathétique* Sonata, it should be pointed out that the melodic idea from the Rondo (9d) makes up a quasi-citation of the second part of the *Adagio* theme; cf. Ex. 9f.

Mediated recurrences

“There is much in common between this early song *Maigesang* and the piece that evinces the greatest likeness to the opening song of the *Liederkreis*, namely, the slow movement of the Piano Trio Op. 1, No. 3. [...] The harmonic, intervallic, melodic and motivic parallels between the two are patent. [...] The path runs from *Maigesang* to the theme of the variation movement of Opus 1, No. 3, thence to its variations, specifically nos. 2 and 3, and finally to the first song of the *Liederkreis*. No one would claim that Opus 52, No. 4, and Opus 98, No. 1, use the same music, yet they are linked in a way the slow movement of the trio demonstrates better than any description or analysis could”. (pp. 71–72)

But the fact of the matter is that the relationship between the two songs turns out to be virtually non-existent; cf. the brackets in Exs. 10 a/d.

Already the similarity between the *Maigesang* strophe and the trio theme is quite far-fetched as can be seen in 10a and 10b. According to Hatch two short fragments (x and y) from the harmonically conceived bass voice of the song appear in the theme of the trio. Thus, the x four-note motif from the bass of the antecedent of the song is to be found, with one interpolated note, in the melody of the antecedent of the theme, and also, transposed, in the bass of its consequent. The y motif, an even more rudimentary three-note bass motion extracted from the consequent of the song, reappears transposed in the melody of the antecedent of the theme, and it also turns up, again with one interpolated note, in the bass voice of its consequent. It is hard to accept that these criss-cross, non-exact correspondences contribute significantly to any noteworthy resemblance.

The arrows mark melodic intervals in the song that Hatch considers to be important also in the trio. But as to the e^1-g^1 interval, an accented a^1 is interpolated in the trio, and the harmonic context is different. And when it comes to the c^2-e^2 and d^2-c^2 intervals from the song’s consequent, they belong to a quite conventional local descent from the fourth degree. The most convincing similarity occurs at the start of the consequents, where one can find roughly the same combination between the y motif in the bass and a rising-third motif (z), not observed by Hatch, in the melody.

This combination, although the b^1 now appears over an additional e^1 in the bass, is perhaps present also in the closing bars of the second variation

in the trio (10c) – if the three notes needed for the z motif are extracted from the right-hand figuration, and if it is considered proper to use a fragment of a harmonically conceived bass progression to provide a thematic counterpoint. But if one picks out other notes from the right-hand figuration, there is also a correspondence with the y-motif starting the melody of the antecedent of the trio theme (10b). The latter similarity is actually more convincing since it is not arbitrary – the selected treble notes in 10c are all accented, and the accompanying bass notes, while being far from exactly identical with those in 10b, nevertheless represent the same harmonic functions. This agreement is most likely to be intentional – as already pointed out, the beginning of the variation theme is similar to its conclusion; cf. Exs. 6b/6c.

But neither of the two selections from the right-hand figuration serves to produce the melody when it comes to the similarity between the conclusion of the trio variation and the third phrase of the first *Liederkreis* song (10d), featuring motif y in the bass. To this end, still another set of notes has to be arbitrarily picked out from the florid treble of the variation; the recurrence, if any, may in a very loose sense amount to an inversion of the z motif.

The trio movement, composed 1794–95, the same year as the *Maigesang* but more than twenty years before *Liederkreis*, can be disregarded since it does not establish any connection between the two songs. If the consequents of 10a and 10d are directly compared with each other, it appears that the similarity is reduced to four notes of a non-thematic bass progression (motif y extended by one note) providing harmonic support for the chromatically altered and inverted motif z, bisected to form a sequence. In other words, the association virtually comes to nil.

“As to the sixth song of the cycle, its descent of thirds from an opening subdominant finds an echo at the beginning of *Maigesang*. [...] A further kinship with song 6 reveals itself in measures 6–8 of *Maigesang*. Here the music matches what is perhaps the most telling stroke in Opus 98. Despite the discrepancy in expressive force, the two passages occupy similar places in that both are approached by a cadence on the dominant and both are implicated in an elision of phrases”. Furthermore, the beginning of the slow movement of the Fourth Symphony exhibits “momentary agreement” and “transient likeness”, respectively, with the two songs. (p. 72)

First a few words must be said about the piano prelude to *Maigesang* Op. 52, No. 4 (cf. Ex. 11b) bringing an exquisite expansion of the quite simple vocal melody (cf. 10a). It is important to observe that the four-note rising motif *c* starting from f^1 in m. 4 – a motif that in the vocal line makes up the first part of a regular four-bar consequent – is immediately repeated from $b\sharp^1$, as well as to discover that this second motif *c* represents both a transition and the concealed start of a variation of the prelude's antecedent. The varied antecedent is eventually extended by three extra bars, and it gradually assumes the character of a consequent; cf. the added brackets.

The initial similarity in harmony and parallel-tenths voice leading between the sixth *Liederkreis* song (Ex. 11a) and the *Maigesang* prelude (11b) is obvious – but the melodic contour (motif *a*) starting 11a is more convincingly found in the varied repeat of the prelude than in the original statement of this motif since the motion from $b\flat^1$ up to e^2 is included. It should also be pointed out that as a result of the overall melodic correspondence between the first and sixth songs of Op. 98 (cf. 8a/b), the melodic contour in mm. 1–4 of Op. 98, No. 1 (cf. motif *b*) can also be found in mm. 6–9 of the *Maigesang* prelude (11b).

It may be questioned, however, whether there is any “elision” in mm. 6–7 of 11b that makes for a “kinship” with mm. 26–27 in Op. 98, No. 6 (Ex. 11e), and that also “agrees” with the slow movement of the Fourth Symphony mm. 4–6 (Ex. 11d). To the extent that the c^2 in m. 7 of the *Maigesang* prelude betrays a double function, it does so only in retrospect. The slurs do indicate a sequence of four-note motifs issuing from downbeats, but they hide another, perceptually more salient sequence of four-note motifs starting with upbeats (motif *c*). The tempo is quite fast, and mm. 6–7 are likely to be heard as a single $B\flat$ -major seventh-ninth dominant chord, a fact that obscures the sense of a beginning at c^2 .

Nor does the symphony fragment 11d feature any elision. After the root-position $B\flat$ -major chord comes a chromatically introduced, stressed and acutely anacrusic, applied-dominant G-major chord, followed by a deceptive *subito piano* A-major chord. Turning to the sixth song (11e), the exposed m. 26 forms a quite slow chromatic upbeat sliding upwards, continuing the harmonic motion back to $A\flat$ major along the circle of fifths. Due to the restored tempo in m. 27, the theme seemingly interrupts what is actually already achieved by the c/c^1 at the end of m. 26: the re-modulation

to the subdominant A \flat major.⁶ Granted that there are similarities between 11d and 11e – they have a chromatically rising treble motif and a bass motion B \flat –G–A \flat in common – the excerpts 11b, 11d, and 11e feature important harmonic and syntactic differences, and none of them suggests much of a sense of elision.

Matters of similarity and mediation

There are very few hints as to what Hatch considers to be too great discrepancies when establishing (or just suggesting) similarities between musical passages. While he does not seem to approve of relationships where the notes occupy different tonal degrees, cf. 2b/2a2, he frequently accepts passages where the allegedly corresponding notes have altogether different rhythmic and metric positions, are supported by other chords, or serve other melodic functions.

Why the latter differences do not matter is not explained, and yet this analytic policy is far from self-evident. At least if “musical idea” is taken in its current, emphatic sense, it is necessary that some important musical properties remain reasonably intact and combine to produce a recognizable and analytically demonstrable formulation. Even if virtually anything may be changed in a creative process, a “musical idea” cannot survive several substantial deviations or reversals in tonal, harmonic, rhythmic, metric, and formal respect.

Some of Hatch’s recurrences involve a clearly exposed melody on the one hand, and a conventional bass voice serving as harmonic fundament on the other. Such similarities are far from obvious when listening, and they become very attenuated when the agreement is approximate. A missing, additional, or altered note in a melody does not necessarily change it very much, whereas “corresponding” deviations in a bass motion are likely to entail great, even decisive, differences in the harmonic progression.

Furthermore, the use of conventional bass lines to establish similarities is problematic in itself. Since they often depend on various structural

6 It may be argued (cf. later on in this essay) that the melody of the *molto adagio* bar in 11e belongs to the theme of the sixth song in *Liederkreis*.

constraints – rather than being deliberately formed – they do not make up “musical ideas” in current sense, and some bass sequences are so conventional and ubiquitous that recurrences involving such motions tend to be trivial beyond demonstration. Unless they are supported by further qualifying traits, or fit in with a comprehensive and convincing scheme of observations, such bass progressions should be disregarded when searching for recurrent formulations. Obviously, similar restrictions apply also to other conventional aspects of the musical design such as certain frequent voice-leading configurations like neighbour- and passing-note motions, and parallel thirds/sixths.

Particularly in one case (cf. 10 a/d), Hatch establishes a similarity relationship by means of a mediating composition. It did not work out well since each more or less questionable similarity along the route absorbed and accumulated differences until finally the affinity between the first and the last link of the chain had virtually disappeared. The criteria of similarity must be quite rigorous if this kind of reasoning is to be used at all, and one should abstain from mediated similarities unless the works in question can be plausibly associated with each other on the basis of some sort of external evidence. Identity is a transitive category but similarity is not.

Recurring ideas and tonal reduction

Hatch sometimes resorts to reductive graphs in order to bring out resemblances. At first sight these reductions strongly recall Schenkerian analyses, but they expressly serve another purpose: “The schematized ‘graphs’ are given not in order to present the only or the best analytical interpretations but to highlight similarities between passages”. (p. 57) While this purpose (given the general aim of his study) is of course legitimate, the quality of the “analytical interpretations” cannot be that easily disposed of since the procedure is potentially misleading.

The aim of Schenkerian reduction is to extract unifying deep-layer “tonal” structures, and this entails that surface events are retained or left out, respectively, in certain (actually more or less) principled ways that have come to be accepted – or rather that are accepted where Schenkerian analysis prevails. But it has been shown here that Hatch often selects

notes with little regard to their “tonal” importance, and that the motions thus extracted are not truly structural. His reductions do not attain Schenkerian standards, and this is also what he frankly admits in the citation above.

Hatch borrows the graphic style and sometimes also the terminology of Schenkerian theory – and its prestige – without adopting the rules of the game. The notes selected to make up a certain layer in a hierarchical Schenkerian graph (rightly or wrongly) lay claim to represent tonally important events and connections in the music. But this is often not the case with the notes that Hatch picks out; it just looks as if they did. His notes are extracted to “highlight similarities”, and so they do (rightly or wrongly), but with a false, usurped authority.

Turning to a more general consideration, it must be questioned whether the use of Schenkerian analysis (even if correctly applied) is appropriate when ideas in common are searched for – provided that a shared “musical idea” is understood as the recurrence of a recognizable formulation, as involving reasonably exact correspondences between melodic, rhythmic, and harmonic traits. The purpose of Schenkerian graphs, properly achieved and properly understood, is to transcend surface configurations in order to show deep-layer “tonal” motions that are structurally fundamental in the sense that they are supposed to underlie and govern the surface events. Schenkerian theory deals with tonal conventions that are so fundamental that (if Schenker is right) nobody, not even Beethoven, escapes them, but “musical ideas” hardly refer to such basic structures.

That composers work within and cultivate tonal conventions (those of their own time as well as those used for centuries) is both true and trivial, but it is doubtful whether searching for recurrences, “ideas in common”, is a feasible approach if the aim is to study the very fundamentals of music. Scattered observations of similarities are not very satisfactory as evidence when it comes to the nature of tonality. And it seems that the opposite holds true as well: analyses aiming at the prolongational structure of a piece of music are not very productive when looking for recurrent formulations, for “ideas in common”.

It may be argued that the function of Schenkerian analysis – or for that matter of other, less orthodox and yet respectable varieties of reduction as

well – in the search for recurrent “musical ideas” is not to extract the similarities as such, but rather to provide structural backgrounds to which the similarities, if any, can be related and against which they may be assessed.⁷

But it appears (cf. below) that Hatch *is* interested to find, perhaps not fundamental tonal motions in Schenkerian sense, but other deep-rooted conventions in Beethoven’s works. It might be argued, however, that it is all too easy to find similarities, “correlations”, of this kind within as well as outside E♭ major if the analytic methods are licentious. It must therefore be maintained that in order to be valid, the demonstrations of deep-lying recurrences must be based on correct, i.e. reasonably strict and defensible, but not necessarily Schenkerian, reductions. If you are obsessed by the idea to establish similarities between passages in English poetry by searching for, say, occurrences of subject and predicate in inverse word order in declarative sentences, it is imperative to parse the sentences correctly. Likewise, a quagmire of musically dubious “correlations” impends if analytically questionable recurrences of fundamental motions or other conventional sub-surface tonal patterns (or parts of thereof) are accepted as valid.

Consider the reduction shown in Ex. 12r as a stage leading to the basic “idea” shown in Ex. 6d. After all, 12r appears to be at least as reasonable a prolongation of the structure 6d as the reductions 6ar, 6br, and 6cr. (Actually, the upper line in 12r is a better reduction of the melodic details of its musical surface; cf. below.) But, accepting for the sake of argument Hatch’s reductions, why speak about similarity and “ideas in common”, when what these four musical fragments – and no doubt countless others – actually exhibit is a “common idea”, i.e. a very frequent motion, a tonal cliché. In Schenkerian terms it can be described as a fifth degree prolonged

7 Cf. the graphs 13ar, 13fr, and 13gr. In order to prevent misunderstandings, it should be declared that the present writer is not willing to grant Schenkerian analysis any precedence as regards the discovery of musical similarities. Nor does he think that Schenkerian theory makes up a complete and infallible guide for what is permissible when it comes to reduction – no matter whether the purpose of the exercises is to strip off “prolongations” in order to establish deeper structures or to select notes in order to demonstrate resemblances. The problematic relationship between Schenkerian analysis and quests for similarity is discussed in Bengt Edlund, “Hidden repetitions and uncovered parallelisms”, ch. 4 in this volume.

by its upper neighbour-note and then descending to the fourth degree.⁸ But suppose that we interrupt these reductions before reaching the common ground 6d, and instead locate the “ideas” to the elaborations, do not all four reductive graphs (if we accept them as correct representations) rather disclose *different* musical ideas?

But the musical surface yielding the reduction 12r happens to be by Mozart: the beginning of the slow E \flat -major movement of the Piano Sonata K. 333, cf. Ex. 12. But, given the logic of, and extending the aim of Hatch’s investigation, this fact does not amount to an impediment. Commenting on a (contestable) resemblance between the last *Liederkreis* song and Cherubino’s aria from the first act of *Le nozze di Figaro*, Hatch points out that “both pieces signal at the earliest possible moment the importance of the sixth degree by having it as the note through which the vocal line first disturbs the tonic triad”. (p. 74) The 5–6–5–4 idea is certainly common.

The nature of similarity relationships

When breaking off his investigations, Hatch writes: “Without a clearer definition of musical idea, an atomistic jumble of observations threatens. Surely Paul Lang, in speaking of Beethoven’s recurrent ideas, meant something less rudimentary than most of the fragments referred to and exemplified above. Maybe such bits of music should be denied the designation *idea*”. Yet Hatch insists: “Still, the resemblances pointed out do exist”, although not without qualifications – “Given the number of works by Beethoven and the limits of his style, are such parallels inescapable and revelatory of nothing other than their own existence?” (p. 76)

This is fine, but how can we avoid establishing “parallels” that, as the case may be, appear strained, arbitrary, coincidental, trivial, or inescapable? How can we distinguish interesting recurrences from meaningless affinities? Perhaps at least one part of the solution to this problem can be found if we clarify, transcend, and take very seriously an earlier statement in Hatch’s

8 Leonard B. Meyer aptly calls such shapes “schemata for the instantiation of the rules of tonal music”; *Style and Music*, Philadelphia 1981, University of Pennsylvania Press, p. 51.

essay: “The degree and nature of the relationship can only be discovered by assaying the instances of parallelism one at a time”. (p. 57)

If we split the concept of ‘parallelism’ into ‘similarity’ and ‘kinship’, we realize that there is a dialectic interdependence involved, and that, contrary to much analytic practice, it is necessary to set out from a clear notion of the nature of the kinship in order to assay the degree of similarity. For this reason, it will not do to “provisionally recognize” as “musical ideas” almost anything that seems to recur – as Hatch does most of the time. The fundamental problem with his study is therefore not that he does not strictly define what a (recurring) “musical idea” is, but that he tells us so little about what his similarities stand for in terms of kinship.

Hatch sometimes deals with resemblances between fragments deriving either from the immediate musical context or from the same movement or work, but he is particularly interested in similarity relationships obtaining between works that “cover a wide range in terms of both chronology and genre”. (p.57) But no matter whether the compared excerpts are close to or remote from each other in Beethoven’s large output, and regardless of what the musical nature or function of the recurrences may be – as understood by implication – his methods of analysis and his criteria of similarity (whatever they are) seem unmodified.

Thus, in the manipulations shown in Exs. 3 a/d, the first exchange/inversion demonstrates a parallelism between mm. 9–11 and 12–16 of the *Les Adieux* introduction, whereas the second exchange/inversion/transposition shows a correlation between Op. 81a and the *Liederkreis* song Op. 98, No. 1. The former relationship is far-fetched whereas the latter simply emerges as absurd, and it is at least partly the remoteness of the involved passages in the second case that gives rise to the difference in credibility.

It is obvious that the criteria as to what should count as sufficiently similar to a great extent must depend on how we interpret the association. For this reason the discovery and critical assessment of musical recurrences can never be an undertaking without conditions. The credibility of a “correlation” does not only depend on the degree of affinity. Ultimately the validity of such findings must be rooted in prior decisions governing both the analytic procedures and the criteria of similarity, and these decisions cannot be divorced from what we think of the association. “The nature of the relationship” is not something that “can only be discovered” by assaying

the instances of parallelism one at a time”; having formed a notion of the nature of the recurrence is a prerequisite that we must bring to the music under study, a prerequisite that must be independently decided upon *before* the similarity is evaluated.

It should reasonably make a difference, for instance, whether we deal with two adjacent passages within a closed context, or with two excerpts from different works of the same composer. In these two cases, a “musical idea” means a formulation which has at least some structural individuality, and which we might take notice of while listening, or refers to a formulation that a composer might perhaps have cultivated during his long-term creative process, respectively. Having decided this much as to the nature of the association, we have at the same time introduced some constraints on the analytical work and/or the criteria of similarity.

As a general methodological rule it may be stipulated that the methods of uncovering recurrences and the criteria of similarity must match the relationship between the musical objects concerned as well as the purpose of the comparison, and that these matters must be decided upon before “assaying” the parallelisms. When it comes to recurrences claimed to be of aesthetic importance and appearing within more or less immediate musical contexts, it seems reasonable to require that the similarities in principle should be possible to appreciate when listening to the music. For other kinds of recurrences, both within and between works, the crucial point may be what we consider to be plausible elements in a creative process, generally as well as in the case of a particular composer. If the similarities are to be credible, we must be wary not to resort to analytic devices that (perhaps) outsmart the composer.

The idea of the recurring idea

Turning finally to the primary object of Hatch’s investigations, the “ideas” turning up in various works by Beethoven, it is evident that this broad field calls for quite rigorous precautions. The parallelisms, if any, may appear on at least five levels of intentionality, each of them requiring a matching set of rules for discovery and assessment. The recurrences might be intentional quasi-citations, results of contagious motivic inspirations, peculiar idiosyncrasies of the composer, stylistic habits of a more general

kind, and elements of tonal convention, but Hatch does not tell us which of these alternatives that applies in the various specific cases. The phrase “Beethoven’s reformulation of everyday musical ideas” (p. 56), used by Hatch to circumscribe his main topic, indicates that he deals with recurrences on a fairly low level of intentionality and with musical formulations with little individual substance.

Whereas the more or less immediate musical context, i.e. the movement and the work, provides a natural frame within which it seems reasonable to search for similarities and to accept fairly bold analytic devices when establishing them, the vastness and arbitrariness of a whole output (or even an E_b-major selection from it) invites to scepticism. When parallels are sought for across “a wide range in terms of chronology and genre”, a wary analytical approach is necessary, unless external evidence can be adduced that joins the works involved into families within which recurrences are plausible.

But Hatch does not tell us why he brings these very works together, nor does he mention any circumstances that might have warranted his sometimes quite extreme analytic artifices. Implicit reference to Beethoven’s prolonged and painstaking process of composing is too general; bold analyses of the kind Hatch presents will not appear credible unless we know that a sustained compositional effort actually links the works in question together.⁹ Sketchbooks may supply evidence of a persistent creative impulse, but a haphazard collection of completed works does not. In order for a scribble to be a sketch, it must with some certainty be associated with a particular work, but there is no reason why completed works should be associated in this way – unless of course particular circumstances can be adduced making one work preliminary or otherwise related to another.

Hatch’s peculiarly Janus-faced essay on similarities within and especially around Beethoven’s song cycle Op. 98 certainly exposes the methods that musicologists use when establishing musical similarities. It provides both a suitable material for scrutiny and an illustration of the necessity of a critical engagement in this methodological issue. There are some passages in Hatch’s

9 Families of associated works could in principle be established using purely analytic evidence, including recurrences. But this would require a more systematic effort than the one offered by Hatch.

text, like the one initially cited, that indicate that he is aware of the problems involved, but many of the parallelisms actually presented in his study are provocatively bold or, frankly speaking, devoid of credibility. And his aims are so vaguely framed, his results so disparate and ambiguous, that also the question of the nature of the alleged similarity relationships is actualized.

Whereas the tendency here has been to dismiss most of the “correlations” proposed by Hatch as either trivial or implausible, there should be no doubt that the present writer considers “intentional self-references, conscious or unconscious” [!] as well as the “repositories from which music is drawn” to be both worthwhile and feasible objects for analytic study.¹⁰ But in order to be able to present valid results it is a methodological necessity to distinguish between them. They certainly exist, the already-used ideas as well as the commonplace tonal formulas, inextricably mixed up in the composers’ minds, awaiting their moment of recurrence.

Reynolds: Thematic recycling

The article by Christopher Reynolds provides a contrast to that by Hatch.¹¹ Although two other Beethoven works are discussed as pertinent forerunners with respect to a certain thematic technique, Reynolds’s investigation is restricted to internal relationships in Op. 98, and his observations of motivic similarities are integrated within and supported by a context involving structural matters as well as the poetic content.

To some extent this context derives from the very observations that it supports, but this does not necessarily imply that a vicious circle is involved – it rather illustrates the dialectic nature of many studies of thematic relationships. When motivic affinities take on a systematic character, when

10 An example showing that “ideas in common” in the sense of common ideas can be studied with methodological rigour is Robert O. Gjerdingen’s *A Classic Turn of Phrase* (Philadelphia 1988, University of Pennsylvania Press), dealing with the double descending leading-note “archetype”. Turning to quite another field, “Suing a sound-alike”, ch. 7 in the present volume deals with ideas in common, common ideas.

11 Christopher Reynolds, “The Representational Impulse in Late Beethoven, I: *An die ferne Geliebte*”, *Acta Musicologica* 60(1988), 43–61. (Part II of this essay, published in the following issue, is a study of the String Quartet Op. 135.)

the transformations of the musical material begin to disclose a scheme, more or less convincing observations already made seem to be strengthened, and further parallelisms are demanded. The analytic evidence adduced for each particular similarity and the corroboration of the comprehensive plan turn interdependent.¹²

After having studied the thematic process in Op. 98, Reynolds arrives at the conclusion that the song cycle is strongly integrated both by thematic variation/transformation techniques and by the fact that the pattern of thematic recurrences matches important aspects of Jetteles's text.¹³

In short, five motifs are extracted from the first period of the first song (cf. Ex. 13a) and – excepting the initial top-voice motif (1) which is saved for the beginning of the sixth song – these motifs in turn provide the thematic substance for the intermediate four songs. (Exs. 13 b/e) After the third and fourth songs, whose melodies are closely related (cf. motifs x and y in 13 c/d), the thematic fragments begin to coalesce. The fifth song's initial motif (cf. 13e) derives from the closing octave descent in the theme of the first song, and it is followed by transformations of the main motifs from the second, third, and fourth songs. This thematic “recycling” continues in the sixth song (Ex. 13f) where all motifs can be found in due sequence. Indeed, by means of two specific devices the motivic integration attains a higher level in this last song. The entire initial period from the first song recurs – the cycle is closed in a *da capo* manner by an almost exact repeat of this material. Then the coda (the crucial part of which is shown in Ex. 13g) brings a reordering of the motivic material in a way that fulfils a latent tendency present already in the first song, a reordering that emerges as significant with respect to the symbolic content of the work.

12 The present author has published a study on recurrences of *Dies Irae* in Chopin's works, “Allusions and affinities. Tracing an ominous motif”, ch. 1 in *Chopin. The Preludes and Beyond*, Frankfurt 2013, Peter Lang Verlag. As always, those standing outside the glasshouse are invited to throw stones.

13 Beethoven's song cycle has also been studied by Joseph Kerman. He deals extensively with Jetteles's text and elucidates Op. 98 by bringing in evidence from Beethoven's sketches. As regards the completed work, Kerman's findings and conclusions are largely consonant with, although not as far-reaching and systematic as the observations made by Reynolds.

Most of the recurrences found by Reynolds are indicated by brackets in 13a/g; some supplementary observations to be made by this author are also shown; cf. the dashed brackets.

In what follows some critical remarks and alternative readings will be advanced. The present study will close with a (slight) revision of Reynolds's interpretation of the song cycle's musico-literary content.

Songs 1–5

Generally, the similarities found by Reynolds are based on substantial agreements between extended, non-trivial motivic ideas and the overall scheme, suggesting that the recurrences are to turn up at specific places in the cycle, seems convincing. It may appear that accepting Reynolds's motivic similarities and dismissing most of the "correlations" proposed by Hatch is unfair to the latter. Whereas it may be argued that Hatch's analyses are in fact more precarious than Reynolds's, generally speaking, the main difference lies in the nature of their endeavours. Reynolds keeps his observations within one and the same cyclic work, and therefore the bar for meaningful recurrences may be set lower. The themes of the song cycle Op. 98 emerge as the result of a persistent and continuous creative effort, and hence the motivic similarities are neither a question of what "the sketchbooks disclose", nor of what "the works themselves demonstrate", but of what this particular work reveals.

As regards the similarities between the first song and the four intermediate ones, two remarks will be made.

While the inconspicuous falling-third motif 1a from the first song is present in the second song and also turns up in the fifth song, it is rather the composite rising-then-falling-third motif z that functions as a thematic gesture in the latter two songs. This fact somewhat weakens the claim that motif 1a – originally a subordinate piano complement to the repeated b^{\flat} 's starting the vocal theme of the first song – is a unifying motivic constituent within the cycle.

Whereas motif 3 from the first song is distinguishable in the fourth song (the bisection of the motif is somewhat concealed and yet preserved), its presence in the fifth song is not altogether convincing. Reynolds's presentation of the relationship between the fourth and the fifth song

runs: “Both are comprised of two half-phrases sequentially related by step, and both separate the notes of the original motive with leaps down a third, leaps which have become fully triadic in the fifth song. The strongest connection, however, is the underlying contour of each phrase. In the fourth song the essential movement is a step up a second and then down a fourth: e^b, f, e^b, d^b, c . In the fifth song the downward fourth remains the same, but there is an extra note added at the beginning: d, e, f, e, d, c ” (p. 50) But it may be argued that one important trait of motif 3, as it originally emerges in the consequent of the first song, is the falling step between its two sub-phrases; in the fifth song the rise up to f^2 , however important it is for the melodic contour, disturbs the sequential organization of motif 3.

The sixth song

Turning to the sixth song, crucial for the overall thematic scheme of the cycle, Hatch’s derivation of motivic similarities, called for by the words *Nimm sie hin denn, diese Lieder*, seems somewhat more strained than in the fifth song, in which no such assembly of motifs is required by the text.

When the melodic line is first presented, motif 1 is robbed of its initial b^1 ’s. They do not turn up until m. 26 – cf. 13f showing the theme and the bracketed bar introducing it – and there the b^1 is still kept away from the melody to follow due to the slowing down of the tempo, the rise to b_4^1 , and the fact that the text is repeated. According to Reynolds “Beethoven constructs the opening phrase not simply by filling in the leap of a sixth, but by joining Motives 1 and 1a in a different configuration, combining them into one melodic line instead of placing one in the vocal line and the other in the accompaniment”. (p.52) From the listener’s point of view it might be argued that since no motif 1 has as yet been heard in the sixth song – the initial b^1 ’s are missing, and the key seems to be A^b major – there is no motif-1 sixth to fill in. The motif-1a motion $b^1-a^1-g^1$ may be heard as a falling third balancing the preceding rising third $c^2-d^2-e^2$.

As to motif 2 “the original descent from a^b is removed, bumped by the a^b and g that now end the first phrase”. (p. 52) Perceptually, this description is entirely to the point – for harmonic and textual reasons these two notes belong to motif 1. And the omission of the initial particle a^b-g^1

from motif 2 does not appreciably affect the overall similarity – the triadic fifth motion $f^1\text{--}a^1\text{--}c^2\text{--}f^1$ in the first song is now filled in. But in terms of the motivic process the two crucial notes are at least ambiguous, and to the extent that they still belong to motif 2 there is not much left of motif 1a.¹⁴ The net result of these observations is that the filling-in function of motif 1a is somewhat undermined. But its status as a prominent motivic constituent of the sixth song is obvious – it occurs frequently in the first part of this song, although it does not always exhibit a filling-in function. Thus (as Reynolds observes, cf. below) motif 1a provides a falling motion in the last bar of 13f, and so it does in the following short echo in the piano part.

In the second half-period Reynolds gives but little room for motif 3. Starting from c^1 , it is “intimated” at accented positions in the alto voice of the piano accompaniment, and then it is answered by the singer, giving “his own bare-bones version of the motive, a diatonic fall from c to g that manages to include Motive 1a”, an association that, “as we are to discover in the coda, is neither coincidental nor gratuitous”. (p. 52) And no room at all is allotted to motif 4 in the vocal line; this motif is saved for the *da capo*. But more convincing, perhaps, than Reynolds’s piano-then-voice occurrences of motif 3, is the possibility to think of the whole four-bar unit as an expanded (and eventually curtailed) repeat of the preceding rising-then-falling fifth of motif 2, a reading that obliterates the “bare-bones version” of motif 3 but not necessarily the more patent motif-1a constituent within it. Looking ahead (mm. 17–21), the melody set to the beginning of the next stanza brings a further, *ritardando* variant of motif 2, this time being robbed of a part of its ascent and halting on a tonally alienated G-major g^1 .

14 The fact that the motion $b^1\text{--}a^1\text{--}g^1$ is ambiguous with regard to the motivic organization does of course not rule out that Reynolds may be right when reading these notes as a statement of motif 1a. The workings of a masterly mind like Beethoven’s, inclined to engage in intricate structural transformations, cannot be traced with certainty. But if the presence of motif 1a in the initial phrase of the sixth song is accepted, it is (as will be argued later on) more reasonable to proceed from the coda to the song, rather than the other way around.

An alternative motivic organization of the entire theme of the sixth song at variance with the one proposed by Reynolds seems to emerge: the theme may be understood as consisting of three similar ascents/descents, one for each sub-phrase in the 2+2+4 metric scheme. The second and third of these motions issue from f^1 and reach up to c^2 whereas the first one starts at c^2 and proceeds up to e^2 before falling to f^1 . And still another such motif p , as we will call this varied gesture closely related to motif 2, begins the second stanza of the song. It is noteworthy that this reading of the theme of the sixth song does not need any added starting note – instead of supplying the b^1 required to produce motif 1 in its entirety, *m.* 26 can be taken for just what it is, namely a prolonged upbeat. It should also be noticed that this reading takes account of the prominent subdominants: all c^2 's occur over $A\flat$ -major chords. Understood in this way, the vocal theme of the sixth song becomes quite different from the theme of the first song, motivically as well as tonally; cf. the reductions 13ar and 13fr of the first and sixth songs, respectively.

The piano introduction of the sixth song (cf. 8b and the added upper notes without stems in 13f), featuring a variant of the second half-period, is left out of account by Reynolds. It can readily be seen and heard that the first part of motif 3 begins at the proper moment and at the correct pitch, and also that an incomplete and slightly embellished variant of motif 4 finally turns up. But another reading of the consequent also presents itself. Since there are b^1 's in profusion in the piano part from *m.* 5 on as well as a step-wise ascent from b^1 to e^2 followed by a descent to g^1 , the entire second half-period may also be taken to represent an expanded recurrence of motif 1 – which after all perhaps did make up the consequent's first phrase. In *mm.* 5–8 the missing b^1 's are restored, and the falling sixth is completely filled in.

The last four bars of the piano introduction, from which Beethoven took and transposed *mm.* 5–6 a fourth down to form the corresponding bars of the vocal theme, features an extended $B\flat$ -major seventh-chord and eventually leans quite strongly towards $E\flat$ major. For this reason the motivic organization of the vocal theme in terms of three “sub-dominant” occurrences of motif p (or motif 2) does not contradict the alternative account of the motivic content of the piano introduction just proposed, a reading featuring framing statements of motif 1 so as to enclose motif 2.

The coda

Keeping in mind that the first vocal period as well as the piano introduction of the sixth song admit of motivic schemes at variance with those advanced by Reynolds, we now proceed to the coda, which according to Reynolds's analysis represents the union of motifs (lovers) having so far been kept apart. The text of the *da capo* portion of the song as well as the coda reads: *Dann vor diesen Liedern weicht, was geschieden uns so weit, und ein liebend Herz erreicht, was ein liebend Herz geweiht!* His argument (p. 52–55) runs as follows. The melodic substance of the coda theme is spanned by a transformed motif 1, whose falling sixth is filled in by motif 3, just as the descending sixth of motif 1 in the theme of the sixth song was filled in by motif 1a: i.e. by motifs essentially made up of the same notes b^1 – a^1 – g^1 and having the same function; cf. 13g. Furthermore, and turning back to the first song of the cycle, the close relationship between motifs 1a and 3 is “musically corroborated” by the motivic exchange indicated in 13a: just as motif 1a first complements motif 1, motif 1 (minus its first note) then supplies the bass for motif 3, being a transformation of motif 1a.

Considering first the coda theme, cf. 13g, the dual observation that motif 3 has approached what appears to be the head of motif 1, and that motif 1 as a whole appears to incorporate motif 3, can be accepted without recourse to the first phrase of the theme of the sixth song, cf. 13f, which according to Reynolds represents a preliminary stage of the left migration of motif 3 (or right migration of motif 1a). Since there is in fact no initial b^1 in this melody, since there is perhaps no motif 1a in its first phrase but rather a motif p, and since the coordination between the motifs and the levels of diminution in the theme of the sixth song and in its coda differ substantially (cf. the reductions 13fr and 13gr), the reference to the theme of the sixth song does not prove very much with respect to the crucial motivic juxtaposition in the coda theme, nor as regards the assumed functional kinship between motifs 1a and 3.

If one compares the theme of the first song and the coda theme of the sixth song (cf. 13a and 13g and also the reductions 13ar and 13gr), the alleged union of motifs is clearly seen. Instead of being accompanied by motif 1a, i.e. being divorced from it since it appears in another voice, motif 1 now embraces motif 1a in the form of motif 3, which in the first song

was divorced from motif 1 by the intervening motif 2. This makes symbolic sense whereas Reynolds's "corroboration" in the first song is less convincing: motif 1a is coordinated with the three b^1 's, not with the ensuing rising motion $c^2-d^2-e^2$, later supposed to be used as the $c-d-e$ counterpoint to motif 3 *alias* motif 1a. But neither this corroboration, nor the union of the questionable "bare-bones version" of motif 3 and motif 1a towards the end of the vocal theme of the sixth song 13f appears to be necessary. There is already a substantial and sufficient similarity between motif 1a and motif 3 in the theme of the first song, and the difference between them (motif 3 is bisected into two four-note units) is slighted by the correspondence as to melodic function – both these descending motions prepare for the entry of e^2 by increasing the leap up to this top note.

Substituting motif 1a for the three b^1 's, one might in the first song postulate an alternative motif 1' along with motif 1, and it might be a variation of motif 1' that turns up in the second half-period, incorporating motif 3 and (most of) motif 4; cf. 13a. If this description is accepted, the theme of the first song is made up of the motifs 1', 2, and 1' forming a 2+2+4 bar structure recalling the similar make-up of the theme of the sixth song, especially if mm. 5–6 of this song are read as in the piano introduction, cf. 13f and 8b. Indeed, if the three b^1 's are taken away from motif 1 in the first song, the following five notes, motif q, turn up as the initial nine-note phrase of the sixth song. In this light, the stepwise motion up to e^2 in the latter song is of course all but subordinate, and the ensuing motion $b^1-a^1-g^1$ gains in importance – but not as a displaced motif 1a from the first song. For if the motif-1a-like last bar of the piano introduction is allowed to serve as both a conclusion and a beginning (cf. 8b and the notes without stems in the first, added bar of Ex. 13f) – it certainly works as a beginning in m. 35 – the vocal theme of the sixth song might after all be taken to start with motif 1'. But this occurrence of a "motif 1a" before e^2 seems to speak against the idea that it also occurs displaced after it, filling in the descending sixth.¹⁵

15 This does not preclude that motif 1a is present in this theme and plays an important role in the cycle, producing (and perhaps representing) the second song in the overall thematic layout.

Evaluation

As already pointed out, Reynolds's study makes up an investigation, in which the observations of recurrences within a work and the discovery of the systematic nature of these recurrences are mutually dependent. When it comes to critical assessment, you can often not make up your mind whether the similarities gradually revealed the scheme, or whether at a certain point the scheme took over, encouraging the search for further, supporting recurrences. Whereas empirical methodology enjoins us to engage in unbiased bottom-up processes of inquiry, there is no doubt also a scope for top-down understanding as a heuristic device: the emerging scheme prompts the investigator where to look and what to look for. The risk involved is of course that of forcing the musical facts.

Some minor flaws, possibly due to top-down inspiration, have been found in the scrutiny of Reynolds's analysis. The credibility was somewhat strained when for systematic reasons traces of motif 3 had to be found in the fifth song, and the emerging plan of the cycle may have caused Reynolds to observe certain traits, and to ignore others, in the theme of the sixth song. And his readings of the themes of the first and the sixth song – biased by the cherished (and for that matter entirely acceptable) similarity relationship between motif 1a and motif 3 – seem to have had consequences for the way he describes the main tendency and the representational aspect of the motivic layout of the song cycle, an account that after all is perhaps not the optimal one; cf. below.

It appears that the obstacle eventually sung away in the coda may rather be motif 2 – which in the guise of motif p perhaps dominated the vocal theme of the sixth song (cf. 13fr). But it is not claimed that the alternative similarity relationships proposed by the present writer and the somewhat different representational scheme soon to be advanced are correct or better than what Reynolds offers. When it comes to great works of art, positive final views are seldom attainable and perhaps not even desirable. The point of laying bare the profusion of possible similarity relationships in these songs is to expose the ambiguities often encountered when searching for musical affinities, and to demonstrate how an emerging scheme might influence the analytic observations.

Reynolds presents the aim of his investigation quite clearly – thematic passages within a cyclic work are studied in order to find out whether they

disclose any “representational impulse”. This explicit statement of purpose is a great asset. The reader knows the author’s intentions, and it is intimated what Beethoven might have been up to. The nature and functions of the similarities are stated with precision, and granted some background knowledge about Beethoven’s methods of composing, the proposed scheme of motivic recurrences, and the “story” it suggests, can be critically assessed by the reader.

... was geschieden uns so weit

Having by now turned the motivic kaleidoscope around to the point of causing dizziness, it remains to ask whether the symbolic content suggested by Reynolds is intact. Yes, it still applies, but since the motivic agents have been partly exchanged and given other functions, the story has to be slightly adjusted.

Thus, when the singer in the first stanza of the sixth song utters the words *Nimm sie hin denn, diese Lieder, die ich dir, Geliebte, sang*, he refers to the previous songs, but also to the piano introduction just played. It contains, like flowers in a bouquet, allusions to all the other songs of the cycle. And the words of the third stanza *Und du singst, was ich gesungen* may also be understood quite literally as a presentation of the ensuing *da capo* citation of the first period of the first song, the motivic repository of the cycle.

The text underlying the first three phrases (motifs 1, 2, and 3) of the *da capo* reads *Dann vor diesen Liedern weichet, was geschieden uns so weit, und ein liebend Herz erreicht*, and this is also the text of, and a foreboding of what will happen in, the coda, made up of the iterated motif 1 (the second statement lacks the releasing descent from d²) and motif 3. What separated motif 1 from motif 3 in the first song as well as still in the sixth song, namely motif 2, is thereby identified, removed, and replaced by a second, insisting motif-1 gesture. (This interpretation cannot but be strengthened if one takes motif 2, *alias* motif p, to permeate the vocal theme of the sixth song as shown in 13 fr.) Whether this union with a motif that was remote is best understood as something incomplete being completed – motif 3 brings the arrested motif 1 to relative closure – or as something empty being filled – motif 3 completes the stepwise descent from e^{b2} to g¹ – is a matter of one’s notions of love.

The association of motif 3 with motif 1a seems to be an unnecessary complication that weakens the final twist of meaning by anticipating it. If this similarity is underscored, a quite intimate, accompanying union is in fact established already in the very first bars of the cycle, and what happens in the theme of the sixth song is that motif 1a has been moved from a position before e^2 to a position after it, a change that prematurely discloses the crucial and quite obvious juxtaposition of motif 1 and motif 3 in the coda. The lovers have to bide their time until the proper text turns up announcing that the divorcing motif 2 is gone.

6 *Warum Grillen?*

Warum?

The one asking in Schumann's *Phantasiestücke* Op. 12, No. 3 is apparently the gentle Eusebius, and he asks over and over again – and in vain.

Let's begin by studying the first four bars of *Warum?* cf. Ex. 1. After visiting the lower neighbour-note, the melody ascends from the tonic note d^2 to e^2 , then it takes a run from below to arrive at f^2 . This gesture leads from first-degree stability to third-degree openness, and its upward motion agrees with the rising intonation that we are prone to associate with questions. Turning to the harmony, it proceeds from a second-inversion $E\flat^7$ chord (in hindsight it brings the dominant of the dominant) via the root-position $A\flat^7$ dominant to the $D\flat$ -major tonic – a closing progression born out of the air, groping for and gradually attaining stability.

Hence, the theme opens while it closes; it suggests a question while instilling confidence. Or is it perhaps confidence itself that is questioned? That these four bars, like an enigmatic poetic formulation, keep a subtle ambiguity can be shown by destroying Schumann's delicate balance between uncertainty and affirmation. Replace his harmonic approach to the tonic by the safe and circular progression $D\flat-A\flat^7-D\flat$ (Ex. 2a). The result is trivial, an all too prosaic start for a piece called "Why"? And it would be even more detrimental to begin with an unequivocal assertion: combine the harmonic circle of the anodyne accompaniment just proposed with a melody falling from f^2 to d^2 (Ex. 2b). Another way to ruin Schumann's stroke of genius is to add a stupid $D\flat$ -major upbeat (Ex. 2c).

The fact that the right-hand thumb is to play under the left hand in mm. 3–4 makes Schumann's formulation even more exquisite. Why? It is not just a matter of sound quality or even of the comfortable feeling in the right hand when the little finger supports the thumb: the thumb seems to prompt the answer by breathing the note from which it will issue. For the following, resuming phrase may reasonably be understood as an answer to the initial question – it starts in the same way with a neighbour-note motion, but appears in a deeper register and closes with a falling, asserting inflection. But when the answering phrase is completed, its harmonic basis

has changed: the answer emerges as provisional, as valid only under circumstances that no longer match those applying when it started. Just as the question was undermined by the cadence to the tonic, the answer is undermined by the harmonic progression.

This pattern persists throughout the piece. Questions (Q) and answers (A) alternate in a never-ending dialogue. But there is also an element of change as the difference between question and answer is gradually obscured. At the start of the middle part, an alto-register answer is due, but a more urgent, F-minor variant of the question turns up, and its “answer” appears in the bass, but however affirmatively it starts, it ends by suggesting the rising inflection of a question. And two bars later the question, now steeply rising and most insistent, is immediately repeated, perhaps suggesting that there is no answer beyond the question. The music ends (rather than closes) with the initial question, furtively introduced over an answer that comes to nothing.¹

Grillen

Turning to the next, fourth piece of *Phantasiestücke*, it appears that the question is promptly answered *Mit Humor* by Florestan, Schumann’s other and very passionate, sometimes boisterous *alter ego*; cf. Ex. 3a. The theme of the preceding piece is readily identified as $db^1-c^1-db^1-eb^1- -ab-f^1$ in mm. 1–3, and in the left hand the initial bass notes $B-A-Db$ of *Warum?* unmistakably recur at accented positions.² Considering this similarity, clearly emerging in the treble and the bass, as well as the change of mood, one cannot but understand the beginning of the fourth piece as a self-confident response to the question starting the preceding piece. Later on, the initial, lower neighbour-note constituent of the seminal phrase in *Warum?* perhaps turns up as a mocking motif in the accompaniment; cf. Ex. 3b.

The titles of the two pieces provide further and decisive evidence for the allusion and a clue to the extra-musical message involved. The fourth piece

1 When returning to start the repeat, it may be a good idea to slightly bring out the f^1 in the last bar so as to prepare for the renewed F-minor question.

2 I am of course not the only or first one to have noticed this two-voice allusion to *Warum?* For another detective, cf. below.

of Op. 12 is called *Grillen*, a title that should not be translated by “whims”.³ The French word “chimères” is slightly better, and yet it does not quite hit the mark. In the present context the word “*Grillen*” rather means “fixed, unwarranted ideas” for the crucial thing about this lost-in-translation issue is that “*Grillen*” does not describe the content of *Grillen*, but makes up a comment on *Warum?*.

Just as the theme of the fourth piece derives from that of the third, the meaning of *Grillen* cannot be properly understood without reference to *Warum?* Indeed, since the thematic similarity establishes an associative link from the fourth piece back to the third, the message in *Grillen* is even better captured by the title “needless brooding”, as in the idiomatic German expression *Grillen fangen* which one may use about a person bent for getting hung-up on imaginary problems. Apparently, the outspoken Florestan summarily dismisses the worried Eusebius.⁴

Auxiliary cadences

But there is more to say about this specimen of intertextuality, and like Schumann we will start with a question, a question presenting itself to any responsible analyst: what would Schenker have said about the two pieces and their relationship?

Schenker apparently never dealt with these pieces, but fortunately a present-day Schenkerian analyst has paid them some attention.⁵ Burstein’s analysis of *Warum?* turns up as the final illustration in a paper devoted to

3 Nor, presumably, by “crickets”.

4 In his dissertation *Schumann’s Music and Hoffmann’s Fictions* (Manchester 2013) John MacAuslan explains the relationship between *Warum?* and *Grillen* by reference to a literary *sujet* – the title of the set, *Phantasiestücke*, derives from Hoffmann’s collection of short stories *Phantasiestücke in Callots manier*. He does not mention the thematic transformation linking the two pieces together, but nevertheless and correctly describes their content as “repeatedly asks questions to which there are no answers” and “foolish brooding”, respectively. (p. 99–104).

5 Poundie Burstein, “Schenker’s Concept of the Auxiliary Cadence” in Allen Cadwallader (ed.), *Essays from the Third International Schenker Symposium* (1999), Hildesheim 2006, Georg Olms Verlag (*Studien und Materialien zur Musikwissenschaft* 42)

Schenker's notion of 'auxiliary cadence'; in addition he also comments on the relationship between *Warum?* and *Grillen*.

"After the final measures of 'Warum?' are repeated, they move directly to the next movement of the set, 'Grillen' (which likewise opens with an auxiliary cadence), almost as if to suggest that these two pieces form a single, multipart movement. The connection between these movements is enhanced by the relationship of their main themes, for 'Grillen' begins with an obvious paraphrase of the main theme of 'Warum?' In 'Grillen', however, the theme is played *mit Humor*, as the tenuous opening auxiliary cadence of 'Warum?' is transformed to become part of a push towards the tonic. 'Grillen' might even be regarded as a parody of 'Warum?', as it replaces the unquenched yearnings of its predecessor with brusque, capricious gestures. It is as though 'Grillen' counters 'Warum?' with laughter, so that the harmonic and formal enigmas of the earlier movement [...] ultimately remain unanswered." (pp. 34–35)

It is easy to agree with Burstein, but on second, somewhat pedantic thoughts there is a weak point in his sensitive account, a redundant observation deriving from his Schenkerian approach.

For several reasons the present writer is not happy with the term "auxiliary cadence". In tonal music it frequently happens that a chord, or a sequence of chords, lacks a strong connection to the preceding chord but instead invites to be understood as leading to a following chord, functioning as a harmonic point of reference. This phenomenon was observed long before Schenker, and it can be readily handled by any competent analyst without any knowledge about or recourse to Schenkerian theory. You simply put the chord symbol(s) needing subsequent support within parentheses to clarify that it (they) is (are) to be understood as attaching to the following chord. And as listeners we have learnt to wait a moment for the arrival of the clarifying harmony. In current theoretic parlance the dependent chord(s) is (are) called "applied" while the anchor chord is called the "auxiliary tonic".

Although literally correct, the translation of Schenker's term *Hilfskadenz* into "auxiliary cadence" is therefore unfortunate. In Schenkerian theory, such harmonic progressions are supposed to make up incomplete cadences lacking their initial tonic, i.e. the same chord that will soon turn up as the anchor closing the circle. But when turning to listening, such passages are very seldom associated with any sense of incompleteness – the theoretical absence of the postulated but lacking initial tonic goes unnoticed.

The idea of the “auxiliary cadence” is deeply entrenched in Schenker’s theory, which means that if you do not belong to his followers you are free to take it or leave it. Making a long story very short, a most important mechanism of prolongation is the transference of the encompassing *Ursatz* to inferior levels, i.e. various sections of a work are analysed as being governed by subordinate *Ursätze*. Sometimes these structural cadences are complete, sometimes not, and the latter incomplete, “auxiliary” cadences may appear inside a work as well as at its very start. Indeed, it might even happen that an entire work is ultimately analysed as an incomplete, “auxiliary cadence”, as a progression whose lack of an initial tonic (to a sceptical outsider) comes close to conceding that the music in fact does not have an overall *Ursatz*.

From a musical point of view the beginning of an initial “auxiliary cadence” should be associated with an impression that the music begins with a virtual, left-out tonic chord. Introducing a more rigorous qualification that might be tested, the notion of ‘auxiliary cadence’ implies that the would-be harmonic incompleteness can be amended by adding the missing initial tonic in some musically acceptable way.

Preferably, not only the *Baßbrechung* of an “auxiliary cadence”, but also its *Urlinie* should behave like it is supposed to do in an *Ursatz* – a requirement that the passages in question may be at pains to satisfy. And it can sometimes be observed that Schenker and others force the harmonic facts when it comes to demonstrating the presence of analytically desirable “auxiliary cadences” in starting position. Actually incomplete cadences are made to emerge as theoretically complete by boosting whatever trace there may be of an initial tonic, and it even happens that initial tonics are simply assumed/added. In such cases it is not the cadence that is “auxiliary”; the very concept of ‘auxiliary cadence’ emerges as auxiliary in a methodologically quite embarrassing sense; the one in need of *Hilfe* is the analyst, and as a bystander you cannot but look for Occam’s razor.⁶

6 An analysis demonstrating this kind of analytic emergency exit, a reading showing how Schenkerian, would-be superior “structural listening” replaces well-grounded musical perceptions, is Schenker’s treatment of Chopin’s A-minor Prelude Op. 28, No. 2. Obviously, the music does not begin with an initial G-major “auxiliary” (I)–VI–V–I cadence, nor does the prelude as a whole make up an (A-minor-to-)E-minor-to-A-minor “auxiliary cadence”; there is simply no

What about *Warum?* and *Grillen* – do they really start with incomplete, “auxiliary cadences” as Burstein claims? If the scores are consulted, it is a fact that the former piece begins with the dominant of the dominant whereas the latter starts from the dominant of the relative minor.

Lacking an initial tonic – or rather an initial chord that will eventually turn out to be the tonic – *Warum?* starts as if it were already in progress, and the sequence of two dominantic seventh-chords issue into what appears to be an anchoring tonic. The treble line does not fall to the tonic, but this particular “auxiliary cadence” may be exempted from the requirement to exhibit a falling upper line. And at least for non-Schenkerians the subsurface rising third $d^2\text{--}e^2\text{--}f^2$ does just as well as an *Urlinie*; indeed, the ascent to the third degree serves much better considering that the point of the first bars is to suggest a question. Furthermore, since f^2 persists throughout the piece as a structural, never released third-degree *Kopftön* (a fact that Burstein’s reduction laudably does not make any attempt to somehow explain away): *warum nicht* regard this initial *Anstieg* as prefiguring an *Urlinie* that comes to nothing? This observation would fit perfectly with the title.

While it is not at all difficult to complete this alleged “auxiliary cadence” – just add a $D\flat$ -major chord to the upbeat in Ex. 2c – the ruining effect of this interference with Schumann’s seminal idea should make us think twice. It would destroy the suspense of the two “up-bars” leading into m. 3, and from a harmonic point of view it takes for granted what we don’t yet know, what we should not know, what we do not want to know. In other words, Schumann did not start his *Warum?* with an “auxiliary cadence”.

If we have heard this piece before, or if we use the score as if it were a map, there are certainly two seventh-chords leading to $D\flat$ major, but parsing these chords so as to make up a wholesale “applied” unit does not do justice to the sense of uncertainty inherent in the progression. An $A\flat^7$ chord is far from a self-evident continuation after an $E\flat^7$ -chord, but a quite unusual one.

trace of any initial, ghost G-major or A-minor tonics. Cf. Heinrich Schenker, *Der freie Satz*, Wien 1935, vol II, Ex. 110 a3, and Bengt Edlund, “Evidence and counter-evidence. Making sense of the A-minor Prelude”, ch. 2 in *Chopin. The Preludes and Beyond*, Frankfurt 2013, Peter Lang Verlag.

One should not analyse subtle music with the boots on, and taking them off in *Warum?* means that each seventh-chord must get its own parentheses.

Burstein holds that *Grillen* also starts with an “auxiliary cadence”, but this might be contested as well. After the very first F-major chord the first accented harmony in *Grillen* is a root-position B \flat -minor chord, the next one is an A \flat -major root-position chord, and then follows a most emphatic root-position D \flat -major *seventh*-chord topped by a \flat^1 , being in turn an applied dominant in relation to the ensuing G \flat -major root-position chord in m. 4, delayed due to the hemiola rhythm. To the extent that there is at all a starting “auxiliary cadence” in *Grillen*, which is its absent initial tonic? Is it at all musically meaningful to assume that the missing initial tonic is a D \flat -major chord because in m. 16 the consequent eventually closes in D \flat major? Isn’t the G \flat -major chord in m. 4 a better candidate in virtue of being the chord that the preceding chords apparently lead up to? Two inferior pieces, that Schumann chose not to compose, start with D \flat -major and G \flat -major chords, completing the two “auxiliary cadences” just proposed; cf. Ex. 4. Indeed, since the very first event in *Grillen* is an F-major applied dominant, doesn’t the piece start with a preliminary B \flat -minor “auxiliary cadence”?⁷

Conclusions

Turning to the “obvious paraphrase” connecting the two pieces, the thematic allusion does not qualify as a *Verborgene Wiederholung*. Schenker might have claimed this, but “hidden repetition” is a term that Burstein prudently avoids. If this allusion is simply studied as a musical similarity, important differences come to the fore, dissimilarities that disqualify the start of *Grillen* as a “hidden repetition” of the start of *Warum?*.⁸ The D \flat -major root ending the motivic bass progression in *Grillen* supports a \flat^1 , not f 1 . This disagreement brings out the fact that the rising fifth in *Grillen* extends beyond, crucially exceeds, its timid rising-third model in *Warum?*. *Grillen* begins in B \flat -minor, does not make any halt on f 1 -over-D \flat -major – the

7 It is up to the reader to compose a *Grillen* starting with a complete cadence in B \flat -minor.

8 Cf. Bengt Edlund, “Hidden repetitions and uncovered parallels”, ch. 4 in the present volume.

very locus of final irresolution in *Warum?* – and eventually, after having landed heavily on ab^1 over a D^7 chord, the initial melody arrives at g^1 over G major.

In a way, then, the initial thematic parallelism between the pieces emerges as resolutely undermined, but this does not at all affect Burstein's interpretation of the relationship; quite to the contrary, his extra-musical interpretation derives from the dissimilarities between the two passages.

Warum? arrives at its D^b -major tonic after two groping bars whereas *Grillen* precipitately sets out from B^b -minor, perhaps heading for a more solid harmonic ground to turn up later. Why not just think of the two pieces as starting with quite different harmonic progressions, a fact that invites us to understand the pieces as making up a question and a corresponding, quite blunt answer. In this light Burstein's claim that both pieces begin with "auxiliary cadences" is not only questionable, but also redundant and even counterproductive: this is another feature that they do *not* have in common.

The dual fact that neither *Warum?*, nor *Grillen* actually begin with "auxiliary cadences", and that the initial thematic reminiscence in the latter piece involves crucial, exceeding transformations disqualifying it as a "hidden repetition", strengthens Burstein's reading as well as the interpretation proposed by the present writer. While being thematically related, the two pieces start with radically different harmonic progressions and with a highly significant difference as to the relationship between melody and bass support.

Warum? is not just subjected to "parody" and "countered with laughter". One might even say that in *Grillen* the question *Warum?* is distorted and exaggerated in a way that surpasses grim humour by adding a sense of scornfulness. Perhaps the most apt translation of *Grillen* is "*Nonsense!*"

Pianists wanting to expose this element of intertextual allusion within *Phantasiestücke* simply have to give themselves up to the strong contrast between the insistent questions and the robust answer. In addition it might be a good idea to juxtapose the two pieces by playing them *attacca*. The sense of dismissal is appreciably enhanced if *Grillen* intrudes with an abrupt change in dynamics, tempo, and metre; cf. Ex. 5.

7 Suing a sound-alike

*The trouble with the world is that the stupid are
cocksure and the intelligent are full of doubt.*

(Bertrand Russell)

The commandment “Thou shalt not steal” was not in the first place meant to apply to immaterial things like music, but at least since the invention of music printing, and then of sound recording, it has become increasingly evident that also music can be stolen. Copies can be produced and sold – can be made available to the public without the originator’s knowing – and the perpetrator may make a lot of money.

Another way of stealing music is to appropriate its very core, the composer’s creative work, by pretending that you have written his/her music. But “plagiarism” rarely involves stealing a composition *in toto*; it is usually a matter of appropriating it in various ways and to some extent. Alleged infringements are sometimes tried in court, but most often they are not, for in the musical community there is, generally speaking, an acceptance of the fact that music makes up an ocean of resemblances. Simply put, it is hard to distinguish objectionable similarities from inoffensive ones, from the business-as-usual ones inevitably thriving at the musical commonage.

The aim of this study is to discuss how we may arrive at reasonable verdicts when tunes are brought into court, and to touch upon some related broader issues. Anticipating the conclusion, it seems that music analysis, if seriously undertaken, has much to offer – indeed, when less well-founded opinions are afloat, competent “forensic musicology” is called for. In due time some methods will be proposed and then applied to a case tried in Swedish courts, to a tune allowing everyone to know for sure that this, if anything, must be a flagrant piece of plagiarism – hence the introductory citation.¹

1 For a thorough and critical discussion of this trial, cf. Bengt Edlund, *Riff inför rätta*, Lund 2007, Juristförlaget, *Acta Societatis Juridiciae Lundensis* 159

But before starting, we must present three prerequisites that must be carefully considered before a verdict of guilty, or acquittal, can be delivered. Firstly, the representatives for the tune that allegedly has been the victim of plagiarism have to show that their tune attains a sufficient degree of *originality*. Secondly, they must demonstrate that the other, would-be infringing tune exhibits a sufficient degree of *similarity* to their tune. Thirdly – and this may not amount to a prerequisite, strictly speaking, since the court or the legislation may regard it as irrelevant or otherwise inconsequential – the parties have to make it plausible that the similarity (if any) is, or is not, a result of (intentional) *imitation*. In other words, the third prerequisite is a matter of the genesis of the would-be infringing tune.²

In the next sections the three prerequisites will be presented and discussed. It must be stressed that a full penetration of the judicial issues when it comes to cases of alleged plagiarism implies that the court carefully considers all three prerequisites in due order, and particularly that there is an intimate and reciprocal relationship between originality and similarity. But it is also important to observe that, although the prerequisites form a chain of arguments, each of them must rely on an independent scrutiny of all available evidence; it is necessary to prevent undue transfer of findings and conclusions from one prerequisite to the other. Otherwise one may, for instance, be tempted to simply turn a high degree of similarity into a circumstance indicating imitation.

Originality

To enjoy copyright protection a tune must be sufficiently original. This prerequisite is logically the first one since if a tune fails in this regard, if it does not deserve to be protected, there is no ground for pursuing the lawsuit any further. Indeed, there was not even a ground for starting it.

The reason for adopting this prerequisite is obvious: it would be absurd to try another tune for being a piece of plagiarism if the plaintiff's tune is

2 The legislation when it comes to these pre-requisites may differ in various countries. In the U.S., for instance, it seems that crucial importance is attached to similarity and imitation, whereas the (perhaps tacitly assumed) requirement of originality is less prominent.

entirely or largely made up of musical public property. From this commonplace truth follows a crucially important consequence involving the second prerequisite: without a well-founded idea of the alleged model's degree of originality the ensuing assessment of the similarity between the two tunes may be misdirected to the point of being devoid of judicial value. Or, otherwise put, an inquiry into a tune's originality may be judicially irrelevant if it is undertaken in a way that does not yield a useful basis for the following treatment of similarity issues. To clarify this, three possible, contrasting cases will be presented.

If a tune by and large makes up a collage of musical clichés, the probability for "double creation" is bound to increase substantially – it is not unlikely that someone else might independently come up with a quite similar tune. Hence the first prerequisite, stating that highly conventional musical works do not enjoy copyright protection.

Another tune may have some original traits, which means that it should be granted some protection. But it also implies that a tune composed by someone else must feature a fairly great number of elements exhibiting close similarity, and that among these "hits" some should involve the original traits. Otherwise the possibility of double creation cannot be excluded beyond reasonable doubt.

Finally, if a tune is highly original, it enjoys strong protection. This makes sense because it is most improbable that somebody else would independently come up with a similar tune. When dealing with a highly original tune, it may therefore be a sufficient ground for suspecting plagiarism if another tune, while exhibiting a number of less obvious similarities, closely replicates (most of) the original traits of the would-be model.

Thus, there is an intimate judicial connection between originality and similarity. In order not to get into absurdities when trying the second prerequisite, it is necessary to take the originality of the would-be model into account. How else can you evaluate the similarities found in the alleged copy? You must always consider the probability of double creation, the probability that someone else might independently compose a similar tune.

Evidently, the core of judiciously relevant originality is the probability of the formulations making up the would-be model tune, and from this follows that the originality of a tune is crucially dependent on the style of the music. (In this context, "style" must be understood in a very comprehensive sense

as ranging from matters of tonality to the particular habits of forming to be found in a certain genre at a certain time.) Understandable musical utterances beyond stylistic restrictions are not possible; whatever laymen think, the melodies in (say) late twentieth-century popular songs are certainly not free to move as they “want”. Quite to the contrary, if the originators of such melodies at all have an ambition to produce catchy tunes, they should keep close to the middle of the road – i.e. to a place where there is a greater risk of collisions, infringing or not.

When assessing the originality of a tune in a way that is productive when later on judging whether another tune is “infringingly” similar to it, there is a useful distinction to be made.

In music, as in many other artefacts, one may distinguish a number of “basic patterns” that, given a certain style, are ubiquitous almost to the point of being inescapable. Obvious examples are the antecedent/consequent pair, the dominant-to-tonic harmonic cadence, and triadic melodic motions. Such patterns derive from the musical commonage and are so frequent that they cannot reasonably enjoy any copyright protection at all. On the other hand, if they turn up outside their “natural” stylistic environment, they emerge as remarkable and may contribute to a tune’s originality.

But in music there are also a large number of “optional features” turning up at the composer’s will, as it were – they can be found, for instance, in the particular elaborations of (say) triadic melodies. While being in a general sense regulated by the prevailing style (they must be possible within it), they make up the specific details of a certain work. Some of these features are virtually unique or strongly associated with a particular composer while others border on conventional clichés – the former have low probability and should enjoy protection whereas the latter are too common coins to contribute to a tune’s originality.

If you are to judge the originality of a tune, you cannot just lean back and “enjoy” its originality. For two reasons discretionary, “overall” assessments of originality are of no judicial value. Firstly, law-and-order decency bids that you are able to support your decisions with observations based on facts. Secondly, your ensuing attempts at dealing with similarity will be largely irrelevant if they are not associated with traits in the alleged model that by rights can be said to be sufficiently original, i.e. to traits having a

reasonably low probability within the style. Thus, if you are a judge (or a lawyer) having problems to identify whatever original traits there may be in the would-be model – if you feel that you don't touch the musical bottom of the case – the way out of the trouble is self-evident: you have to listen closely to those who know better, to people having analytic competence.

A reliable sign that judges, as well as lawyers and jurors, do not know what they are – and what they should be – talking about is that they carelessly use words like “peculiarity”, “distinctiveness”, “individuality”, “character”, and “independence” as synonymous with “originality”. These words (and if sloppily used, even “originality”) also or rather refer to (say) a perceived quality of “distinctive character”, having little to do with whether a tune keeps traits that are original in the judiciously crucial sense that they have low probability. It is quite possible to achieve a “distinctive character” by using clichés, and this is exactly what many originators of successful, rightly popular tunes have managed to do. Resorting to misleading quasi-synonyms for “originality”, when what you should notice and talk about are low-probability traits, involves a risk of ending up in inflation – eventually you will accept a far too low degree of originality as sufficient.

Laymen (within as well as outside the courts) also tend to think that “catchy” or “prominent” ideas that “good” tunes, should enjoy strong copyright protection. However understandable this notion is, it involves a serious fallacy: such values do not necessarily correspond to low-probability formulations. Some excellent tunes are original in the judiciously relevant sense – they extend or even transcend the given stylistic restrictions – while other very fine melodies are quite conventional. One must be cautious not to confuse aesthetic value with originality and hence with a high level of copyright protection.

Similarity

The second prerequisite, involving both tunes, is of course the very core of any trial of alleged plagiarism.

As already pointed out, if the originality of the would-be model tune is low or fairly low, a high degree of similarity must be required. Law and order bid that another tune must not be condemned as a piece of plagiarism if the possibility of double creation cannot be excluded with reasonable certainty. If, on the other hand, the originality of the alleged

model is high, a lower degree of similarity might be accepted as evidence of plagiarism – the probability of double creation is so low that it is unlikely that a similar tune can turn up independently. Unfortunately, this general principle does not offer much guidance, but if you have invested relevant analytic efforts when dealing with the first prerequisite, you have also distinguished between original and conventional traits in the would-be model. This cannot but better the prospects of arriving at a judicially relevant and tenable decision when assessing the similarity between the two tunes.

Tunes tend to be mixtures of trivial and (more or less) original features, and this means that the evaluation of similarities must be differentiated accordingly. When it comes to conventional, every-day formulations, even quite exact similarities score low as evidence of plagiarism. Conversely, it is reasonable to attach great importance to similarities – as well as differences! – when checking whether there is agreement at points where the would-be model tune exhibits original, low-probability formulations.

Similarities of the latter kind make up strong evidence to the effect that the suspected tune might be a piece of plagiarism. Differences when it comes to original traits, on the other hand, indicate the opposite conclusion: if exactly the would-be model's low-probability traits are not replicated in the supposed copy, the allegation of plagiarism emerges as seriously undermined. (Unless, of course, the representative of the plaintiff ventures to argue that such deviations are just shrewd manipulations in order to hide away the fact that the would-be infringing tune is an imitation – an accusation that is very difficult to substantiate, and that belongs to the domain of the third prerequisite.)

The distinction made in the previous section between “basic patterns” and “optional features” is important here as well. The former do not enjoy any copyright protection, and their presence in the alleged copy is neither musically, nor judicially remarkable. Yet, basic patterns may nevertheless be important when assessing similarity: if they do not turn up, or are substantially modified, in the would-be copy, this fact speaks against plagiarism. While some optional features are original, even idiosyncratic, and make up important damning evidence should they appear in the alleged copy, others are conventional, which means that the similarities carry little weight as evidence of plagiarism.

Originality is obviously a double-edged property when judging whether or not a certain tune is a piece of plagiarism. Generally speaking, a “hit” with respect to similarity is remarkable only when a low-probability feature is involved. For this reason it is essential to first arrive at an analytically well-grounded and differentiated idea of the originality of the would-be model. Only then is it meaningful to assess the similarities – and differences! – between model and alleged copy. In order to arrive at a reasonable verdict one must be able to evaluate the various agreements in terms of probability.

Just as was the case when judging originality, one should avoid discretionary, “overall” assessments when it comes to the second prerequisite. When dealing with similarity, the argumentation of the parties as well as the opinion of the court should be explicit and based on musical facts. If you have merely rudimentary ideas as to what constitutes musical originality, there is a substantial risk that what you bring out as important similarities between two tunes in fact derives from shared musical conventions lacking copyright protection. Law and order bid that this risk is avoided – or at least made explicit.

From a psychological point of view, “similarity” ranges from positive identification to vague impressions of resemblance. But if “plagiarism” is literally understood as “stealing” a creative product, similarity should be a matter of positive identification based on a number of important and observable properties. Turning to tangible products, if someone has stolen your old, white Volvo 245, it is neither a sufficient ground for accusation, nor for a verdict of guilty, if you find such a common car outside another person’s house – the steering-wheel must be on the same side as in your car. If a court is content with talking of musical similarity in terms of “may be taken for” or “may be mis[!]taken for”, the second prerequisite has deteriorated.

Imitation

The third prerequisite states that the allegedly infringing tune must be an imitation. But it may not be considered necessary to prove that this tune has been created through an intentional act of imitation; it may be accepted as sufficient if it emerges as plausible that it has been unconsciously, “passively” inspired by the plaintiff’s tune. Since actual imitation is what

the verb “imitate” literally means, or at least strongly suggests, accepting passive imitation comes close to a contradiction.

It is as easy (and futile) for the defendant to deny that actual imitation has taken place as it is hard for the plaintiff to prove that this is what has happened. And “unintentional imitation” (!) is an accusation that is very easy for the plaintiff to insinuate but very difficult for the defendant to refute – unless the originator of the would-be infringing tune is among the few who can afterwards account in a convincing way for the sources of inspiration behind his/her tune and for how it was composed. Passive imitation, which is arguably very common in music, is a Kafka-esque offence; no wonder, then, that the courts try to escape the third prerequisite.

One way of circumventing the imitation problem is to rely on a previously established high degree of similarity – law and order bid that the similarity has been carefully demonstrated by paying due attention to the would-be model’s degree of originality and the probability of independent double creation – and then declare that there is a strong “presumption” for imitation, leaving it to the defendant to argue as best he/she can that the allegedly infringing tune has been independently composed.

Another (slightly different) way to get rid of the third prerequisite is to short-circuit it by allowing thinking in terms of the oxymoron “actual unintentional imitation”, i.e. by simply disregarding how the similarity came about. This move annihilates the crucial but evasive active element, the verb “imitate”, in favour of the firm meaning of the derived noun “imitation”. Instead of dealing with what someone has perhaps done, the third prerequisite has been turned into a matter of how something is. And this shift may prepare the way for an even more momentous one: it may open up for reasoning in terms of “actual similarity” (or even “objective similarity”), which in effect means that the case is closed already after the discussion of the second prerequisite. It also means that the defendant is dispossessed of his/her opportunity to account for how the would-be infringing tune in fact came into being.

But when it comes to the crunch no court can entirely do without the third prerequisite. It is necessary to take into account at least one circumstance pertaining to the allegedly infringing tune: its date of composition. A copy

cannot very well precede its model – if this turns out to be the case, the wrong tune may have been sued.

In addition, it is usually considered to be a matter of interest to find out whether the originator of the later, would-be tune could reasonably have heard and been inspired by the earlier one. No matter how much the court wants to speak about a presumption for imitation or to keep to “actual/objective similarity”, an element of thinking in terms of imitation (intentional or not) tends to slip in. It simply does not seem fair to establish that a tune is a piece of plagiarism if the would-be model had negligible dissemination or was virtually forgotten when the second tune was composed. “Plagiarism” has a moral component, involves an element of condemnation, that one cannot entirely escape by sidestepping the third prerequisite, and that enjoins us (judges, lawyers, jurors, and the public at large) to observe a certain restraint.

Finally, a few words should be said about the feelings of the originators when they know and honestly believe that they have composed a tune. Although they are likely to be aware of the fact that the market is crowded with more or less similar melodies, their indignation often prevents them from dispassionately considering the possibility of double creation, from thinking that someone else might – or already has! – come up with a tune resembling their own. And their subjective evaluation of the originality of their own tune is likely to be far greater than its actual originality. Thus, originators sometimes get very upset when they discover that another tune exhibits, or seems to exhibit, similarities to their own. Regarding the problem from the other side, originators tend to get very angry when being accused of plagiarism.

Some illustrative examples

At this point some explanatory illustrations are due; cf. Exs. 1–5 and the melodies derived from them. All these tunes might be described as “peculiar” or “distinctive”, as having “individuality” or “character”, as being “independent” – which indicates the uselessness of such words when it comes to assessing originality in a judiciously relevant sense. And being “catchy” and easy-to-remember, they are not only popular but also quite “good” melodies. But are they “original”, should they enjoy copyright

protection? What are the probabilities that potential “copies” of them exist or might be created?

Haydn’s and Mozart’s melodies (Exs. 1 and 2) are thoroughly inspired by ideas from the musical commonage. As so many 18th-century tunes, they are closely modelled on the most frequent chords in tonal music: the tonic triad is followed upwards, then the dominant seventh-chord provides the way down. Formally, both of them adopt another, ubiquitous “basic pattern”: their two phrases make up an antithetic pair. And the “optional features” of these melodies – i.e. whatever there may be in them that makes for originality – derive from a clever use of clichés. In Ex. 1 each new note (except for the final, lengthened ones closing the phrases) is stubbornly repeated, hence the conspicuous “character” of the tune; in Ex. 2 the ready-steady-go formula, yet another basic pattern, is gradually released with irresistible energy – an idea that is repeated.

Could Mozart (were he still alive) have sued Haydn for plagiarism? No, because his own melody may not be original enough, given the musical conventions of its time, and because the optional features (however conventional they may be) make the two melodies quite different from each other.

Is it possible to imagine melodies that infringe on (say) Haydn’s melody? Well, the tune shown in Ex. 1a, constantly inserting passing-notes (another stock optional feature) without changing a single note of Haydn’s demonstratively note-repeating idea, might come close to a piece of plagiarism. Indeed, Haydn might have composed this tune, had he wanted to provide a variation of his theme. But the melody in Ex. 1b, employing another cliché in a less uniform way, and bringing Haydn’s melody out of focus while retaining its general contour and the distinguishing idea of repeated notes, is arguably not a piece of plagiarism.

Tchaikovsky’s melody (Ex. 3) is quite original since it exhibits several low-probability features. It starts with a long f_{\sharp}^1 , which only after the scale has been heard turns out to be the fifth degree of B minor, and this note is then repeatedly brought out – a “ready-steady-go-extra”. The melody eventually turns into a sequence of thirds that first confirms B minor, then (but when?) suggests G major. The latter effect is caused by the antepenultimate note g, and its almost shocking effect spreads retroactively, suggesting a furtive G-major triad – a poignant major shade in an already sad B-minor melody.

The *g* is so improbable that you are likely to replace it with *f* \sharp , the “correct”, expected note, when you try to remember the melody.³

Actually, the *g* is just the minor sixth of the minor mode, and when used in another, ordinary context such sixths are not very remarkable; cf. Ex. 3a where it appears as *g*¹, and where the general contour of Ex. 3 is retained but not its ambitus. Some listeners will recognize Tchaikovsky’s tune in Ex. 3a – indeed, they may be prone to mistake it for the original tune – but whether it can be considered as a piece of plagiarism is questionable since some of the original features of the would-be model are gone.

Because the melody in Ex. 3 is most original, a possibly infringing copy may deviate in several respects. The tune in Ex. 3b is also likely to remind some listeners of Tchaikovsky’s melody, although it is perhaps less similar to it than Ex. 3a. There are only two *f* \sharp ¹s, and the thirds are replaced by stepwise motions, but the low *g* is in place.

The tune in Ex. 3c might perhaps also be considered as a piece of plagiarism by some people, no matter the fact that Tchaikovsky’s melody has been trivialized by replacing its most original trait (the low *g*) by the note that “should” be there. This is worrying since for exacting ears Ex. 3c is certainly not the tune swimming in *The Swan Lake*, but a duck melody that may be mistaken for it by people who do not listen.

By contrast, Kálmán’s melody (Ex. 4) is virtually devoid of originality: within its ambitus of a fourth it virtually only features seconds making up neighbour- and passing-note motions, the same uneven rhythm turns up over and over again, and its overall tonal course is most foreseeable. Since this tune is far beyond copyright protection, it is easy to compose doubles: cf. Ex. 4a in which every motion is inverted – only 6 out of 12 notes are the same as in Ex. 4 – and Ex. 4b taking some less constrained liberties – 5 notes of 12 recur. These melodies are similar to Kálmán’s since the same tonal scheme, melodic contour, and rhythmic pattern turn up – in other words, since they share the same items from the musical commonage. Therefore, and in spite

3 If you take the harmonization into account, which you of course must do when you analyse music (not just “tunes”), you will see that the triad shift inherent in the melody is overlaid by an exquisite sequence of chords suggesting another, concurrent harmonic process.

of all similarities, Exs. 4 a/b are not reasonably pieces of plagiarism. If a melody is very conventional, it is hard to imitate it in an infringing way.

The tune in Ex. 4c – having 8 notes of 12 in common with Ex. 4 – is not an infringing copy since it is not very similar. It appears that counting recurring notes – a “method” enjoying popularity among musically underprivileged people – is not very enlightening when it comes to judging similarity/plagiarism. Similarity is a matter of which notes that agree and of how the other notes deviate.

Turning finally to Ex. 5, the turn-of-the-mill tonic-dominant-tonic circuit and the repeated use of these triads cannot very well give rise to any originality worthy of legal protection. Otherwise the cuckoos might have come up with the idea to sue the tune shown in Ex. 5a – a ready-steady-go jingle serving as a sounding trademark for doorstep-sold ice-cream in Sweden. But woe betide the one who presents Ex. 5b in public. It has the same tonal layout as the melody in Ex. 5a and a similar melodic contour, the main difference being that the harder-to-sing and harder-to-remember rising sixth of the ice-cream tune is exchanged for just a fourth. For we have now left the domain of plagiarism and musical copyright. You must not compose anything that might even be mistaken for an established and somehow “characteristic” trademark like the ice-cream-tune, no matter whether the trademark is original or not in musical terms.

Enough of this, but before proceeding to our non-representative case of alleged plagiarism, an important matter of terminology must be settled. We have been – and will sometimes for convenience be – talking about “tunes” (or “melodies”), and this may be to the point in as far as people quarrelling over plagiarism (and *aficionados* of popular music in general) are obsessed with this particular aspect of the musical structure. But it is obvious that a serious analytic penetration of plagiarism issues cannot rest content with such a primitive approach. The melody (i.e. the “sequence of intervals”) can and should never be divorced from the rhythm and the harmony – whether inherent or added as accompaniment – since these (and still further) elements of the musical structure mutually influence each other, and since when combined they give rise to form, tonality, and style – aspects of music that must not be neglected.

Riff 1: Originality

The first prerequisite bids us to establish the degree of originality of the would-be model. Having always the probability of independent double creation in mind, we must find out if, and to what extent, the model can reasonably enjoy copyright protection. Two methods will be presented and applied, both of them aiming at the probability of the musical process so as to provide a background for the ensuing study of similarities. In addition, a further approach will be described – and be dismissed as analytically unproductive and judiciously devoid of value.

Popular songs are not only subject to the conventions regulating Western tonal music in general, they must also match a certain, often quite restricted, stylistic frame dictated by the musical taste of a certain group of listeners. Thus and generally speaking, it seems fair to say that popular songs are not likely to be very original.

It is also (by and large) fair to say that longer tunes have more opportunities to exhibit original traits, and that tunes replete with repeated material are likely to miss many such chances. For very good reasons, popular songs – and many other kinds of music as well – are often characterized by iterations of various kinds. Turning to the present case, the alleged model is quite repetitious, which implies that the burden of exhibiting originality rests heavily on its iterated core phrase.

The “complaining” melody turns up as introduction/interludes of a hit song (“Song 1”) that was released in 1973 by the group *Landslaget* (EMI). The title of the song is *Tala om vart du skall resa*, and (when transposed from E major to C major) its introduction/interlude runs as shown in Ex. 6. To clarify that we will not just be dealing with its melody, the introduction will henceforth be referred to as “Riff 1”, an apt name since the initial phrase, which also makes up the root of the legal controversy, occurs three times and functions as a kind of riff.

Conventional patterns

To what extent do the formulations of the core phrase exemplify conventional musical patterns beyond protection?

Disregarding for the moment the “manifest” harmony, i.e. the chords that actually accompany the melody, it is obvious that (excepting the final

a¹'s) the notes of the initial and then twice repeated phrase make up a C-major melodic unit; cf. Ex. 7a. In other words, C major emerges as the "inherent" harmony of the first nine notes of the melody: the notes of the C-major triad stand out at several prominent metric positions, and a C-major chord is in fact also chosen as accompaniment in m. 1. The very centre of the C-major tonality is made up of the rising-then-falling motion from c² to e² and back to c², but already the C-major quality of the initial rising sixth g¹-c²-e² is strong enough to prevail despite the shifts to accompanying A-minor chords in mm. 2 and 4. (When the crucial phrase turns up to begin the interludes, C major is actually the supporting chord underlying its first four notes.)

To use the inherent harmony to describe a melodic unit may seem far-fetched, but it is the evident analytic consequence of an important musical observation. Contrary to common belief, melodic ideas (in tonally conceived music) are virtually never invented from one note to the next; the fact of the matter is rather that many melodies have arisen quasi-automatically by filling in the diatonic gaps of triads. Therefore melodies often betray their inherent chords and hence their harmonic origin – Riff 1 is certainly a case in point – and they can be readily understood as (sometimes overlapping) sequences of harmonically conceived units.

The two closing a¹'s of the crucial phrase are quite conspicuous since they deviate from the C-major triad in a way suggesting that another manifest harmonization than C major might be possible in mm. 2, 4, and 6. And since one does not want to be laboured when composing popular songs, there are but two further options to consider: A minor (the accompanying chord that actually turns up in mm. 2 and 4) and F major (occurring in m. 6). This fact discloses that there are two complementary, harmonically conceived falling motions within the C-major core phrase. They are latently present from the first-beat e² and from the second-beat f², respectively, but emerge retrospectively only at the start of the next bar; cf. Exs. 7 b/c.

To complete this account, a further inherent harmonic framework should be mentioned. Balancing the swiftly rising C-major gesture, one may (from the top-note f² on) hear a slower, and yet similar falling motion embodying a D-minor triad; cf. Ex. 7d. This less obvious interpretation of the melody means that the fourth-beat c² is understood as a kind of passing-note rather

than as the resolution of an appoggiatura as in the A-minor and F-major readings.

Turning to the question of originality, what can be said about these melodic units identified by means of their inherent harmonies? The nine-note C-major gesture, issuing from the lower fifth degree, reaching the third degree and its upper neighbour-note, and eventually falling to the first degree, describes a quite common motion in tonal music. This becomes even more obvious if we dispose of the two unaccented, non-C-major-triad eighth-notes filling in the initial rising sixth. Even more frequent is the seven-note rising-falling c^2 -back-to- c^2 constituent.

If we remove the quick four-note upbeat (or just take away its first note g^1) and add the two closing a^1 's, we get a quite familiar seven-(or-ten-)note A-minor motion that after touching the minor sixth essentially describes a descent from the fifth to the first degree. This motion (as well as the ones suggesting F major or perhaps D-minor) closes with a speech-like falling intonation (d^2 - c^2 - a^1) known from countless nursery rhymes; cf. Ex. 7e.

Eschewing all unnecessary ambitions to demonstrate the deeper tonal layers of Riff 1 as a whole, the tonal structure of its first and crucial phrase emerges from the reduction shown in Ex. 7f. Depending on whether you adopt C major or A minor as the predominant tonality of the phrase, the main-note motion 5-3-1 or (1-)5-3-1 emerges as commonplace, and the secondary notes, filling in the triadic motions, are quite conventional, "natural". The f^2 , i.e. the upper neighbour-note of e^2 , occupies a relatively strong metric position, turning it into a local appoggiatura in relation to its resolution at e^2 , and this eighth-note e^2 has a transient quality of being a passing-note on the way to the accented d^2 , itself having a sense of being an appoggiatura resolving into c^2 ; modest functional shifts often met with in melodies, making them musically coherent.

Considered apart from the melody, there is nothing remarkable in the manifest C-major-to-A-minor harmonic shift, in the progression from a major chord to its parallel-minor chord.

Turning to the rhythm of the first phrase, and considering the *alla breve* tempo, the quarter-note iteration of a^1 is a most natural choice if one wants to keep up the swift pace of the melody, and so is the extended four-note upbeat to the main accent on e^2 as well as the following subdivision of the

weak beat. The rhythmic outfit of the core phrase does not add any originality to it and underscores its overall C-major quality.

Turning to the synthesis of the various musical elements, the only unusual trait in the initial phrase is the final harmonic shift suggested by the two final a¹s, a shift that is brought out by the change from C-major to A minor in the accompanying chords.

Riff 1 as a whole is no doubt a piece in C major, but when it comes to its first phrase, this assertion must be qualified. The basic pitch set of its melody is pentatonic (g¹, a¹, c², d², e²) – f² merely acts as a tonally insignificant turning note, and b¹ is entirely missing. This pentatonic set is compatible with C major, and the latent pentatonic quality of the melody would barely have been noticed, had the accompaniment not shifted to an A-minor chord. The closing a¹s in connection with the shifts to A minor in the first and second phrases cannot but bring stylistic consequences for Riff 1 in its entirety and open up for further connotations. Since the melody is played on the violin, Riff 1 suggests a dance tune in American Country style.

Do the final a¹s, supported by the shift to A-minor, in the core phrase make up an original trait, deserving copyright protection? This trait is arguably the only remarkable property of the core phrase. But on the other hand, the straightforward up-then-down use of a stock scale like the pentatonic one – i.e. a “basic pattern” not distinguished by any noteworthy “optional features” – must reasonably be taken as a free musical commodity that cannot very well be granted protection.

Whether this pentatonic touch of the melody, underscored by the major/minor shift, emerges as conspicuous (and perhaps original) depends on the musical environment of Riff 1. Had the introductory tune been part of an American popular song, this trait would not have been remarkable at all, whereas a pentatonic violin melody in a Swedish “schlager” from the thirties would have struck the listener as quite original. Today, and even in 1973, the originality of the core phrase has faded considerably since much popular music in Sweden has come to betray influences from American Country music.

There is not very much to say about the fourth, deviating phrase – which is also more peripheral in the legal discussion. It fulfils the tonal duty by bringing the whole melody down to the low tonic note, and it does so by using the same rhythm as the preceding phrases, and by means of an entirely

conventional harmonic cadence; cf. Ex. 6. Already at the end of the third phrase is A minor exchanged for the F-major subdominant as support for the a¹s, and in m. 7 there is a penultimate dominant seventh-chord. It should be noticed that the last phrase completely erases the sense of pentatonicism characterizing mm. 1–5, and also that the melody in mm. 7–8 perhaps may be considered slightly original since it immediately repeats the swift notes e¹–d¹–c¹ as more weighty quarter-notes.

The form of Riff 1 is quite conventional. The harmonic change to F major closing the last iteration of the core phrase makes for a ready-steady-go formal design with a barely marked mid-point (the half-note a¹) before the release.

To sum up, a thorough study of the constituents of Riff 1 reveals that it is made up of conventional traits – except for the a¹-over-A-minor endings of the core phrase. On this account Riff 1 only merits a quite low degree of copyright protection, based on the fact that it features one (relatively) original trait.

Probability and melodic choices

Turning to a complementary rather than alternative method to assess judiciously relevant originality, we might ask to what extent Riff 1, and particularly its core phrase, proceeds in less probable ways, in ways that are hard to predict, in ways that virtually exclude double creation?

Before answering this question three important general observations are due. Depending on the style of the music many options of continuation are impossible or undesirable when composing a melody; popular tunes, intended to appeal to ordinary listeners, are not likely to excel in low-probability formulations. There is also a relationship between unlikely formulations and the tempo of the music. We need time to appreciate original twists in melodies, which means that they tend to be sparse when the music is fast. Furthermore, as a melody proceeds from its beginning to its end, the freedom of the next note becomes more and more restricted.

The following thought experiment will demonstrate how the core phrase and eventually the entire Riff 1 may be understood as resulting from a number of presumably mostly unconscious decisions. In this light the composition process makes up a branching structure in which the outcome of

each choice can be ranked according to its musical probability. Needless to say, the probabilities of the various available options cannot be exactly determined – we simply lack the knowledge necessary to calculate such things.

It is important to point out that the selection of continuations forming the branching structure must not be thought of as an increasingly unwieldy bunch of “Markovian” chains. (Which sixth note can reasonably turn up after each and any possible sequence of notes 1 to 5, which seventh note can follow after every conceivable 1-to-6 sequence, etc.?) Instead, and this agrees much better with how coherent melodies come into being, non-contiguous, quasi-hierarchical, or associational relationships will be considered along with the informal probabilities of note-to-note continuations. Intelligent, well-shaped melodies in progress have a past, i.e. they depend on various prior decisions giving rise to motivic connections and various tonal, metric, formal, and stylistic properties. How else could they suggest their future course? For the crux of the matter is that we are often able to predict where a melody is going.

As pointed out above, when tonal musical processes develop, we move from openness to strong determination. After the first note of a melody-to-be, a great many options for the second note are available, whereas after the penultimate note there are usually only one or perhaps two reasonable alternatives. Turning to our composition experiment, this implies that the branching structure to be sketched will, in order not to be unmanageable, assume the prior existence of a minimal musical idea as a starting point.

In the case of Riff 1 and its core phrase, we might begin with, say, either a three- or a five-note idea, i.e. either with the swift rise $g^1-a^1-c^2$ or the longer rise $g^1-a^1-c^2-d^2-e^2$. It seems that the latter option is more probable when starting a melody. A short, rapid motion up to c^2 , i.e. up to a note that (although it is reached by a skip) may emerge as an all too early, closing arrival at a position suggesting a sense of a tonic, would not be an optimal beginning. Proceeding swiftly up to e^2 is a better, more opening start, lending an energetic quality to the melody due to the inherent rising-triad fanfare $g^1-c^2-e^2$; cf. Ex. 8. It should be observed that the sequence $g^1-a^1-c^2-d^2-e^2$ means that two important properties of Riff 1 have already been determined: its duple time and its C-major tonality. These very five

notes also suggest (in a con-committing way) that the ensuing melody might have a pentatonic character. Furthermore, this rapid rising-sixth motion up to e^2 brings a general expectation: it is likely that the melody (immediately, or after some short delay) will somehow return downwards.

So what can happen after the quarter-note e^2 , arresting the swift motion? (See the small notes in Ex. 8.) For tonal and stylistic reasons only near-by tones belonging to the C-major diatonic set are possible. Three of them appear as slightly more probable than the others: a repeated e^2 , and d^2 or c^2 (i.e. notes starting the expected descent). A rise up to f^2 is also a quite possible choice; while delaying the descent of the melody, it also seems to announce it – with f^2 the ascending motion continues by just a minor second, which suggests a turning point. Much less probable is g^2 since the rising third gives an impression that the ascent goes out of hand. A skip up to a^2 is better because it urgently promises a g^2 to start the expected descent; a skip down to a^1 may also be possible. Riff 1 settles for the upper neighbour-note f^2 , and it turns up as an eighth-note – a lucky flip of the coin since it keeps up the pace.

The short f^2 makes a motion to the nearby notes e^2 or g^2 very likely; other options are d^2 and a^2 , or a repeated f^2 .

What does the actually occurring, high-probability, returning f^2 – e^2 motion want? It might bring a small surprise by a skip up to g^2 or a^2 , but two other options are much more likely. It might either issue into a delaying return to f^2 or continue the flying start of the outstanding descent by proceeding to d^2 – the most probable alternative and also the one realized in Riff 1. Thus, d^2 follows as a quarter-note as becomes its accented quality.

In virtue of its *appoggiatura* quality in C major, the d^2 offers one very likely follow-up note: a falling resolution to c^2 , a note that also satisfies the expectation of an overall descent. A rising motion to e^2 is less probable, and so is a skip up to f^2 . The melody chooses c^2 .

There are several options for the first beat of m. 2. Going back to e^2 is possible; returning to d^2 or repeating c^2 are perhaps more probable choices. But the latter options would be disadvantageous for Riff 1 as a whole because they would abruptly finish off the first phrase by closing it firmly in the dominant and the tonic, respectively. Proceeding down to a^1 is a quite attractive continuation since it pursues the downward motion, and since it makes for a sense of tonal unity in the phrase by again suggesting the pentatonic potential of the melody. A skip down to g^1 , the point of departure for

the phrase, would also be satisfactory. While doing away with the inherent pentatonic quality, b^1 is possible.

A second quarter-note a^1 follows after the first one; other ways to keep up the momentum would be to return to c^2 or even to e^2 , or to arrive at the point of departure, g^1 .

Some words must also be said about the chords accompanying the melody. C major is the self-evident choice in m. 1, making up the core of the phrase. As to the last two notes, it would be possible to keep to C major, but the first accented a^1 seems to demand a shift of chord. A minor and F major are about equally probable, but if the melody “wants” to underscore its pentatonic character, A minor is the best choice.

Suppose that an eight-bar introduction/interlude is to be composed, what is likely to happen after the first phrase? If we keep to current formal conventions, there are just two possibilities to consider: either we repeat the phrase, or we invent a (somehow related) companion phrase, a second phrase perhaps taking the music to a demarcating, halfway harmony. Riff 1 chooses the repeated-phrase option but allows for a long, slightly demarcating a^1 in m. 4.

Since the relative-minor chord turns up once again in m. 4, the first four bars do not make up an ordinary antecedent closing in the dominant. Hence, there is no strong obligation to continue with a standard four-bar consequent. The most obvious continuation is therefore to repeat the core phrase once more, as if trying to come up with a way out. In Riff 1 the A-minor chord is exchanged for an F-major one in m. 6 – the other high-probability harmonic alternative is realized.

The emerging ready-steady-go design (another formal convention) must of course be brought to a suitable end in the tonic, and as musical parsimony bids, Riff 1 uses the same rhythm again in the obligatory fourth phrase completing the eight-bar unit. One of several possible, “natural” melodic clichés to reach c^1 is selected to go with the entirely conventional, full harmonic cadence to the tonic.

The conclusion of this composition experiment is obvious. The initial core phrase as well as Riff 1 in its entirety are predicated on the high-probability options that step-by-step are afforded by the melodic process or dictated by various basic musical conventions. Riff 1 is hardly an original piece, nor is its first phrase a very original beginning.

The discarded options of this thought experiment might be used as points of departure in order to produce a number of alternative tunes, starting with phrases that are more or less similar to the core phrase of Riff 1. Using our intuition, which of these tunes run the risk of being condemned as pieces of plagiarism?

Let's start with the minimal three-note motion $g^1-a^1-c^2$. After inserting a similar follow-up motif as a link, the phrase continues according to Riff 1. (Ex. 9a) Although the five-note, pentatonic upbeat is gone, the result cannot but remind a listener of Riff 1. Without seriously affecting the similarity to Riff 1, the long pentatonic upbeat up to e^2 can also be ruined by replacing it either with a short $c^2-d^2-e^2$ motion doing away also with the ascending-sixth, or with a rising quarter-note triad $g^1-c^2-e^2$. (Exs. 9 b/c) Evidently, the originality (if any) of Riff 1 – or its musical identity, which is more to the point – does not reside in its initial, pentatonic ascent.

Retaining the pentatonic five-note motion up to e^2 , the visit to the upper-neighbour note f^2 can be taken away and be replaced by another quarter-note e^2 without harming the similarity to Riff 1. (Ex. 9d) This applies also if f^2 is replaced by the lower neighbour-note d^2 . (Ex. 9e) Making the f^2 more prominent has also a minimal effect on the similarity. (Ex. 9f) The originality (if any) of Riff 1 is apparently not its turning-note excursion up to f^2 .

Proceeding directly from e^2 to a quarter-note d^2 makes for a somewhat greater deviation from Riff 1 since the d^2 is now a passing-note, not an *appoggiatura*. (Ex. 9g)

Keeping to Riff 1 as far as the fourth-beat c^2 in m. 1, the motion b^1-a^1 may replace a^1-a^1 , and yet the similarity to Riff 1 persists virtually unaffected – the b^1 emerges as a tonally inconsequential *appoggiatura* note. (Ex. 9h) Apparently, the “pentatonic” gap in the quarter-note descent is less important for the identity of the phrase than one might think.

Most of these tunes (and yet further derivatives of the core phrase) are quite useful melodies, and they could be considered as infringing on the copyright of Riff 1 if we have not dealt cautiously with the first prerequisite. The evident conclusion is that in order not to unduly restrict the freedom to invent new melodies, we must be wary not to grant Riff 1 a too high degree of originality, corresponding to a too strong copyright protection. When it comes to tunes like Riff 1, using a high degree of similarity as the decisive criterion for plagiarism is obviously not satisfactory.

Other, quite probable changes in the core phrase of Riff 1 can be undertaken to learn about differences that emerge as essential. Although it may be readily recognized and accepted as a variant of Riff 1 if it were used in Song 1, the tune shown in Ex. 9i, with its two prominent e^{2s} giving the melody another contour, cannot without further evidence be taken as a piece of plagiarism if it were to appear as the core phrase of an introduction to another song.

The melody in Ex. 9b may seem dangerously similar to the core phrase of Riff 1, but only if a C-major chord underlies m. 1. If this bar is harmonized with an A-minor chord, the minor mode inherent in the melody will take over, wiping out much of the similarity. (Ex. 9j) And even if the tonal makeover is less conspicuous, the same happens if F major replaces A minor in m. 2 of Riff 1. (Ex. 9k) Generally, the harmonies chosen to accompany a melody may be crucially important for its identity since they neutralize the inherent harmonization suggested by the melody itself.

In addition to being conceived of in terms of “decorations” of inherent triads, or (as in our thought experiment) being understood as a result of musical impulses step-by-step afforded by the more or less immediate melodic past or by stylistic constraints, melodies may also be “composed” in the literary sense of the word. Obviously – and this is a fact that must be taken into account when judging cases of alleged plagiarism – some melodies also or concurrently come into being as assemblages of inspirations or musical resonances that, consciously or unawares, derive from external sources, nearby or distant as the case may be. We will return to this perspective when discussing the third prerequisite.

Searching for melodic doubles

Since it is sometimes thoughtlessly resorted to, a third “method” of assessing originality must be presented. Being empirical and straightforward – not analytically convoluted as the methods proposed in the preceding sections – this approach to the first prerequisite is appealing to some people, but it is associated with severe logical problems.

This is how the argument underlying the third method goes. If it can be shown that there are already a number of tunes that are similar to the would-be copied tune, it cannot be considered original and the case is

simply over. Conversely, if no similar tune is submitted, the allegedly copied tune is original and enjoys copyright protection. The first conclusion is quite shaky while the second is wholly untenable.

The first outcome/conclusion brings up a host of problems. How many similar tunes must be submitted by the defence to convince the court that the would-be model tune is not original, i.e. to make it probable that a similar tune can be created independently of the alleged model? Is one enough, or are ten tunes needed? There is also a substantial (and for the plaintiff most embarrassing) risk that one or several of the similar tunes found in the search might in virtue of being older by rights file a plagiarism case against the tune claiming originality.

Furthermore, “similar” must reasonably be understood, not as virtually identical, but as “reasonably similar”, which means that an agreement must be reached as to how similar a submitted tune must be if it is to count as a piece of evidence speaking for the possibility of independent double creation. How important is the rhythm? What about the accompanying chords? These and other questions bring in problems to be dealt with only in the next, second-prerequisite stage of the lawsuit, i.e. the as yet unsolved core issue of whether a certain would-be infringing tune is sufficiently similar to its alleged model.

The second outcome/conclusion must be dismissed because it does not show that there is no reasonably similar tune. You can never empirically prove that something does not exist. If a court has based its decision as regards the first, originality prerequisite on the fact that no similar melody has been submitted by the defence, a final verdict of guilty will emerge as seriously mistaken if one (or indeed several) reasonably similar tune(s) were to turn up later – after all, there might very well be such tunes “out there”. Moreover, if you do not want to assume what is to be proven in a case of plagiarism, there might be at least one reasonably similar, and perhaps independently created, tune to consider: the “accused” one.

Both outcomes/conclusions suffer from a further deficiency. Whether one or several reasonably similar tunes are found or not, such searches are in vain since they do not shed any light on the originality of the would-be model tune, since they do not give any guidance when turning to the second prerequisite. In what ways is or isn't the alleged model tune original? Which

of its traits are to be paid special attention when studying the would-be copy tune to find out whether it features noteworthy similarities?

Turning back to the first outcome/conclusion: even if some reasonably similar melodies are submitted, this does not preclude the possibility that the would-be model tune is original, or at least original to a certain, perhaps sufficient degree. A non-musical example may serve to explain this point.

Let's assume that Tom Hanks (*Forrest Gump*) and Marty Feldman (*Quasimodo*, the ringer of *Notre Dame*), respectively, both hit upon the idea to sue a reasonably similar actor for imitating their appearances. When dealing with the first prerequisite, i.e. when trying to establish the originality of their looks, the courts hit upon the idea to require that a number of look-alikes of Tom Hanks and Marty Feldman are to be presented. What conclusions can be drawn if a number of Feldman-looking persons (it is not altogether impossible to find a few such persons) were to turn up in court? Certainly not that Marty Feldman's appearance lacks originality. Hence, whatever look-alikes you may find "out there", you cannot avoid dealing analytically with Tom Hanks' and Marty Feldman's appearances.⁴

To conclude, the third, empirical "method" of establishing originality is a logical disaster. This being said – and because Riff 1, when studied analytically, emerges as more like Tom Hanks than Marty Feldman – it is of some interest and even perhaps of some relevance to search for and submit a number of sound-alikes; cf. Exs. 10 a/h, showing 8 out of 30 tunes collected from relevant sources. If these tunes (or just some of them) were accepted as reasonably similar to Riff 1, they would give some additional support for the conclusion that this riff is not very original – its formulations are evidently not improbable enough to preclude (presumably independent) double creation. Conclusion: the originator of Riff 1 should have thought once more before suing a sound-alike.

It may be instructive to quickly scan this body of (deficient) evidence to see whether the various tunes might reasonably make up (or fail to make up) pieces of plagiarism with respect to the initial phrase of Riff 1. All

4 It may justly be held that tunes and looks are quite different things. To mention but two of the differences, looks are (as yet and fortunately) not subject to copyright legislation and (excepting monozygotic twins) people are created independently.

eight melodies feature a pentatonic descent from e^2 – but notice that the harmonization of 10a completely does away with this quality – and all of them (but 10a, 10e, and 10f) also suggest a pentatonic ascent. In various ways, all these tunes embody a melodic contour of a rising sixth balanced by a falling sixth (or fifth). Due to its rhythm, 10c is quite dissimilar to Riff 1 whereas 10b may pass as a more florid variant of it. Although 10e starts non-pentatonically with a rising triad, it is reasonably similar to Riff 1; an even better melodic double is perhaps 10g despite the fact that the non-pentatonic note b^1 is touched on the way upwards.

Ex. 10h, finally, with its quite exposed, up-then-down pentatonic pitch sequences, and in spite of the upward twists in the first and third phrases, comes very close to Riff 1. This example is of particular interest since just as in Riff 1 the initial phrase occurs three times in succession.⁵

If the deficit “third method” is adopted, the originality of Riff 1 emerges as insufficient: double creation cannot be excluded, and the trial should be discontinued already after the first prerequisite.

Riff 1 and 2: Similarity

There is nowadays a large body of empirical knowledge of great interest when it comes to evaluating impressions of musical similarity. How do we remember music, and what do we take notice of when we recognize a tune, or when we think that one tune is reflected in another? But one must bear in mind that most of this knowledge derives from experimental studies made under carefully controlled conditions, and therefore it cannot be applied unthinkingly when it comes to everyday situations, as when people think that a certain tune is a “copy” of another.

Yet, among the findings a few will be mentioned. Corresponding melodic contours are very important for the sense of similarity, a fact that turns agreement in terms of exact intervals between two tunes less critical. Identical or very similar rhythmic patterns often delude us into believing that the interval sequences of the tunes are closely similar as well. To people who are prone to listen in harmonic terms, melody notes representing the

5 As we will see, *Sandy River Belle* also displays some interesting features in common with Riff 2.

same harmonic function may easily be mistaken for each other – and in musical practice they may in fact be used as stand-ins for each other. But a detailed presentation of this research, highly relevant as it may be, lies outside the scope of the present study being devoted to the analytic part of musical forensics.⁶

Preliminary considerations

Should musical similarity be assessed on the basis of what one can hear or be grounded on what one can see? Before answering this question we must pay due attention to the word “can”. The problem is that people tend to think that everyone can listen to music while they realize that only some of us are able to read music.

It is evident that the ability to listen differs substantially among those who enjoy music, and one may hold that law and order bid that cases of alleged plagiarism should be judged by people with exacting ears. But it may also be considered proper or even desirable that judges and jurors in musical issues as representatives of the public should be average listeners.

Apart from the question of listening expertise, some people have a vast and readily accessible “musical reference library” in their heads. And if these people also have a low threshold when it comes to musical similarity, they are prone to immediately recognize and even name “sound-alikes”, suspected models, when(ever) they hear a tune. The problem is that such listeners may be allergic, rather than just sensitive, to similarities, and that they may be disinclined to adopt a critical attitude towards their musical associations, i.e. to pay attention to the differences involved.

Aural similarity is an evasive quality, a fact that enjoins us to be cautious. Many of us have experienced how musical similarities, which at first appeared convincing, often melt away if we bother to check our impressions. The basis for the once so obvious resemblance is not at all as solid as we

6 A collection of papers on these matters can be found in two special issues of *Musica Scientiae*, namely Discussion Forum 4A from 2007 and Discussion Forum 4B from 2008; taken together the various contributions make up a very good survey of the field and offer a wealth of bibliographical information.

thought, and sometimes we discover that we did not remember the would-be model correctly, that the similarity was partly a delusion.

Generally, there is a treacherous dialectics, an uneven polarity, between similarity and difference. The experience of similarity is primary – without a sense of similarity there is no reason to even think of any dissimilarity. And it seems easier to notice similarities than to take account of differences, and once a similarity has been discovered, it tends to dominate our impressions.

As regards reading music, there are as we all know huge differences even among people interested in music. What a “music reader” gets out of a score ranges from dots on a piece of paper, dots confirming the up and down motions of a melody being played, to virtually complete impressions of the music as it would sound if it were performed.

Returning to the initial question: it may be argued that in trials concerning alleged plagiarism in music we should both listen to the music and read its notation because listening and reading are complementary, mutually supporting approaches to music. When you listen, you may take notice of properties that do not emerge when you read the score (unless you are a very good reader), and when you read music, you may discover things that are difficult to hear. In court, where all relevant matters should be carefully penetrated, accomplished listening *and* reading are both necessary. After all, what should count in a trial of plagiarism is arguably not in the first place what sounds similar, but what *is* similar.

When appreciating music, and not least popular music, there is a strong predilection for the melodic element. This paves the way for mistakes when trying to find out the structural basis for perceived similarity. If we think that two tunes are similar, this impression may derive from a close rhythmic agreement rather than from a very convincing correspondence as to the interval sequences: rhythmic similarity tends to absorb melodic differences. The accompanying harmonies may also be crucial. If we take account of the fact that different underlying chords alter the tonal interpretation of the notes of a melody – such effects can be heard if we just try – two quite similar interval sequences may in fact be more different than we at first assumed.

The latter observation deserves to be brought out since there is a current notion that the accompanying chords of popular tunes are exchangeable and non-essential. This is supposed to be shown by the fact that musicians often re-harmonize the “same” melodies, for instance when producing “cover” versions. But this depreciation of the harmonic element in popular music is not acceptable. (For that matter, musicians at work may change the rhythm and the melody as well.) When melodies are tried in court, the chords must, just as the melodic pitches and the note values, be respected as integral elements contributing to the whole as it was conceived by the originator. The underlying chords are in fact crucially important when trying to understand a melody since they may disclose the composer’s idea of the melody’s inherent sequence of harmonies. Succinctly put, if two identical, or closely similar, interval sequences are provided with different harmonizations, they are not the “same” melodies.

This can be readily demonstrated if we turn to a most wellknown, introductory riff. Had Beethoven continued not as in Ex. 11a, but as in Ex. 11b, we would (retroactively) have understood the two mottos in terms of an inherent E \flat -major harmonic framework; the likewise retroactive sense of C minor suggested by Ex. 11a would not have presented itself. Beethoven could also, had he been a lesser composer, have started his C-minor and hypothetical E \flat -major symphonies, respectively, with kettledrum-blows manifestly presenting his choice of inherent chords; cf. Exs. 11 c/d.

Before comparing Riff 1 with the allegedly infringing Riff 2, we should recall an observation made when introducing the thought experiment, in which we tried to estimate the probabilities for each new note of Riff 1, namely that melodic processes – phrases as well as larger sections – get more constrained as they proceed. Since any meaningful evaluation of differences between the two riffs must be undertaken against the background of the probability of the traits in question in Riff 1, we must take the position of the difference into account. The later in a melodic unit a difference turns up, the more remarkable it is.

It is time to present the would-be infringing tune, henceforth called “Riff 2”. Again this is an apt designation since it is an instrumental interlude featuring a recurring phrase. It forms part of the hit song *Om du vill bli min fru*, “Song 2”, released in 1995 by the group *Drängarna* (Regatta).

Similarities and differences

Riff 2 is set in D major while the key of Riff 1 is E major. Although of some importance for people having absolute pitch and of some, greater importance for those playing and singing the music, this difference will be left out of account. A further difference is the fact that whereas Riff 1 is notated in 2/2 time, Riff 2 features 2/4 bars, but this distinction is wiped out by the fact that the note values in Riff 2 are halved.

To facilitate comparisons Riff 2 will be notated with long bars in 2/2 “*alla breve*” time and be transposed to C major; cf. Exs. 12 and 13.

Turning to the interval sequences of the two riffs, 35 notes from Riff 1 recur in Riff 2 whereas 7 notes* are different. (We will return to note-counting later on.) As already pointed out, the first phrase of Riff 1 is repeated twice before the rounding-off fourth phrase. Turning to Riff 2, its first three phrases start as in Riff 1, but its second phrase features a final turn upwards, a quite unexpected deviation from the preceding phrase. The fourth phrases of the two riffs start in a similar way, but again Riff 2 comes up with a surprise – its last phrase veers off from the expected route to the low tonic c^1 and lands on c^2 . These differences between the riffs are remarkable in terms of probability since they turn up at the ends of the (repeating) second and the fourth phrase, i.e. when the concluding notes could be anticipated by the listener with full and reasonable certainty, respectively. (This being said, the fourth-phrase surprise is somewhat diminished by the fact that the second phrase has already exhibited an upward twist.) A further deviating note is to be found in the upbeats to the fourth phrases. The second note is f^1 in Riff 1 while Riff 2 features g^1 – which is arguably better. (We will return to this difference.)

The rhythm of Riff 2 is identical to that of Riff 1. But this correspondence is not very remarkable, considering the dual fact that the rhythmic pattern of the initial phrase of Riff 1 (and Riff 2) does not exhibit any low-probability traits, and that repeating a certain musical idea, and particularly its rhythm, is what riff-like passages are supposed to do.

In the harmonic domain, there is an obvious and important difference: whereas in Riff 2 all three core phrases feature C-major-to-F-major shifts, Riff 1 keeps to C-major/A-minor until in the third phrase A minor is exchanged for F major. Of some importance is also the fact that the final

cadence is somewhat different in Riff 2: the dominant sets in already at the first beat of m. 7, turning the accented e^1 into a dissonance (to mention but one of the effects on the melody).

The A-minor-versus-F-major harmonic difference is crucial since the patent tonic-to-subdominant shifts in Riff 2, unlike the smooth changes from the tonic to the relative minor in Riff 1, counteract the latent pentatonic quality of the melody.⁷ The steeply rising endings of the second and fourth phrases in Riff 2 strongly contribute to this effect. By being exposed as the main downbeat in m. 4, the melody shows that f^2 (just a turning note in the first phrase) belongs to the primary pitch set, and when b^1 turns up as the penultimate leading-note in m. 7, it makes the diatonic C-major set complete. A-minor chords do not occur at all in Riff 2, and (allowing of a speculative remark) it seems doubtful whether its composer ever thought of his melody as having an inherent relative-minor chord or as embodying a pentatonic scale.

The harmonic plan and the melodic design of Riff 2 conspire to make for a formal difference between the two riffs. The final rising inflections in the second and fourth phrases correspond to each other, paving the way for understanding Riff 2 as an eight-bar period – featuring an antecedent closing in the subdominant. The symmetric, divided layout of Riff 2 ($AA_1'AB$) emerges as quite different from the ready-steady-go sequential configuration of Riff 1 (AAA_1B).

The tonal and formal differences in turn suggest another stylistic context for Riff 2. It associates to Swedish folk music rather than to American Country music. (As we will see later on, there is also an American trait in Song 2.)

Both Riff 1 and Riff 2 serve as instrumental interludes in hit songs that are primarily made up of verses and refrains, and both riffs are played on the violin. These agreements cannot but strengthen the overall similarity, but they should not be overestimated – given the genre of the two songs, these traits are conventional almost to the point of being inescapable. There

7 Although involving a shift from major to minor, the shift from C major to A minor is fairly inconspicuous since two notes of the C-major triad are retained in the A-minor triad; the C-major and F-major triads have only one note in common which makes for a more marked shift.

are also some general differences that are arguably less important: Riff 1 is first played as a violin solo; only when the riff turns up as interludes is the violin accompanied by an acoustical guitar – an instrument not featured in Riff 2. Song 2 and its riff interludes are played perceptibly faster and more energetically than Song 1/ Riff 1, and there is also some background shouting.

When listening to Riff 1 and then to Riff 2, the immediate impression is that they are very similar; indeed, some people would even say that they are (virtually) identical. But if you care to penetrate deeper into the music, some crucial differences emerge that have far-reaching, distinguishing consequences. The dual fact that F major, not A minor, is consistently chosen as the alternating chord support in Riff 2, and that its second and fourth phrase bring steeply rising endings exhibiting f^2 and the leading-note b^1 , blocks the pentatonic quality of the core phrase, makes for another formal layout, and suggests another stylistic context. Two similarities between the two riffs appear noteworthy: the iterated core phrase starts with the same filled-in rising sixth, and the fourth phrase begins by heading downwards in the same way.

Riff 2: Imitation

What arguments can the plaintiff muster in order to make it likely that Riff 2 is in fact an (unconscious or deliberate) imitation of Riff 1? It was held during the trials that Song 1 was quite popular and widely disseminated, and that its popularity lasted for several decades after its release in 1973. How did the defence counter this claim? The originator of Song 2, released in 1995, testified that he could not remember having heard Song 1 – being of a younger generation, he did not care very much about old hits.

The defence can also be, and was in fact, faced with an argument that amounts to an allegation of deliberate imitation. Must not, given the great similarities between the two riffs, the rising endings of the second and fourth phrases in Riff 2 (and the one-note difference in m. 6) as well as the F-major chords be regarded as attempts by the originator of Riff 2 to conceal that he actually did use Riff 1 as a model? This is an accusation that, apart from simply denying it, can only be countered by accounting for how Riff 2 was in fact created, or by demonstrating how it probably came into being.

Music as the art of combination or convergence

But first of all we must turn to – and waste quite a few words on – an argument that presents itself immediately (and that was not ignored by the plaintiff). It is often claimed that music is characterized by its infinite possibilities. This means that a substantial similarity between two tunes, i.e. a great number of identically recurring notes, cannot be explained unless one assumes an act of imitation. How else can such an astounding series of coincidences, each of them most improbable, arise? Therefore and speaking in legal terms, it might simply be established that, due to the high degree of similarity, there is a strong “presumption” for (intentional) imitation.

To convince the court of the force of this argument the plaintiff may be (and was) tempted to present monstrous combinatorial calculations. Issuing from the 88 keys available on a full-range piano keyboard – or more modestly from just the 12 chromatic or 7 diatonic notes within an octave – one may simply ask how many possible melodic combinations there are, and then promptly deliver the exact result: a number that cannot but make anyone dumbfounded. And if you combine all these pitch combinations with the overwhelming number of possible rhythmic and harmonic patterns, the total sum of different tunes becomes truly astronomical.

There is a grain of romantic, non-mathematical truth in the talk of music’s infinite possibilities, but a heedless application of this commonplace brings us very far beyond the border to nonsense. Music, and especially popular music of the kind represented by the two riffs, does not work in this throw-the-dice way. Any meaningful sequence of notes is regulated both by general rules and by unique restrictions presenting themselves as the melody takes form. This means that most of the infinitely many “tunes” must be discarded since they turn out to be musically absurd or useless.

A comparison with language is enlightening. In a certain language there is a fairly great, but limited number of available phonemes (or if you will, letters) but they cannot be combined haphazardly. Many combinations of phonemes/letters must be discarded since they are impossible to pronounce or do not make up words in the language in question. And at the next stage many combinations of acknowledged words are useless since they do not add up to meaningful sentences.

Turning to the two riffs, how can, the plaintiff's lawyer asked, a tune like Riff 2 arise except as a result of dependent creation, except as an intentional copy of Riff 1? The two riffs are made up of 42 notes of which 35 turn up in exactly the same way in the two tunes! Isn't this an extremely improbable, and hence completely incredible, coincidence?

But this argument is grossly misleading. Both riffs feature a core phrase that turns up, almost unchanged, three times, and this fact (dictated by musical convention) can of course not be used to work out a huge number of combinations within the entire riffs. Logic decency bids that we keep to the initial phrase, which means that all 11 notes starting Riff 1 are present in the same order in the first phrase of Riff 2. But isn't even this an extremely improbable coincidence, proving beyond any reasonable doubt that Riff 2 must be an imitation of Riff 1?

Before accepting this conclusion, we must take into account that the two riffs operate within a reduced set of 7 (or even 5) diatonic (pentatonic) notes out of the 12 available chromatic ones – 7 (5) notes that are not equi-probable – and that most of the combinations have to be dismissed as musically useless. And when judging the remaining melodies, we must check whether the “same” pitches are in fact identical – due to rhythmic and harmonic influences they might be tonally different – as well as consider the fact that melodic similarity is not a matter of pitches but of relationships between pitches, i.e. intervals. Finally, as was demonstrated in the thought experiment sketching a probabilistic branching structure for the first phrase of Riff 1 (or Riff 2), a musically meaningful calculation of the odds for Riff 2 would yield a much less spectacular result.

Duping, throwing-dice calculations can be readily exposed by purely mathematical means. Let's calculate how many 11-note “melodies” there are if we modestly and quite realistically assume that the melody is “white-key” diatonic and moves within a range of two octaves, and if its starting note is determined beforehand. Let's also assume that we keep to the rhythm of Riff 2 and leave the accompanying chords out of account. Since there are 15 options for each of the 10 remaining notes, we get $15^{10} = 576\ 650\ 390\ 625$ different, equi-probable pitch sequences, three of which are shown in Exs. 14 a/c.

But this is a very problematic calculation, to say the least. Firstly, the combinatorial equi-probability of each and any of all these pitch sequences

has neither anything to do with its musical probability/usefulness, nor with its resemblance to Riff 1. In terms of music, the *musical* probability of 14a is considerably higher than 1: 576 650 390 625, and also much higher than the probability of 14b, not to mention 14c which is extremely unlikely; the one who composed the latter tune must have come from another planet. The melody 14a is identical with Riff 1, while 14b is only faintly similar to it, and yet, according to the calculation they have the same, extremely low probability.

Keeping again to the white keys within two octaves, it is of interest to consider another case of slot-machine composing. Now the task is to find up a 5-note “melody” whose first note is g^1 and last note is e^2 . Since there are 3 free notes, the probability of each combination is $15^3 = 3375$; six of these pitch sequences are shown in Exs. 15 a/f. The outcome 15f is musically absurd while 15e may be useful in some situations; 15d is somewhat awkward due its zigzag motion, a trait that is less prominent in 15c. The jackpots of the sample are the straightforwardly rising melodies shown in Exs. 15b and 15a. But suppose that the melody is to move rapidly, and that the sense of an inherent G-major triad is undesirable. This means that 15c and 15b are no longer suitable, and that 15a emerges as the winner. Indeed, if you are reduced to spend three notes to get from g^1 to e^2 in a fast tempo and in a C-major way, there is virtually but one alternative: the pitch sequence of Ex. 15a.

Does the 1-out-of-3375 probability really add up to a “strong assumption” to the effect that the composer of Riff 2 (perhaps wanting or needing to rapidly fill in a rising C-major sixth) must have listened carefully to Riff 1 and then copied its way of filling in a rising C-major sixth? Rather, and whether or not making for a pentatonic character at the very start of Riff 1 and Riff 2, the rising gesture g^1 - a^1 - c^2 - d^2 - e^2 emerges as virtually unavoidable.

Turning to the whole riffs, what happens to the 35-hits-out-of-42-notes argument and the unfathomably low probability of such a long and ordered set of concordances between Riff 2 and Riff 1? Well, considering that the rules of forming musically meaningful melodies must be obeyed in popular tunes, and that the 11-note core phrase occurs three times as is suitable in a riff, the “strong assumption” for dependent imitation withers away considerably.

Thus, there are quite a few counterarguments that can be used to kill off the combinatorial hoax, but the third prerequisite also gives the defence an opportunity to account for how Riff 2 was in fact created as far as its composer can recall – or as far as other, internal evidence indicates.

The musical core of what follows is that the similarity between Riff 1 and Riff 2 may be the result of *convergence* – a common, and arguably legitimate, phenomenon in music, especially when it comes to popular tunes of low originality.

According to this view each of the tunes involved in this legal dispute derives from its own sources of inspiration, which implies that none of the riffs actually came into being as a result of “decorating” inherent triads or through piecemeal, branching decisions dictated by high probabilities as demonstrated in the thought experiment. (This does not preclude that the riffs can be described, and that their degree of originality can be assessed, in such terms.) The two riffs were created by means of “compositional” work in a quite literal sense: pre-existing ideas, inspirations, were combined and adapted to each other so as to give rise to two new – and as it happened – similar tunes.

When convergence is involved, one should not talk of double, but rather of “parallel” creation. Convergence, conscious or not, is the background for the commonplace but true observation that “music comes from music”, and convergence may explain why many tunes are similar. Every composing or improvising musician lives in an “echo-chamber” and cannot be expected to always be able to account for how he/she got “his/her” ideas.

The actual composition process

So, what did the originator of Song 2 say about the composition process and his inspirations?

The initial spark came from some short lines suitable for starting a refrain. After settling on the melody for the words of the refrain (Ex. 16b), he turned to the text of the verse and its melody (Ex. 16d). The riff (Ex. 16c) was finally derived from the refrain. Using his violin he simply improvised over the core phrase of Refrain 2, and while doing so another melody entered his mind, helping him on his way: the first short phrase from *Oxdansen*, a traditional Swedish dance tune which he had played many times when he

was young (Ex. 16a). He also mentioned that he had another external source of inspiration for his song: the contrasting phrase of the American folk song *Oh, Susanna* (Ex. 16e) turned up as a suitable contrasting idea in Verse 2.

In what follows his account will be scrutinized to find out whether it holds good, whether it can be substantiated analytically. Is there any support in Song 2 for independent parallel creation, for the idea that the similarities between Riff 1 and Riff 2 can be explained as a result of musical convergence, by the fact that Song 2 came about as a result of “composition”? Or is his account merely a rationalization made up to dismiss the implicit accusation of having imitated Riff 1?

The melody of Refrain 2 matches the pre-existing text perfectly. The stressed syllables of the important words in each of the four lines always coincide with accented notes, and the melodic inflections, always describing a falling sixth, agree with the natural prosody of the rhyming lines. The fourth phrase reaching down to c^1 fits very well with the determined message of the last line of the text. With just one exception – the e^2 – e^2 eighth-note pair in the first phrase is a necessary concession to the text – the rhythm of each phrase is made up of quarter-notes and closing half-notes. The second and third phrases are preceded by two-note and one-note rising-sixth upbeats, respectively; while keeping the motion going these added notes accommodate extra words. The two-note upbeat features a connecting a^1 , a natural choice considering the preceding a^1 . All three statements of the core phrase are accompanied by C-major-to-F-major shifts, effectively erasing any sense of pentatonicism in the melody.

The originator’s statement that the text gave rise to the melody of Refrain 2 emerges as quite convincing.

Turning to the relationship between Refrain 2 and Riff 2, it is not difficult to see that the refrain serves as the melodic source for the riff, nor is it hard to hear. Since the first constituents sung-then-played in Song 2 are the refrain and then the riff, the close kinship between these melodies is unmistakable, and it is demonstratively brought out by the fact that the two sections are juxtaposed. It is absurd to hold that Riff 2 came into being as an imitation of Riff 1 since what is imitated in Riff 2 is obviously Refrain 2, and as the word “improvise” suggests, the quarter-note vocal phrases of the refrain are fleshed out with eighth-notes – always observing that the overall rhythmic

pattern of the phrases remains the same. In Riff 2 the second beats of mm. 1, 3, and 5 are subdivided, introducing a neighbour-note idea that no doubt (partly) stems from the e^2-e^2 eighth-note pair in m. 1 of Refrain 2. The latently pentatonic four-note upbeats beginning the core phrase in the riff include the note a^1 to be found in the two-note upbeat to the second phrase in the refrain. The two a^1-g^1 motions starting the fourth phrase in the riff evidently derive from the corresponding quarter-notes in the refrain.

The model/copy improvisatory relationship between Refrain 2 and Riff 2, as declared by the originator, is evident beyond any doubt. The added notes emerge as quite natural,⁸ and it is a minimal requirement that a judge or juror dealing with music should be able to hear and understand what probably took just a few moments for a musician to come up with. In this context it should be mentioned that Refrain 2 and Riff 2 over and over again have a proto-pentatonic cliché in common with Verse 2: the three-note motions $d^2-c^2-a^1$ and $a^1-g^1-e^1$, respectively.

As will be recalled, the originator of Song 2 stated that the dance tune *Oxdansen* revolved in his mind when he improvised Riff 2 out of Refrain 2. That this tune entered his mind may be explained by the fact that the interval sequence as well as the rhythm (the divided f^2-e^2 second beat) of the first bar of Refrain 2 are present also in the first bar of *Oxdansen*. Furthermore – and this is the main point – the initial seven notes of *Oxdansen* are exactly replicated within the initial phrase of Riff 2 where they make up its C-major core.⁹ It is of particular interest to notice that the short, eighth-note c^2-d^2 upbeat of *Oxdansen* complements the quarter-notes g^1 and a^1 in the second bar of Refrain 2 so as to give rise to the swift four-note upbeats in Riff 2 – a latently pentatonic motion arising from patently non-pentatonic sources. It should also be mentioned that some versions of

8 The remaining notes of the filled-in rising sixth will be explained below, and so will the unexpected upward detours finishing off the second and fourth phrases in Riff 2.

9 That the entire, bisected first-repeat of *Oxdansen* does not show up in Riff 2 is of course an entirely invalid objection. The d^2 finishing off its first phrase in the dominant was not desirable, nor was its complementary phrase closing on the tonic c^2 . One must distinguish between inspiration and citation when it comes to creative work: when improvising you are free to use what you need – starting the riff with a dominant-to-tonic pair of short phrases was entirely unsuitable.

Oxdansen start with the eighth-note upbeat g^1-c^2 , supplying the inherent C-major triad of the rising sixth beginning Riff 2.

The originator's statement that *Oxdansen* was a supplementary source of inspiration when improvising Riff 2 is obviously true.

While speaking of *Oxdansen* two further remarks are pertinent. The observation that 7 out of 11 notes of the core phrase of Riff 2 can be found in the first phrase of *Oxdansen* is also true of the core phrase of Riff 1. Whether the originator of Song 1 was also inspired by *Oxdansen* or not, this makes up a minute, but perfect example of convergence and independent parallel creation. Furthermore, since the 7-out-of-8 notes from the first phrase of *Oxdansen* cannot very well lay any claims to be original, the fact that the repeated core phrases in both Riff 1 and Riff 2 are infested by this melodic virus indicates that the originality of both riff tunes is quite low.

The quasi-citation of the contrasting F-major phrase of *Oh, Susanna* at the corresponding place in Verse 2 is most obvious, and another, more vague reminiscence turns up two bars later. This rising-fifth motif, starting with the swift upbeat motion $c^1-d^1-e^1$, is very common in *Oh, Susanna*, and the rapid two-note upbeat constituent turns up in *Oxdansen* as well as, embedded in the four-note upbeats, in Riff 2. In addition, there is another feature shared by *Oh, Susanna*, Verse 2, and *Oxdansen*: phrases closing at the dominant (at d^1 or d^2) alternate with phrases closing at the tonic (at c^1 or c^2). There is also a direct connection between *Oh, Susanna* and Riff 2 in the form falling fifths (g^1-c^1 and e^2-a^2 , respectively) including upper-neighbour turning notes.

Perhaps *Oh, Susanna* gave rise to the association to *Oxdansen*? In any case, *Oh Susanna* emerges as an important agent of convergence in Song 2. The fact that a phrase from *Oh Susanna* is demonstratively included in Verse 2 cannot but give an American ring to Song 2. The imported phrase brings out the F-major subdominant most clearly in verse 2, and it is possible that *Oh Susanna* is the source of the C-major-to-F-major shifts in Refrain 2 and hence in Riff 2. This connection may also explain the choice to close the antecedent part of Riff 2 at the subdominant.

A seemingly insignificant, but actually quite important, detail should finally be brought to attention. All melodic cadences (but one) to the low tonic in Refrain 2, Verse 2, and *Oh, Susanna* feature some kind of $e^1-d^1-c^1$

motion; *Oxdansen* of course has $e^2-d^2-c^2$. But the last phrase of Verse 2 is finished off in a quite surprising way by a bold rise to the high-register $e^2-d^2-c^2$. This ending cannot but be associated with the similar, unexpected upward twists closing the antecedent and consequent in Riff 2. Thus, when listening to Song 2 as a whole, the rising melodic cadences in its riff are not unprecedented, and far from being attempts to hide away that Riff 2 is an imitation of Riff 1, they emerge as idiosyncratic traits in a riff tune that is created out of its own intra-opus sources.

In this context, one of the previously cited “sound-alikes” should be mentioned. Ex. 10h, *Sandy River Belle*, features a three-fold core phrase which is quite similar to the core phrase in Riff 2, and the unexpected high-register close of its first and third phrases is replicated at the end of the second phrase of the riff. Perhaps *Sandy River Belle* served as another, unconscious inspiration for Riff 2, or perhaps there are many American dance tunes providing models for suddenly rising phrase-endings?

To complete the picture of convergence, some words should also be said about Song 1 and the relationships between its constituents. Nothing is known about external influences in this case, so we are reduced to study whether Riff 1 features any melodic fragments stemming from Verse 1 or Refrain 1; cf. Exs. 17 a/c.

Just as Riff 1, the refrain and verse of Song 1 feature repeated core phrases. As appears from the brackets, Song 1 is integrated by a falling motif, although these internal motivic kinships are not as close as those found in Song 2. It is of interest to note that Refrain 1, with its simple triadic melodic motions and its recurring C-major-to-F-major shifts, is not at all pentatonic; nor is Verse 1, although it brings shifts to A minor at the melodic low-points – a feature that might have inspired the harmonization of Riff 1.

If Song 2 had been released in 1973 and Song 1 in 1995, and if Riff 2 had sued Riff 1 for copyright infringement, the originator of Song 1 would have had problems when coming to the third requirement – unless he/she was able to recall some external sources of inspiration making independent parallel creation plausible. Outside the court the two riffs are specimens of convergence, a common and accepted way of creation in the world of music, but in the court, perhaps being less informed in musical matters, convergence may be dangerous.

To sum up, the account of the originator of Song 2 together with strongly supporting analytical evidence from the song itself make it plausible beyond doubt that Riff 2 derives from its own set of sources, internal as well as external. Song 2 emerges as a tightly integrated composition, and since many of its ideas and inspirations obviously coalesce in the riff, there is simply no ground for assuming a further, all-important model for Riff 2. Riff 2 does exhibit a number of similarities with Riff 1, but it turns out that the two riffs exemplify musical convergence, i.e. independent parallel creation.

Can anyone seriously believe that Riff 1 served as the model for Riff 2 – whose originator allegedly took care to introduce some changes so as to hide away the appropriation – and that Riff 2 was subsequently “de-improvised” to create Refrain 2? The fact that Riff 2 is evidently an improvisation on Refrain 2 – it is played immediately after the refrain – effectively undermines the plaintiff’s argument that the originator of Song 2 must have heard, remembered, and imitated Riff 1.

Thus, there is no ground for claiming that Riff 2 is a piece of plagiarism, unless of course one ignores the third, “imitation” prerequisite altogether and simply grounds a verdict of guilty on the basis of an unlawful degree of similarity. But such a conviction must bear scrutiny according to what has emerged in the previous discussions of the second and first prerequisites. Is Riff 2 sufficiently similar to Riff 1 in a judiciously relevant, probability-based sense? And is Riff 1 sufficiently original in the sense that double creation of such a tune is highly improbable, or does it merely enjoy a limited copyright protection – or perhaps none at all?

General conclusions

If one applies musical analysis in order to identify conventional tonal patterns in Riff 1 and/or to evaluate the probability of its tonal process as it evolves – as has been done here when dealing with the first prerequisite in ways that take account of the probability of double creation – it is obvious that Riff 1 lacks sufficient originality and hence cannot be granted copyright protection. Alternatively, its originality only suffices for limited protection, which means that a high degree of similarity must be required at certain “hot”, low-probability spots if another tune is to be judged as an infringing copy.

If one makes use of previously acquired analytic insights as regards the probabilities of the various formulations in Riff 1 – as was stipulated in the discussion of the second prerequisite – it is apparent that, along with many less remarkable similarities, Riff 2 features crucial differences at hot spots *vis-à-vis* Riff 1. Given the low originality of Riff 1, Riff 2 cannot reasonably be judged as a piece of plagiarism.

Turning to the third prerequisite, it has been shown beyond doubt that Riff 2 primarily derives from Refrain 2, and secondarily from Verse 2 and two external sources, in a way that precludes a model/copy, imitation relationship between Riff 1 and Riff 2. The similarities between the two riffs make up an example of musical convergence, a common musical phenomenon that cannot reasonably be condemned as unlawful.

Hence, the complaint should be dismissed on all three accounts.

The verdicts and a supreme twist

The Riff 1 vs. Riff 2 case was tried in three Swedish courts: Stockholms Tingsrätt, Svea Hovrätt, and Högsta Domstolen (The Supreme Court). The present writer became interested in the case after reading some newspaper articles written prior to the trial in Stockholms Tingsrätt. As a result, he sided with the defence and took part as an expert in the proceedings of Svea Hovrätt.

As to the first and the second prerequisites, the originality of Riff 1 and its similarities with Riff 2 were (apparently) established in a discretionary, “overall” way. The opinions of the courts contain very few motivations, which indicates that no penetrating musical analysis and no serious discussion of probability issues had occurred. Consequently, Riff 1 was taken to be sufficiently original, and Riff 2 was considered to be too similar.

Turning to the third prerequisite, the verdicts turned out differently. Stockholms Tingsrätt concluded that it had not been shown that Riff 2 could not have been created independently, and hence that it did not make up a piece of plagiarism.

Svea Hovrätt established that the high degree of similarity between the two riffs amounted to a strong presumption indicating a dependent creation of Riff 2. Ignoring that the independent, converging creation of Riff 2 had been demonstrated by the defence, a verdict of guilty was based on the strong presumption that an imitation of Riff 1 had taken place.

The precedential verdict of guilty issued by Högsta Domstolen (HD) simply established that the two riffs were “objectively” similar – not a very apposite expression considering the discretionary assessments, arguably involving subjective elements – but it also brought a twist having possibly far-reaching consequences. Since this twist entirely shortcuts the third prerequisite, lowers the sufficient degree of similarity, and makes for repercussions when it comes to the first prerequisite, it calls for a discussion.

HD argued that a few notes, originally brought together, must be granted protection – just as “personally formed book-titles”. The additional comparison may perhaps be understood as an inconsequential remark *en passant*, but given the supreme, precedential level it must be taken as seriously as the obscure formulation permits. A hint that may solve this judicial *koan* is perhaps to be found in the plaintiff’s petition where the word “trademark” turns up, a bait that HD seems to have swallowed.

If the core phrase of Riff 1 (its “hook” phrase, perhaps) is to be regarded as a trademark, what difference does it make? A registered trademark – or an otherwise established trademark, in which case its degree of “distinctiveness” is less important than its power to evoke a certain association – calls for unconditional respect. Nobody is allowed to use a similar mark, no matter how it came into being, and the critical degree of similarity is quite low: it is sufficient if the mark may be *mistaken* for the protected trademark. If a short musical phrase – a “distinctive” phrase, not necessarily an original one – is likened to a book-title, and is to be treated on a par with a trademark, it is granted protection from a host of other more or less similar phrases that may be mistaken for it, and this applies even to situations when people do not pay much attention to what they hear.

Since the book-title/trademark idea amounts to missing the very point of music, an example from another field of human endeavour is needed to tune in the right wavelength. In virtue of being a trademark, MacDonald’s slightly obese M may block the somewhat obese W standing for WhackDonald (after Gregor WhackDonald, the founder of a company selling underwear for large women) although an M is in fact a far cry from a W, and although a hamburger is quite different from a brassiere. But the point is that you might mistake the W for an M when driving your car down the street while talking to the person sitting beside you.

And if you do not listen to “Riff 2/W”, it might be mistaken for “Riff 1/M”, and if Riff 1/M insists on the copyright of its initial phrase, its trademark, not only Riff 2/W is out of the question, but presumably also a number of other, possibly useful riffs starting in roughly the same way as Riff 2/W; cf. Exs. 18 a/i. It should be noticed that Ex. 18g, i.e. the core phrase of “Refrain 2/W”, may be mistaken for “Riff 1/M”. In other words, if Riff 1 is a trademark (book-title), not only Riff 2 but also its internal model Refrain 2 is unlawful.

This would be a pity, but what is the intellectual problem with putting Riff 1 on a par with a book-title/trademark? A book-title is distinct from the rest of the text and refers to a book, whereas the initial phrase of Riff 1 belongs to, forms a part of its tune, without referring to it. (Song 1 has a title, namely *Tala om vart du skall resa*, a quote from its lyrics.) This conceptual confusion becomes even more obvious when we turn to trademarks in current sense. Like the rest of Song 1, the core phrase of its riff is music whereas MacDonald’s M is not a hamburger. To find out whether or not Riff 2 is a piece of plagiarism with respect to Riff 1, we need musical analysis to settle questions of originality, similarity, and genesis. But a comparable Coca Cola vs. Pepsi Cola lawsuit would not be a dispute between two (clearly different) trademarks but between two brown liquids, an issue calling for chemical analysis. You may also, if you are a judge or juror thinking that you have a sense of taste qualifying you to arrive at “overall” assessments, drink whatever there is in the bottles.

However supreme, a court must be able to distinguish between *signifiant* and *signifié*.

But doesn’t, after all, the initial phrase of Riff 1 function as a trademark, doesn’t it make us think of the rest of the song? It may, due to sheer repetition, do so for some people having heard Song 1 many times, but it cannot very well be claimed that it has a distinctiveness comparable to the ribbed Coca-Cola bottle and has been established in the minds of the general public to such a degree. And it may, just as in the case of a brown liquid kept in a bottle for some decades, be argued that the associative power of Riff 1 has passed its best-before date.

All this does not imply that passages of music cannot be, and have not been, exploited as trademarks, referring to something beyond music. The “hook” motif starting Beethoven’s Fifth and the “EU-tune” taken from his

Ninth are cases in point. And we all know that snippets of music are used in advertising. The jingle shown in Ex. 19a is widely recognized, but due to its lack of originality – it is made up of a quite common melodic motion plus a cadential cliché – it may be mistaken for several other “objectively” similar melodic fragments, which consequently must be forbidden in virtue of the jingle’s “distinctness”; cf. Exs. 19 b/d.¹⁰

Another tune that may be rammed by 19a is the one shown in Ex. 20. But presumably Old MacDonald would deny that he has violated any copyright laws – his tune older as well as arguably even more established. This raises several questions about Riff 1. When The Supreme Court of Sweden, 29 years after the composition of Song 1, granted its riff a legal status comparable to that of a book-title/trademark, was its degree of distinctness seriously tried, was it really checked whether this everyday phrase was unique at the time of its composition – don’t forget *Sandy River Belle!* – and was its associative power assessed in some way?

A final reflection

As a matter of principle works of music enjoy copyright protection, and they are protected for quite a long time. But it is fair to say that most popular tunes sink into oblivion after just a few years – the copyrights usually outlive their objects by many decades. By and large, it is also fair to say that popular tunes are produced in close adherence to the musical conventions of some current style, and that they often feed on what the musical commonage affords. As a result, many of these tunes tend to exhibit a certain degree of “family resemblance”.

The consequences of unthinkingly granting popular tunes a high degree of originality, and hence a stronger copyright protection than they deserve, and of unthinkingly lowering the bar for the critical degree of similarity – as you do when putting melodic phrases on a par with book-titles/trademarks – may be severe and long-lasting. A verdict of guilty in a plagiarism case might therefore mean that a pestilence flag is hoisted over an unknown number of useful sound-alikes, and that members of (and perhaps also relatives to) melody “families” are incited to sue each other.

¹⁰ In this context, cf. also Exs. 5 a/b.

It is certainly not honourable to get a free ride in the wake of a hit by imitating passages from it, nor is it worthy to use courts to rob another originator of his/her independent creative work. The copyright laws have been instituted to protect published works from appropriation and to secure that the originators get their rightful share of the proceeds. In other words, the legislation is not in the first place intended to protect the freedom of musical expression. This fact enjoins proprietors as well as courts to observe restraint: the law should not be used by default to favour the sawn timber at the cost of the growing forest.

8 Schubert's promising note. Further exercises in hermeneutics

Don't trust the teller, trust the tale.
(D. H. Lawrence, *Studies in Classic American Literature*)

*Vice and virtue are to the artist materials for an art.
To reveal art and conceal the artist is art's aim.
It is the spectator, and not life, that art really mirrors.
The highest, as the lowest, form of criticism is a mode of autobiography.
Those who find ugly meanings in beautiful things are corrupt
without being charming.
All art is at once surface and symbol. Those who go beneath the surface do
so at their peril. Those who read the symbol do so at their peril.
Diversity of opinion about a work of art shows that the work is new,
complex, and vital.*
(Oscar Wilde, from the preface to *The Picture of Dorian Gray*)

Introduction

It may seem as a paradox that the “new musicology” is characterized by, indeed almost obsessed with, an approach dating back to the nineteenth century and that loomed large in many musicological or quasi-musicological writings in the early decades of the twentieth. Whether called “music criticism” or “musical hermeneutics”, and no matter whether it drapes itself in one lavish theoretical package or the other (semiotics, narratology, deconstructivism), the sting is directed against “positivist” structural analysis and myopic historical studies. Instead of worshipping music as the purest of arts, literature and pictorial art are held up as models since they invite the beholder to understand the works in terms of content and reference. Music, it is claimed, is after all no less capable of conveying thoughts, no less pregnant with social or ideological content, no less suitable for extracting meanings supporting political, cultural, or private agendas.

The adverse reactions – ranging from indignation to scepticism, and not only coming from hardened formalists – could be anticipated. But the discipline within the discipline has not been strong enough to prevent a fairly

widespread following: specimens of “new musicology” have frequently turned up in journals and monographs.

It may therefore be useful to present a thorough “critical” study of a short piece of music in order to lay bare each step in the interpretation process, to expose the problems and limitations of the hermeneutic approach, and to demonstrate the pitfalls involved. But before embarking on such an investigation and to prevent misunderstandings, the proper key should be set by giving a frank declaration of my attitude towards hermeneutics.

Musical hermeneutics is not my cup of tea, generally speaking. I am not in the habit of producing such readings, at least not if we by “musical hermeneutics” mean interpretations that clearly transgress the border to the “extra-musical” domain – a domain that of course may be demarcated in various ways. And I have read more than one hermeneutic interpretation that I have found objectionable, irrelevant, incomprehensible, disgusting – or funny. (I have not been shocked because my sense of humour sets some interpretations aside as ridiculous.) In my opinion, the worst deficiency an extra-musical reading, or the evidence for such a reading, can have, is to be out of touch with the music as an experienced (heard, imagined, performed) phenomenon. Analyses taking on the character of mere paper work turn me off.¹

On the other hand, I am not very inimical to musical hermeneutics either. I confess that I sometimes have strong (but not imperative) impulses to associate certain musical passages with something else than music. And I fully acknowledge and respect the fact that other people evidently have a much greater propensity to experience music in terms of extra-musical content, no matter whether this happens spontaneously or as the result of aesthetic deliberation. Hence, I think that musical hermeneutics is of interest and that

1 Exempt from this generous condemnation are interpretations that do not at all involve music as an experienced phenomenon, for instance readings that propose elements of content that entirely (or predominantly) rely on notational features. Obviously, the validity of such symbols (or whatever their mechanism of signification may be) must be assessed by other standards. The fact that they do not grow out of the auditory substrate of the music, but are products of detached visual observation and intellectual reasoning, makes for a less vivid and perhaps also less satisfactory kind of meaning, which of course does not preclude that the references as such may be both patent and profound.

it should be studied – being a music analyst with a bent for taking account of cognitive aspects, I am curious about all intelligible ways of making sense of music. Musical hermeneutics is back again, it seems, and my purpose of highlighting some of its problems is not to attack it, but rather to improve it by paying it due critical attention.

This much (for the very moment) about hermeneutics, the underlying topic of this essay, but what about the object of my exercises? I have chosen to deal with Schubert's *Moment Musical* No. 6 in A \flat major, D. 780. It is short and wellknown, it has a highly individual, enigmatic musical design holding out the prospect of discoveries in terms of content. And it has already been subjected to a hermeneutic interpretation by Edward Cone, which has subsequently been commented upon by Leo Treitler.² This means that I have a specimen "exercise" to describe and scrutinize before proposing my own alternative interpretations.³

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- 2 "Chosen" is perhaps not the correct word for how I settled on this very piece. Actually, it just turned up in Leo Treitler's key-note speech for a panel discussion during the 13th Nordic Musicological Conference in Aarhus, Denmark, 15–19 August 2000. The title of his speech was "Hermeneutics, Exegetics, or What?", and his main example was Edward Cone's reading of this *Moment Musical*, "Schubert's Promissory Note: An Exercise in Musical Hermeneutics", first published in *19th Century Music*, 5(1981/82)3, 233–241, and then appearing in *Schubert: Critical and Analytical Studies* (ed. Walter Frisch), Lincoln 1986, pp. 13–30. Treitler's speech reminded me of Cone's essay which I had almost forgotten after my first, cursory acquaintance with it in *19th Century Music*, and it provoked me to penetrate into this Schubert piece and its interpretation. The following general remarks on musical hermeneutics stem from my contribution to the panel discussion; Treitler provided the agenda for my views, which are, I believe, largely consonant with his. The keynote speech as well as the contributions of the panel members can be found in *13th Nordic Musicological Congress, Aarhus 2000. Papers and Abstracts* (ed. Thomas Holme Hansen), *Studies and Publications from The Department of Musicology VII*, University of Aarhus 2002; pp. 68–73. As to Cone's essay, whatever objections I will eventually raise, I want to express my admiration for it since it is bold and conscientious, and since it is permeated with respect for Schubert's music.
- 3 Since August 2000 further material of relevance has turned up, and it will be considered in due time. Incidentally, Cone's original essay, the present one, and a further one by Lawrence Kramer (cf. below) carry the word "exercise" in their titles. Apart from the fun of travesties, don't any of us mean what we say?

But first of all I have to clarify my standpoint as regards some general issues of musical hermeneutics. In the following section, I will discuss a number of problems brought up by Treitler, and turn to Cone and Schubert for illustrations.

Some general remarks on hermeneutic exercises

There is a dichotomy underlying and at the same time hampering virtually all attempts to give hermeneutic accounts of music: that of form and content, structure and expression, embodied/referential meaning, congeneric/extraneous meaning, introversive/extroversive semiosis, or whatever we prefer to call it. It is tempting to do away with this obstacle altogether, as Cone does when choosing the terms “structural content” and “expressive content”.⁴ And this seems reasonable in as far as the two aspects appear to be inseparable. When we use all our capacities as musical and cultural beings to get into close contact with a piece of music – and nothing short of that will do if we engage in hermeneutics – part and whole, understanding and pre-understanding, as well as form and content merge into the same experience.

The form/content dichotomy is inapplicable when it comes to the unordered process – or momentary act – of making hermeneutic discoveries, but this does not imply that we can dispense with it when accounting for our findings. Scholarly speaking, immediate phenomenological insights are less useful than systematic, dissecting analyses, deliberately articulated so as to explain such experiences and to open up for critical scrutiny. When sliding along the slippery slope from surface to symbol, it is necessary to know where you are.

Turning to Cone's “expressive content”, there is – adopting the least mystifying mechanism of musical signification – a number of attributes that music (to a certain, but sufficient degree) may share with other things, things that we therefore tend, or cannot resist, to associate with certain musical passages. Sad music has a quality that weeping willows have as well, and that we recognize in how sad people look and behave. Not amounting to

4 Cone's position is aptly circumscribed by Raymond Monelle: “The text is not form plus content, or the annihilation of the opposition of form and content, but the fruitful overcoming [...] of form and content”. *The Sense of Music. Semiotic Essays*, Princeton University Press 2000; p. 149

reference, but exceeding metaphor, this sharing of properties affords what is needed to warrant our talk of “expressive content”. These associable attributes, whether learned or “natural”, are rather few but very flexible in actual use, and those who are unable to identify and enjoy these expressive meanings in music (or who reject them) are severely handicapped as listeners, performers – and analysts.⁵ Since they are shared properties as well as part and parcel of competent musical understanding, it is pointless to insist on calling these human aspects of musical structure “extra-musical”.

On the other hand, we must acknowledge the fact that there are more specific varieties of content that are obviously extra-musical – referents that many people (not only observers with a stubborn inclination towards formalism) have problems to accept. Excepting borderline cases, it just takes some, not necessarily very sophisticated, introspection to tell such elements of extra-musical content from meanings that are intra-musical in virtue of being based on shared properties. Is this a meaning (one may ask oneself) that has presented itself without effort because it derives from a property shared between the music and some other thing? Or is it a meaning that has been deliberately read into the music, using some external source of information or drawing upon one’s own insight, background or interpretational agenda to come up with the association?⁶

This distinction may be clarified by an example from Cone’s “exercise”. Music is capable of expressing fear because it can share some qualities with the inner or outer signs of that emotion, and music may even convey, say, a sense of ominous threat. But music cannot reflect *medical* fear since there is (as far as I know) no naturally occurring or culturally transmitted associative link to that effect. And even less can it signify the fear of a specific disease such as syphilis without any additional information.⁷

5 Equally at a loss are those who neglect the existence and referential capacity of traditionally mediated musical topics and figures.

6 I do not dismiss the latter kind of extra-musical ideas altogether. That would be unreasonable since such associations may (from case to case) be justified; some of them may on closer consideration be supported by culturally established conventions.

7 Obviously, vocal music, i.e. melodies associated with certain texts, makes up an exception. Suppose that there was once a well-known song about, for instance, the Spanish Flu; its melody might still make us think of this disease.

The controversial part of musical hermeneutics is not the intra-musical narratives you can devise out of the structural/expressive content, relying on your musical and human wits and sensibility. The problems arise when (and if) you proceed to extra-musical meanings in emphatic sense. If they lie beyond the music, they also lie beyond your musical competence. How do you know? What kind of musical evidence has been used to establish the associations? Or, speaking normatively, what kind of evidence should be allowed? Making up hermeneutic interpretations may perhaps be important, but we should be equally concerned with how to get rid of unwarranted extra-musical ideas.

Scanning the hermeneutic tradition, various sources of evidence come to the fore. The evidence that may give rise to and support extra-musical interpretations – or may be cited as grounds for dismissing such ideas – include (1) the composer's intentions as far as we know them; (2) facts about the composer and/or a certain work; (3) the similarity (or dissimilarity) with other works whose extra-musical meaning is already established or seems accessible; (4) the public understanding of that day as far as it can be ascertained; (5) present-day understanding as a product of an established cultural tradition in which the interpreter claims to be at home; (6) references to a comprehensive system of thought that the work can be taken to illustrate, belong to, or be subjected to; (7) the interpreter's own, more or less idiosyncratic, more or less subtle (or just bold), capacity of psychological empathy or cultural understanding; (8) important or deserving present-day agendas matching the work's assumed content.

When entering the extra-musical domain, Cone becomes very tentative, and suddenly he abdicates as a hermeneutic authority in favour of biographical evidence.⁸ Evidently unable to *hear* the syphilitic quality in Schubert's *Moment Musical*, he turns to what we (think we) know about the composer's health. And instead of bothering to find out whether there is actually and somehow a homoerotic touch in Schubert's *music* that might

8 This may seem to be a disappointing turnaround. On the other hand, how else could a specific extra-musical content of the kind he has in mind be established? To require the impossible is too simple an objection to kill off radical hermeneutic interpretations.

correspond to the alleged content of a secret vice and its consequences – admittedly not an easy task – he resorts to music-historical gossip.

At this point a digression must be allowed. As some, most, or all of us know by now, Schubert was (or was probably) gay, and much effort has been spent to claim or reclaim him, to drag him out of the closet or to push him back (to where he perhaps never was in the first place) – a top priority in musicology, obviously. But when it comes to the crunch we do not know, or just think that we know, that he was gay. In the debate following upon Maynard Solomon’s “Peacock” article (published in 1989, i.e. several years *after* Cone’s essay) the evidence has been thoroughly sifted.⁹

My own opinion on Schubert’s gender and sexual activities is not very important in this (or any) context, but I rather opt for the alternative that he was gay. It seems to me that “the defence” has turned this very retrospective inquiry into Schubert’s supposed homoerotic leanings into an absurd trial, in which “the prosecution” is required to present proof beyond any reasonable doubt that he was guilty of the “crime” of not being straight.

I am not at all appalled at the probability that he (and several of his friends) might have been gay, and this assumed state of affairs does not at all change my love and respect for his music and its peculiarities, although it may perhaps somewhat and yet significantly alter my attitude to it, making some of his works more affecting as personal and cultural documents. In any case, what follows becomes more interesting if we accept that he was in fact gay – which is far from saying that such an assumption gives a fool-proof key to *Moment musical* No. 6. The extra-musical interpretations to follow are basically conjectures, and cannot be anything else.

9 Solomon’s article “Franz Schubert and the Peacocks of Benvenuto Cellini” is to be found in *19th Century Music* 12(1988/89), 193–206; most of the discussion appeared in *19th Century Music* 17(1993/94) 1, featuring major articles by Rita Steblin (countering Solomon’s views), Maynard Solomon, Kristina Muxfeldt, and David Gramit, as well as shorter contributions by Kofi Agawu, Susan McClary, James Webster, and Robert S. Winter. Further references can be found in this all-Schubert issue; among these, Andreas Mayer’s “Der psychoanalytische Schubert” in *Schubert durch die Brille* 9(1992), 7–31 is an attack on all attempts to adopt and adapt composers or their works to serve the specific interests of various groups.

Turning back to the track, it is maybe not entirely impossible for music to hold out the image of gay desire – the problem is to know whether or not this is the case. Should the listener refer to his/her own more or less straight experience or faculty of empathy? Or should the listener adduce essentialist arguments, claiming that he/she somehow knows what gay desire is like? The sad thing about the latter option is that prejudiced notions make for “understanding” more readily than do careful and multi-faceted generalizations – if available. In my opinion, the worst alternative would be to resort to some kind of psychoanalytic evidence – hasn't a bulk of empirical research by now made it increasingly clear that we have inherited an intellectual bankruptcy estate, and that we should think twice before relying on Freudian symbol-cracking even within the arts, hitherto a sheltered domain of application?¹⁰

Philosopher Jerrold Levinson has claimed that, in a way, the composer makes up a part of the musical work since there are important aesthetic properties in the work that crucially depend on the person who composed it.¹¹ Ontological matters aside, this may be problematical: bringing in the composer comes disquietingly close to having invited the intentional fallacy – or, considering unwitting expression, the “unintentional” fallacy, which is just as bad. Imagine a piece, identical with Schubert's *Moment musical*, but composed by Anton Bruckner. Would Cone's syphilis/secretive interpretation still hold? If not, to what extent is the concluding part of his “exercise” a specimen of *musical* hermeneutics?¹²

There are different opinions as to what kind of musical hermeneutics that is to be practiced, but it seems that an “interpreter-centred”, radical variety is in vogue these days. It is presumably felt that taking account of the composer or his times means to unduly restrict the range of possible readings and to

10 Some post-Freudian art is another matter, obviously. If you are obsessed with psychoanalytical ideas, you are likely to reproduce, deliberately or unwittingly, elements of such thoughts in your novels and paintings.

11 Cf. Jerrold Levinson, “What a Music Work Is”, *Journal of Philosophy* 77(1980), 5–28

12 Bruckner is just an example, and I may be wrong about him; after all and apart from his housekeeper, he was both singular and single. Charles Ives held most composers to be sissies (or even worse, some kind of crypto-women), and Dr. Freud no doubt has a closet spacious enough to accommodate all of them.

make interesting or desirable interpretations hard to achieve. Considering the intentional/unintentional fallacy, this policy seems commendable, but actual practice may of course deteriorate.

Using Umberto Eco's candid terms, the prevailing tendency is not to "read" works, but to "use" them – even if this leads to appropriation and misunderstandings. "Hidden" meanings has come to count for more than overt ones, and Paul Ricoeur seems to advocate hermeneutics of "suspicion" rather than interpretations based on "trust", seems to prefer uncovering the element of "falsity" in cultural artefacts in order to arrive at their "real" meaning rather than "dealing lovingly" with them.

I must say that I have difficulties when it comes to applying Ricoeur's sophisticated talk to musical hermeneutics. Let me put some hopelessly naïve questions. How am I to tell a "hidden" meaning from an overt one? Must a meaning be hidden in order to be "real"? Can there be more than one "real" meaning? Is "suspicion" the only way to discover real meanings? If so, what about hermeneutics of "trust": can "real" meanings really never be arrived at along this route? Leaving Marx and Freud (and Gilbert and Sullivan) out of account – is it actually true that "Things are seldom what they seem"?

In order to stay clear of abstractions, let's turn to Cone and the Schubert piece, and ask some of these questions again. Has Cone unearthed the "real" meaning of this music? Is his interpretation inventive (or strained) enough to qualify as a "hidden" meaning? Is his reading enough against the grain of common understanding to qualify as a deed of "suspicion"? Generally speaking, I would like to suggest that much work remains to be done by just "dealing lovingly" with musical works and striving to establish not-quite-that-hidden meanings.

My enthusiasm for the formulation "the work proposes" is very limited indeed. You can compose works, and they can be printed, performed, recorded, listened to, and they can even be subjected to hermeneutic interpretations. In one word, they are objects, and if you are at all interested in using language so as to find out for yourself and explain to others what you are doing – it seems to me that the first thing to be demystified in scholarly work is the method being used – you have to admit that a work of music, although admittedly an artefact, is as incapable as a stone of proposing anything, let alone a whole "world". Music works make up parts of our

world – that's why we have a fair chance to understand them – and you might even say that a music work “is” a world.

I guess that the phrase “the work proposes” is not really meant to be taken literally, and that it signals a deliberation to bar out the composer, and perhaps his times as well, from hermeneutic consideration. By all means, but in addition to being unbearably pretentious this phrase does away with the interpreter as well. And this is very unfortunate since, whatever particular brand of hermeneutics you espouse, interpretation is basically and at least an affair between a text *and* its interpreter. The value and credibility of a reading crucially depends on the musical competence, human sensibility, and cultural knowledge of the interpreter, as well as on the external information used in the interpretation process. Music works do not propose anything; they just demand to be respected. Nor do they actually “narrate” anything, although it is convenient to speak of them as if they did: the narration is in the beholder's ear.¹³

Since (as we shall see) hermeneutic interpretations proceed through several stages, offering a choice among a number of options as to structure, expression, and signification, the extra-musical meaning of music works is likely to be ambiguous. As any analyst knows (or should know), ambiguities turn up already in structural analysis,¹⁴ and therefore ambiguity cannot *per se* serve as an argument against hermeneutic undertakings. But as we move from structure to signification, the ambiguities involved in each stage tend to accumulate making for a considerable and quite problematic final uncertainty. That musical passages, like puzzle pictures, may be apprehended differently is common knowledge, and yet quite positive assertions are sometimes made to the effect that a piece of music has a certain, specified extra-musical meaning. Quite understandably such claims invite to criticism.

13 This means that whatever interpretations I will eventually propose, and whatever extraneous support I may adduce for them, they are stories that *I* have found in Schubert's piece – which is not to say that I necessarily believe in them. “It is not music that typically narrates; rather, people narrate their experience of music and confuse that narrative with the music itself”. I agree with the one who wrote this and will try not to make such mistakes – but unfortunately I have not been able to retrieve the source of this quotation.

14 Cf. Bengt Edlund, “In defence of musical ambiguity”, ch. 2 in the present volume

A very important, obvious and yet often neglected, source of the proliferation of meaning – or conversely, of the specification of content – is the fact that musical texts must be performed, that they must be interpreted by means of musical action, before they can be interpreted in words. (This applies also to silent reading of music, of course, since you cannot really imagine music without providing a certain rendering of it.) It is amazing how much different performances can alter not only the musical structure as heard, but also aspects of its extra-musical meaning.

The existence of alternative extra-musical meanings is (or should be) a problem for those who are unwary enough to proclaim that they have found the “real” meaning of a certain music work. (“If I know that Schubert was gay? Why, he comes out in *Moment musical* No. 6!”) Generally speaking, it is the profusion of possible meanings, rather than the element of irreducible uncertainty pertaining to each one of them, that prevents musical hermeneutics from being an instrument of knowledge, no matter its possible merits when it comes to human or cultural understanding.

Some observations on the hermeneutic method

It is possible to distinguish six stages, which in turn can be clustered into three layers, in Cone’s Schubert analysis, and indeed in most hermeneutic readings of music.¹⁵

To begin with the interpreter *selects* certain events and properties, and *describes* their structural functions or significance in a certain way. The terminology is (in principle) purely musico-theoretical, and these stages serve as the basis for what follows. Yet, to say that they make up an “objective” point of departure is not entirely true since it is obvious that already this

15 In order to disentangle these stages, I have adapted Cone’s text for my own dissecting purposes. My stages are closely related to, but perhaps not quite identical with, those appearing in Treitler’s commentary on Cone’s reading. Cone’s account is actually made up of two separate narratives following the course of Schubert’s music: the first one is based on the structural/expressive properties; the second advances the extra-musical referents. The transitions between the various discourses are sometimes blurred, and this applies especially to the structural/expressive description of certain events, a fact that Cone specifically asks his readers to notice.

preliminary layer, including the first two stages of the hermeneutic process, may open up for alternative ideas. Other structural events and properties might have been selected, and their structural implications might have been described otherwise.

The next stage of the process is to *translate* the theoretical descriptions into expressive terms, i.e. to establish what the structural phenomena mean or suggest in terms of human character, attitude, emotion, change, or action. When these fragments of expressive meaning are *connected*, we arrive at an intra-musical narrative in which the music often seems to be personified in some way or other. The musical process emerges as a story about a fictive person's experiences and states of mind, or about various protagonists, their actions and interactions. The music may also suggest a process within an abstract, but conscious and intentional living organism, or make us think of a kind of dialogue between sentient human beings. Again it is obvious that these two further stages, constituting the intermediate layer in the hermeneutic process, make for ambiguities. There are no given, one-to-one correspondences between theoretical descriptions and expressive meanings, and given the same sequence of expressive elements, one might construe different intra-musical narratives.

Then comes the fifth and most controversial stage – the decisive leap from “intra-musical content” to the extra-musical domain. Citing supporting evidence or not, the interpreter ventures to *name the referents* of the agents, objects, events, and qualities of the intra-musical narrative. Needless to say, it happens that several, more or less different referents are conceivable. Finally, in the sixth and last stage, the interpreter might top the third hermeneutic layer by *supplying a wider context*, i.e. by suggesting further implications of his/her interpretation, by explaining why the music bears the alleged content, by indicating for whom the music has this meaning, etc., and again there are different options. This wider context often works as evidence for the interpretation: the proposed extra-musical content may, for instance, emerge as belonging to or exemplifying some established system of thought, and this in turn lends credibility to the interpretation as a whole.

But the interpretation process is not just, as this layered scheme suggests, a matter of controlled, piecemeal bottom/up description. On closer consideration there is a mutual dependence between the higher, synthetic stages of hermeneutic understanding and the particular observations upon which

the interpretation is based. Once on the track, your idea of the emerging musical narrative and its extra-musical significance may influence how you understand the expressive meaning and structural function of the musical details, and even influence which traits you select as relevant.

This top/down element of the hermeneutic process is virtually inevitable, but it must always be kept in mind because it narrows down your perspective, preventing you from finding alternative meanings, and because – since vicious circles impend – it may make for delusions. Hermeneutic interpretations seldom or never exhaust the musical possibilities; it is often possible to find musical traits that have been neglected or that could have been understood differently. But it goes without saying that it is preferable to work as far as possible from the structural observations all the way up to the comprehensive notions of referential meaning, rather than to scout about for details that may be recruited in support of more or less preconceived ideas of extra-musical content.¹⁶

The fact that ambiguities are necessarily involved when devising hermeneutic interpretations does of course not imply that anything goes. At the layer of structural analysis strong arguments can often be levelled against readings that exploit compositionally given facts in unwarranted ways. A certain expressive content may be criticized for not being an apt description – this is simply not how the passage is reasonably understood. And it is possible to raise objections to intra-musical narratives for being incoherent, or for disregarding or misreading important passages or aspects of the music. Finally, the extra-musical referents and the wider context may often be questioned.

It remains to bring in (once again) a factor that to an appreciable extent determines the hermeneutic outcome by influencing the decisions at the various stages. Which traits you select, what structural significance you assign to them, what expressive properties you consider them to have, how you make up your musical narrative, and finally which extra-musical referents and what wider context you come to think of – all these decisions may

16 All this being said, it should be admitted that in practice the hermeneutic process is likely to proceed in a rather unsystematic way, freely alternating between the stages.

crucially depend on how you imagine the music to be played, and needless to say, it can be played in several, sometimes quite different ways.

It is apparent that the relationship between interpretation in current musical sense and hermeneutic interpretation is a two-way affair. Your idea of what a piece may mean is bound to have an effect on how you play it, and the character of a performance suggests what the hermeneutic content might be. The latter influence explains why performances make for hermeneutic ambiguities and generally for proliferation of musical meaning. If you come to think of a valid new way of playing a piece of music, a new extra-musical content may come to the fore. Conversely, if you meet with a piece of music that seems to be inherently ambiguous with respect to its hermeneutic content, the way it happens to be played may do away with much of this ambiguity; several, otherwise possible extra-musical contents seem to be eliminated in virtue of being incompatible with the performance.

Consequently, when devising a hermeneutic interpretation, one should try not to be the victim of a particular rendering. Many a dead-certain idea as to extra-musical content may be due to the fact that the observer is unable to imagine another, significantly different performance, or to the ignorant or prejudiced belief that there is only one way of playing the music. Generally, one and the same composed structure tends to allow of several substantially different renderings, and hence of different hermeneutic interpretations, while a particular rendering of a piece of music is likely to be less ambiguous with respect to content than the composition of which it is a performance.

It seems that performances can be used as a critical instance when evaluating hermeneutic interpretations. Can the interpretation that you want to propose be expressed when playing the music? If not, your cherished content may be more or less inadequate with respect to its structural basis. If a structural trait has been given an ill-matching expressive content or extra-musical meaning, this may be noticed as an anomaly when playing the music. Extra-musical readings that cannot be expressed in performance, or that correspond to renderings that emerge as musically unconvincing, should be considered as less plausible and be dismissed. Succinctly put, our discernment with regard to the aesthetic qualities of performances may be used as a touchstone of hermeneutic proposals.

Finally, the piece to be subjected to further hermeneutic “exercises” will be shortly presented. Ex. 1 shows only mm. 1–77; the Trio seems to be of little relevance. The main part of *Moment musical* No. 6 will therefore most often be simply referred to as the “piece”. It is obviously cast in ABA’ form, but since the B-section features material from the first section in a way recalling a development, the three formal constituents will be named in adherence to the terminology of the sonata form: exposition, development, and recapitulation.

A hermeneutic interpretation of a piece of music must account convincingly for a fair number of its most conspicuous events and qualities. Which are then the remarkable passages and properties inviting to, or even demanding, interpretation (or explanation) in extra-musical terms? A preliminary enumeration will do: the character and function of the initial two-bar phrase, seminal for the piece, and the deviating *forte* complement phrase mm. 11–12; the change of mood after the double-bar, and the transition to and the qualities of the E-major episode in the middle of the development; the sudden re-modulation in mm. 40–43, and the *forte* outburst appearing soon after it; and finally the unexpected turn of events in the recapitulation – the transformation of the seminal motif in mm. 62–65, the following expansion of this material to include a brief tonal excursion to A major and back again.

Quite a few things – this *Moment Musical* certainly has a design making hermeneutic exercises worthwhile.

Cone's promissory-note reading

In the following presentation of Cone's reading, the various stages of the hermeneutic process will be kept separate as far as possible, but to avoid duplications they will be grouped so as to form three layers according to the account given above.

Starting with the musical events and their structural functions, the first “salient feature” of Schubert's piece to be selected by Cone is the sudden, unexpected *forte* outburst in mm. 11–12 with its inner-voice b_4^1 rising to c^2 and then its top-line f^2 falling to e_4^2 . This event, bringing a most conspicuous harmonic deviation from the corresponding phrase mm. 3–4, is understood as a half-cadence to V/vi, i.e. to a C-major chord deriving its harmonic

function from and holding out the prospect of an F-minor chord. But the next phrase does not come up with such a chord; the aspiring leading-note $e^{\sharp 2}$ moves downwards to $e^{\flat 2}$, thwarting the implied rising continuation back to f^2 . According to Cone, this deviating, applied-dominant phrase is emphasized and isolated to an extent that makes it demand an exposed F-minor resolution later on in the piece; especially the top note $e^{\sharp 2}$ lingers on in the listener's memory.

The next chord singled out in Cone's reading, the chord starting the developmental section, features the crucial tonal pitch-class E_{\sharp} , now turning up as the tonal pitch-class F_{\flat} . [It might be added that the chord after the bar-line also brings two further tonal pitch-classes marked for attention in mm. 11–12: B_{\sharp} , now written as C_{\flat} , and D_{\sharp} instead of D_{\flat}].¹⁷ In the following passage, f_{\flat} and f_{\flat}^{\flat} [representing the flattened sixth degree of the implied, but never fully emerging temporary tonic A_{\flat} minor] repeatedly sink to e_{\flat} and e_{\flat}^{\flat} , until the harmonic field is redefined by the enharmonic transformation of a second-inversion F_{\flat} -major chord into an E-major one in m. 29, thus stabilizing the crucial pc F_{\flat}/E and retroactively giving the former tpc E_{\flat} leading-note status as tpc D_{\sharp} .

The music then brings a broad cadence to E major, followed by two three-bar cadences, repeatedly establishing this key as a temporary tonic. And yet Cone insists that the modulation is not quite stable: E major still has "a dominant flavour" due to the organ points on B and then on E in the bass, veiling the subdominant and dominant functions in the cadences.

Cone then brings out how the music returns to A_{\flat} major. Written again as F_{\flat} major, the "E-major" chord is given a " d_{\sharp}^{\flat} " dominant seventh in m. 41, but the doubled $a_{\flat}/a_{\flat}^{\flat}$ third of the chord does not act as a rising leading-note. Instead of proceeding to A major as might otherwise have been expected from an applied "E-major" dominant, the ensuing harmony in m. 42 is an E_{\flat} -major chord retaining the third of the previous F_{\flat} -major chord as a suspended fourth. At the end of the next four-bar phrase the return to the

17 The difference between a tonal pitch-class and a pitch-class is that the former categorization takes account of the way the pitch is notated: E and F_{\flat} are different tonal pitch-classes instantiating the same pitch-class. Henceforth, the designations tpc and pc will be used to refer to "tonal pitch-class" and "pitch class", respectively.

original A \flat -major tonic is a fact, and a six-bar phrase is added that seamlessly connects to the recapitulation section.

But this interpolation starts *forte* with an F-minor sixth-chord, which Cone takes to mean that the harmonic tension of the frustrated applied-dominant C-major chord in m. 12 has at long last reached its resolution. Following this emphatic outburst, the tpc F \flat transiently turns up again in m. 51. But this time it is unambiguously directed downwards, being safely encapsulated as a passing-note in a chromatic top-voice descent within a dominant harmony.

According to Cone, the recapitulation cannot feature a repeat of the *forte* deviation towards C major heard in mm. 11–12.¹⁸ Instead, the first, seminal phrase of the consequent features *forte* right from its beginning, and the quality of its suspension chord is changed by the more poignantly dissonant middle-register f \flat ¹, replacing f \sharp ¹; the upper voice then passes c \flat ² on its way down to b \flat ¹. This transformed phrase is repeated, and then the music takes an entirely new turn: f \flat ¹ and c \flat ² are enharmonically retained as e \flat ¹ and b \flat ¹ while the bass rises from D \flat to D \sharp . The resulting third-inversion E7 chord acts as a most urgent applied dominant and leads in a very emphatic way to an accented root-position A-major chord, a “tonicised Neapolitan A” that for a short moment appears as the goal of this expanded, metrically irregular consequent. But very soon the proper main tonic takes over again via its parallel-minor six-four chord.

The excursion to A major and back is then immediately repeated in a subdued manner, and the end of the piece only features the tpc A \flat , ambiguous with respect to major and minor.

The Trio is included in Cone's analysis, but since it is of secondary importance in his hermeneutic “exercise” – and arguably also a less convincing element of it – his reading will not be accounted for.¹⁹ The Trio is only faintly related to the main part of the work, and Cone's hermeneutic interpretation is not appreciably weakened if it is disregarded. The

18 Whether this assertion is part of Cone's analytic description or rather belongs to a later stage in his hermeneutic account is uncertain.

19 Later on we will briefly return to the *Trio*.

extra-musical content of a piece like this with its conventional tri-partite overall form must not necessarily be based on the entire composition.

Which expressive meanings does Cone assign to these features, and when joined to form a continuous account of the music, what intra-musical narrative do they add up to?

To capture the human essence of the deviating *forte* phrase in mm. 11–12, issuing into C major and implying F minor, and especially the meaning of its frustrated leading-note e_2^2 , Cone uses the words “promissory chord” and “promissory note”. The latter designation is a deliberate pun, introducing a figurative, extra-musical, and ominous aspect of meaning, but since we are now dealing with the second hermeneutic layer, “promissory” only refers to the tonal fact that this note “has strongly suggested an obligation that it has failed to discharge” (p. 235), i.e. its function as a rising leading-note. Cone describes the situation as follows: “So when the concluding phrase-member [mm. 13–16], dutifully remembering the demands of the true dominant of mm. 7–8, suppresses the tendency toward vi and turns the E_4 downward to E_b , the E_4 remains in the ear as a troubling element of which one expects to hear more”. (p. 37)

And the tpc E_4 is prominent in the development, which “prefers [...] to dwell on the promissory note and to investigate further its peculiar connection with E_b ”. (p. 237) At first this happens within an A_b -minor framework, but then “the F_b reasserts its importance”: “refusing to be drawn back into A_b minor, it replaces the E_b [...] thus initiating a modulation to its own key, spelled for convenience as E_4 ”. (p. 237) This shift to E major corresponds to a change in character: “The restrained, carefully measured satisfactions of the opening have been gradually transformed by the development into the more sensuous delights of a berceuse”. (p. 237)

As mentioned above, Cone feels that the position of E major as a new tonic is not quite stable in spite of the three-fold insistence upon it: “Was it not perhaps usurping a tonicisation to which it had no right?” (p. 237) And when A major fails to turn up in m. 42 although it has been prepared for by its applied dominant, “that temptation is resisted” (p. 238); what we get is a dominant suspension belonging to the domain of the original A_b -major tonic and a rhythm recalling the starting motif of the piece.

Later on the *forte* F-minor passage brings “the long-postponed discharge of the responsibilities of E_4 as a leading-tone”. (p. 238) The promise has

been kept, and “yet how close the music came to forestalling the fulfillment!” (p. 238) for in terms of the overall tonal scheme, these six bars are redundant and can be omitted.²⁰ However, “immediately after the emphatic proclamation of F minor” and “perhaps with a touch of irony”, the crucial note \flat^2 reappears, although it “now seems docile, forming a passing and passive diminished seventh instead of a recalcitrant applied dominant”. (p. 238)

What happens in the consequent of the recapitulation is “unforeseen in prospect yet inevitable in retrospect”. (p. 238) When the “promissory” note “returns” again as \flat^1 in mm. 62 and 64, it introduces “the most painful dissonance of the entire piece”, and twice it “forces the suspended C to pass through \mathbb{C}_b on the way to its resolution on \mathbb{B}^\flat ”. (p. 238) “The new combination of \mathbb{F}_b and \mathbb{C}_b is too strong to be resisted”, and when the music continues in m. 65, the right-hand chord is supported by the bass note \mathbb{D}_b , which “of course is none other than the dissonant tone” of the chord starting the development. (p. 238) “This time, however, it is in the powerful bass position; and this time the chord insists on being treated as a dominant, thus confirming our earlier suspicions”. (p. 238) “The result is an expansion of the consequent phrase that is terrifying in its intensity” and that leads into A major. (p. 239)

“A first attempt to return to the true tonic fails, interrupted again by an echo of the Neapolitan interpolation”, whose effect is still felt when the tonic is finally reached: “it is the minor color that remains in the ear [...] The harmonic material of the development has infiltrated the reprise with devastating effect”. (p. 239)

Let's summarize this intra-musical narrative of the musical process. Cone has told us a story, in which the pc \mathbb{E}/\mathbb{F}_b is the main agent. This “promissory note” has been tonally redefined in several ways, and it has had various local structural functions and expressive qualities. First turning up as a leading-note, ominously deprived of its target note, it has then been the basis for the “sensuous delights” of the middle E-major episode as well as the lever bringing forth the final state of dread and devastation. Speaking

20 Cone shows in an example how you can skip this interpolation and proceed directly from the first chord in m. 47 to the upbeat chord in m. 53.

in terms that are less specific musically and yet fairly cautious as to extra-musical content, Cone describes the “expressive potential” of the piece as follows (pp. 239–240):

As I apprehend the work, it dramatises the injection of a strange, unsettling element into an otherwise peaceful situation. At first ignored or suppressed, that element persistently returns. It not only makes itself at home but even takes over the direction of events in order to reveal unsuspected possibilities. When the normal state of affairs eventually returns, the originally foreign element seems to have been completely assimilated. But that appearance is deceptive. The element has not been tamed; it bursts out with even greater force, revealing itself as basically inimical to its surroundings, which it proceeds to demolish.

It remains to transgress the border and enter into the domain of extra-musical signification, to account for the two final, emphatically hermeneutic stages of Cone's interpretation.

“The arrival of the ‘foreign element’” is assumed “to be symbolic of the occurrence of a disquieting thought”, that is also “exciting”. (p. 240) Following the proverbial phrase that the first step in yielding to a temptation is to investigate it,²¹ the protagonist is imagined to be “more and more fascinated by his discoveries letting them assume control of his life as they reveal hitherto unknown and possibly forbidden sources of pleasure. When recalled to duty, he tries [...] to sublimate the thoughts that led to them [...] but the past cannot remain hidden”. (p. 240) The “promissory note” falls due, but the “vice” has left “indelible and painful marks” and eventually leads to disaster.

The “vice” in question is homosexuality and the “marks” are syphilis, referents that without much ado are derived not from the music, but from Schubert's life, and that are considered to be supported by biographical evidence.²²

21 Whether or not it was one of the Church Fathers who uttered these words, I don't know, but I know of a maxim by Oscar Wilde that fits the present situation just as well, or even better: “The only way to get rid of a temptation, is to yield to it”. As an Irishman and brought up as a Catholic, Wilde was probably well acquainted with Catholic literature, and it adds to the wittiness of his aphorism if it is a travesty.

22 As far as homosexuality is concerned, Cone's formulations are very tactful, almost closeted – he mostly speaks about Oscar Wilde. Cone's essay was written when Schubert's homosexuality was (somewhat) less of a fact than it is today.

Turning to the final stage, Cone offers a somewhat surprising twist. Circumventing the simplifying causal explanation that Schubert composed this piece as he did because he was gay and had contracted syphilis, Cone reverts the perspective – thus shifting, in a way and to some extent, the burden of the decisive hermeneutic conclusions from the interpreter to the composer. When realizing what he had composed, Schubert gained insight in his situation; ultimately, *Moment musical* No. 6 emerges as a catalyst, as a vehicle for the composer's self-understanding.

A critique of the promissory-note reading

Given that you are at all prepared to accept hermeneutic interpretations, and that you can stand gems of the piano literature being encumbered with sexual referents, Cone's reading makes some sense. And yet it must be scrutinized, not in the first place to tear it down, but in order to allow scope for other interpretations.²³ Some of his observations and conclusions will be questioned, taking the same route from structural matters via expressive content to extra-musical meanings. Now and then I will plant a number of baits, preparatory hints suggesting the first of my own "exercises" in musical hermeneutics.

In terms of context-free harmonic theory, it is true that the deviating *forte* phrase in mm. 11–12 may be understood as an incomplete cadence asking for an F-minor chord due to turn up in the next phrase – an auxiliary tonic that Schubert does not provide. But if you take account of how this expository sixteen-bar period is construed and of how its phrases attach to each other, this expectation is considerably weakened. The phrases do not supply prompt harmonic resolutions of the more or less unstable sonorities left in the air by their predecessors. Turning specifically to the second phrase, mm. 3–4, being obviously the model from which the *forte* phrase deviates, its four-bar continuation in mm. 5–8 issues from the preceding, unstable A \flat -major harmony and then features a second-inversion dominant seventh-chord leading to a root-position tonic chord. And this is exactly

23 According to some authorities, it is not necessary to tear anything down since hermeneutic interpretations may coexist – a quite generous, but also worrying attitude.

what the *piano* phrase after the *forte* outburst does – if you want to make this perfectly clear, you can replace its initial right-hand *piano* chord with three rising C-major eight-notes, $g^1-c^2-e_2^2$; cf. Ex. 2. And it can be predicted from the quite obvious parallelism so far that the unit following after m. 12 will be a four-bar phrase coming up with a change in expressive attitude and rhythm, and that it will bring a sense of conclusion as becomes a consequent. Thus, a cadence to F minor, satisfying the harmonic demands of the applied-dominant C-major chord, emerges as a fairly unlikely continuation.

An F-minor sonority would be possible at the first beat of m. 13, of course, but the point is that we have no strong reasons for taking such an outcome to be held in prospect. The alleged applied-dominant function of the C-major chord, and the far-reaching conclusions drawn from it in Cone's interpretation, appears to be an unwarranted artefact of its harmonic designation V/vi. "V-of-vi" is an unfortunate, promissory label, a cocksure package designation involving a description that anticipates a certain auxiliary tonic (vi) and hence exaggerates the sense of harmonic deception if it fails to turn up. Harmonies are relational phenomena, and for this reason harmonic designations should not be compound in ways taking future events for granted. Don't count the chickens before they hatch!

If you attend to the deviating *forte* phrase with the pattern of phrase rhetoric established in the antecedent in mind, its final C-major chord with its top note e_2^2 is not much of an applied dominant. By the same token the beginning of the ensuing four-bar phrase (however evasive its emotional content may seem) is not very deceptive since it is most doubtful whether one really expects a continuation featuring an auxiliary-tonic F-minor harmony. And the "promissory" situation is in fact immediately done away with by means of the $e_2^2-c_2^2$ top-voice motion and the following, most expected cadence to the A_b -major tonic.

In comparison with the quiet complementary phrase mm. 3–4, the contrasting *forte* phrase in mm. 11–12 is of course both unexpected and emphatic, and emphatic is also its alleged, and literally very far-fetched *forte* resolution in m. 48. But, no matter whether you think of it in prospective or retrospective terms, the association between the two passages is quite unlikely. And this non-connection is not only due to the thirty-six-bar distance and to the lack of any long-term promissory quality of the first passage. The *forte* outburst in m. 48 does have the correct register, but it may be argued that

it does not necessarily start with emphatic, first-position F-minor chords, as Cone's hermeneutic scheme demands, but issues from root-position $A\flat$ -major chords featuring sixths instead of fifths. And the *forte* passage does not necessarily emerge as an interpolation in the way Cone thinks, i.e. as an addition satisfying a long-range harmonic demand. First and foremost it makes up the third and last member of a rising sequence of phrases bringing out $a\flat^1$, $d\flat^2$, and f^2 . To clarify the kinship between the second and third of these phrases you can play an eighth-note c^2 - $d\flat^2$ - $e\flat^2$ upbeat in m. 47; cf. Ex. 3.

The two *forte* passages should be explained in some other way – if explained they must be. But there is some truth in the observation that hermeneutic interpretations often take as their point of departure, and are then guided by, details that are conspicuous and appear strange, and that seem to demand some, perhaps extra-musical, interpretation.

Cone holds that the chord beginning the development in m. 17 somehow derives from the $d\sharp^1$ first heard in m. 6, the $b\sharp^1$ introduced in m. 10, the $e\sharp^2$ from m. 12, and the tonic note $a\flat^1$ retained across the double bar. This explanation (involving pcs rather than notes) of an entirely unexpected chord as a product of dispersed preceding notes with other tonal positions and harmonic implications is quite unlikely and also unnecessary for his interpretation. There is in fact a much less strained way of conceiving this sonority, namely as an alteration of the very first chord of the piece.

As to the “promissory note” $e\sharp^2$ -then- $f\flat$, the unmediated transformation, across two octaves and a broad cadence to the tonic, of a would-be leading-note third topping a C-major chord into a suspended flattened-sixth bass note of an $A\flat$ -minor harmony – or, if you have lost your tonal orientation, into the root of a submediant $F\flat$ -major, eventually E-major, seventh-chord – stretches the listener's capacity of making tonal connections beyond what is credible.²⁴ $E\sharp$ -*alias*- $F\flat$ may be a very interesting pc in the piece, but its story does not start until the first part of the development, where as a flattened

24 Many of the “pitch stories” told in hermeneutic interpretations share this weakness. In order for these pitches (or rather pitch-classes) to work convincingly as vehicles for musical narratives, you must first be able to identify and connect their dispersed and tonally quite different manifestations, then be prepared to disregard these very differences. Similarly, the “upper-line stories” of many Schenkerian analyses simply take for granted that structural tonal positions are

sixth it is initially exposed to the gravity of the $A\flat$ -minor fifth and repeatedly gives in to it, and where it eventually achieves enharmonic independence as the root of the forthcoming E-major tonic.²⁵

Another observation in Cone's analysis is that the cadences to E major in mm. 32–33, 35–36, and 38–39 are not quite stable because the pedals on B and then E obscure the subdominant and dominant functions. But considering the three melodic motions down to e^1 in the treble and the fact that E-then- e (\flat) is sustained for nine bars in the bass, this instability is negligible, and the tonal complex over E in mm. 35 and 38 makes it quite clear that both the minor subdominant and the dominant of a full cadence are present.²⁶ Excepting a transitory $F\flat^7$ -moment in m. 41 where E major emerges as a quite urgent applied dominant, E major does not betray much of a “dominant flavor” in the development. Besides, if we adopt this hyper-sensitivity with respect to harmonic non-closure, the cadence back to $A\flat$ major in mm. 44–47 is bound to emerge as unstable as well since the retained $e\flat$ in the bass interferes with the $D\flat$ -major subdominant function.

Turning to the recapitulation, Cone maintains that the *forte* deviation heard in mm. 11–12 cannot appear as a second phrase in the consequent due to the alleged resolution to F-minor bursting out in m. 48. But it certainly can – an admittedly much less original piece than Schubert's, closing with an exact recurrence of mm. 9–16 in the recapitulation, is quite conceivable. This cannot but cast further doubts on the long-range significance of the deviation to C major with its top note $e\sharp^2$ in the exposition, and it makes for a re-interpretation of the origin and role of the pc F/E in the recapitulation. For the important thing in the recapitulation, whose consequent eventually veers off into A major, is the fact that Schubert brings in *another forte* deviation – \flat^1 turns up instead of f^1 in m. 62, i.e. already in

still in effect, are somehow prolonged, no matter intervening radical harmonic redefinitions and bewildering voice-leading adventures.

25 Indeed, and as we shall see, $F/E\sharp$ is a crucial pc in the piece, and its story may (in a way) start even *earlier* than Cone thinks.

26 People that are more cunning than prone to respect facts may hold that the very insistence on E major is a sign of its deeper instability. The massive record of seduced women has, for instance, been taken as an indication that Don Giovanni is “in reality” gay.

the *first*, seminal phrase of the consequent, and it is evidently *this* exchange of notes that brings the consequent entirely out of track. This situation is not convincingly described by saying that the crucial note “returns”, no matter whether you think of the “promissory” top-note e_4^2 from m. 12 or (more plausibly) of the left-hand f of the chords in m. 17 and 25. It seems, then, that the repeated occurrence of the crucial note f^1 in mm. 62 and 64 should be derived from mm. 1–2, the initial, seminal phrase of the piece.

It is true that the soprano in mm. 62 and 64 passes c^2 on its way down from c^2 to b^1 , but it must be noticed that the alto f^1 has redefined the relationship between consonance and dissonance. Back in m. 2 the soprano’s b^1 was heard as a (relatively) consonant resolution; now it is the intervening c^2 that turns out as (relatively) consonant whereas the b^1 emerges as dissonant. The c^2 is a passing-note only in a rhythmic sense, and that is why the fifth c^2/f^1 (actually forming parts of an E-major triad in the right hand) cannot be “resisted”.

The third-inversion E^7 -chord turning up on the third beat of m. 65 is indeed an applied dominant urgently demanding A major, and Cone is right when holding that it has something to do with the F_b -major (*alias* E-major) seventh-chord-like sonority starting the development. But there we did not suspect any dominant; we did not, considering the immediately preceding A_b -major cadence, expect a B_b (A) major chord to somehow follow after the second-inversion A_b -minor double-suspension chord in m. 17. Nor is it quite to the point to say that the bass note D_4 of the third-inversion E^7 chord in m. 65 of the recapitulation is “none other” than the inner-voice d_4^1 of the A_b -minor double-suspension chord (or root-position E^7 chord) starting the development. Apart from the different register and position of these notes within the chords, the bass note D_4 introduced in m. 65 clearly comes from the preceding D_b – just as the f^1 ’s in mm. 62 and 64 issue from e^1 ’s. Furthermore, whereas (say) the root-position E^7 -like chord in m. 17 is a fresh point of departure for the development, the third-inversion E^7 chords in the recapitulation appear within the consequent as the result of several chromatic motions.

Proceeding to Cone’s expressive meanings, does the beginning of the piece necessarily convey “restrained, carefully measured satisfactions” (p. 237), or does it perhaps suggest something else?

As to the *forte* outburst in the exposition, it is (as already pointed out) hard to hear the e_4^2 topping the C-major chord as “promissory” in a tonal sense since its leading-note obligation is so weak, and since nothing seems to be suppressed when e_4^2 quietly and promptly gives way to e^2 . And it is also difficult to understand this e_4^2 as a “promissory note” in an ominous sense; the somewhat pathetic quality of the *forte* outburst does not necessarily suggest such a meaning – in an opera, a phrase like this would rather stand for (say) lofty moral determination. And Schubert's piece will not bring any more tpc E of *this* C-major kind that you can hear as a reminder that there is a debt to be paid. In short, the visit to the raised fifth-degree e_4^2 over a C-major chord emerges as a transient episode, leaving no trace in the ear as a troubling element bound to recur.²⁷

A further consequence of the lack of “promissory” qualities in the exposition is that the F-minor *forte* outburst in the development cannot be heard as a “long-postponed discharge” of a distant harmonic implication. It is also impossible to identify a tamed, formerly “recalcitrant applied dominant” in the f^2 of the following chromatic descent, although as a whole this melodic transition may be understood as a gesture of resignation.

And turning to the middle-register f^1 in mm. 62 and 64, does it necessarily produce a “painful dissonance”? Is this chord really much more dissonant than the corresponding one in the initial, seminal phrase? Considering the radical changes this note will bring about, it seems rather to represent a determined modification of the harmonic core of the seminal phrase. The transformation of the consequent in the recapitulation is admittedly “unforeseen in prospect”, but why is it “inevitable in retrospect”? If the transformation of the consequent, beginning right from its start, is unforeseen, how can this be reconciled with Cone's claim that the contrasting *forte* phrase from the exposition cannot recur in the recapitulation? The inevitability seems to be transferred from his interpretational scheme, not from the music; in other words, his analytic observations turn out to be

27 The insistent dwelling on the flattened sixth f/b^1 after the double bar, on the other hand, and the following, decisive enharmonic move to accept and stabilize the tpc F_b as tpc E with a concomitant change in mood, are traits in the music that cannot but attract attention, and that might be exploited for hermeneutic purposes.

prematurely derived in a top-down manner from a not-yet presented stage of his hermeneutic interpretation.

Finally, the tonic A \flat major is indeed thoroughly invaded by foreign notes, and the following “Neapolitan” A major is certainly with little delay liquidated by an A \flat -minor six-four chord. But however apt such martial metaphors may seem when you inspect the rank and files of tonalities, is the intensity of the expanding consequent necessarily “terrifying”, and does all this necessarily amount to a “devastating effect”?

Some important passages are left under-determined in Cone’s expressive narrative. Considering the crucial importance of the “promissory note” and its delayed F-minor “discharge”, it is a peculiar deficit in Cone’s reading that these two *forte* passages are so scantily described from an expressive point of view. We are told that the deviating C-major phrase in the exposition is “emphasized”, and that its alleged distant counterpart, the F-minor outburst closing the development, is “climactic”, but what is the significance of these passages if we want to be more specific? Let’s assume that they embody a sense of protest or make up gestures of repression, which seems reasonable. What (in the music) is protested against, and what is repressed?

As to the C-major *forte* phrase, it may be understood as a protest against the immediately preceding phrase, i.e. the seminal phrase starting the piece, or as repressing its own model, the complementary phrase in mm. 3–4, compliant as it is. Turning to the F-minor outburst in m. 47, it may (if I understand Cone correctly) have something to do with the attempt of the protagonist to “sublimate” his thoughts. But since the A \flat -major tonic has already been reinstated (“he is recalled to duty”) when the *forte* passage occurs, the outburst might rather signify a state of distress, or make up a protest against the return to the tonic. Or, taking account of the fact that this phrase is actually the third of its kind lining up so as to form an insistently rising sequence from m. 40 on, it may be better to apprehend it not as a harmonically “redundant” interpolation, but as a most important emotional component – as (say) a final and failing attempt at retrieving something lost. In addition to signifying sublimation, and again according to Cone, the F-minor *forte* phrase also suggests that the debt, deriving from the frustrated C-major applied dominant and the “promissory note” in m. 12, is paid back. But pursuing his interpretation in medical terms, the

instalments begin only with the fit of syphilis occurring in the consequent of the recapitulation.

The sense of sublimation (if any) may perhaps rather be associated with the enharmonic shift in the returning modulation, mm. 40–43. But what further states of mind are portrayed in these bars where the music is so deceptively pulled back into the orbit of the tonic? And what is the emotional content of mm. 17–28 where the tpc F_b is eventually set free and the “gradual transformation” takes place?

The fact of the matter is that the expressive content of many important passages in Schubert's piece, and not least the ones that I have tagged with the word “necessarily”, crucially depends on how they are played, and as already pointed out, there may often be several distinctly different expressive options inherent in one and the same passage. The influence of performance is virtually neglected by Cone, but it is evident that his choices when assigning emotional content to particular passages, as well as his overall conclusions with regard to the extra-musical content of the piece, tacitly presuppose certain ways of playing, and may emerge as invalid or at least far-fetched if you imagine the music to be rendered otherwise.²⁸

Thus, instead of suggesting “restrained satisfactions”, the first two phrases of the piece may be played so as to sound plaintive.²⁹ And the initial four bars of the development can be rendered so as to evoke, say, a sense of warm E-major adoration rather than the sadness that the shift to A \flat -minor suggests.

The transformed seminal phrases starting the consequent of the recapitulation may of course be played so as to reflect pain, lament, anxiety, or desperation – precursors of disaster – but it is also possible to render them in a way that conveys not dissolution, but a strong and positive sense of determination. As to the emergence of the crucial note $f^{\flat 1}$ in mm. 62 and

28 In a section to follow, various ways of rendering a number of crucial passages in the *Moment musical* will be proposed and discussed, specifying the means to be used and the expressive qualities suggested.

29 In addition, there is a further possibility: one may discern an emotional difference between the two phrases – the seminal phrase is at ease whereas its raised complement, starting with a dissonant chord, reflects a more uncomfortable state of mind.

64, the difference between foreboding a disaster and heralding a triumph is partly a matter of playing this note as something that suddenly happens or as something that is voluntarily produced.

The final motion towards A major and back to A \flat minor (rather than A \flat major) must not mean things like dread and devastation. This passage may also signify struggle, followed by triumph and satisfaction, or – imagining yet another rendering – suggest a feeling of rage followed by domination and eventually defeat (or repentance). Particularly the two A-major bars do not seem to be about devastation, and Cone actually leaves them underdetermined with regard to their expressive content. He observes how foreign notes entirely undermine the A \flat -major tonic, thus making for dread and disorder, and brings out the sense of desolation when the A \flat -minor six-four chord turns up, but he refrains from describing what the opening towards A major sounds like. The two-bar outlet into A major can be regarded as dispensable from a harmonic point of view – it can be replaced by an additional bar of repeated E-major seventh-chords, cf. Ex. 4. This variant, normalizing the metric format of the phrase to four bars, sounds more menacing and disastrous with its imploding voice leading, denying the strong harmonic implication, than Schubert's expansive and releasing five-bar formulation, which might be understood as celebrating the arrival of A major.

Now, what do these critical remarks on Cone's account of structure and expression amount to in terms of extra-musical content?

It appears that I have dismissed the “promissory-note” story and the concomitant ideas of latent threat due to a secret vice and of eventual disaster caused by syphilis. The main reason for rejecting Cone's reading is that I cannot fit in his “promissory-note” story with the musical structure. The two widely separated *forte* passages, featuring a would-be applied C-major dominant and its belated F-minor tonic, respectively, do not connect.

The crucial pc E/F \flat is loaded with too many functions and possible symbolic meanings to be captured by just one extra-musical description, however ambiguous – the metaphor “promissory” seems more witty than apt.³⁰ At first this Protean pc appears as e \sharp^2 on top of a supermediant C-major

30 After some analytic work it appears that, even in a short piece like this, the profusion of potential meanings – and the profusion of structural events and

chord (unique within the work), and being a raised fifth degree it is supposed to have an obligation to rise further upwards to f^2 . In the first part of the development, it repeatedly occurs as f/b^1 -falling-to- e/b^1 , which is a quite expressive but also perfectly normal and respectable thing to do for a (flattened) sixth degree within a local A_b -minor harmonic framework. Eventually the tpc F_b is established by means of enharmonic change as the root of the temporary E-major tonic, i.e. the flattened submediant. Later on an alto f^1 serves as the starting point of a very deceptive modulation back to the A_b -major tonic. In the recapitulation the f^1 when changed to e^1 brings about the crucial shift to A major. Within the hermeneutic frame that Cone has proposed, the pc E/F_b might stand for such notions as (say) disquieting thought of forbidden pleasures, giving way to gay desire, last-moment return to morally acceptable conduct, and symptoms of a fatal infection – things that cannot all be covered by the word “promissory”.³¹

It seems that also the F-minor *forte* outburst is overloaded with meanings. According to Cone, the “promissory note” is the C-major top-note e^2 in m. 12, and within the framework of his reading *that debt is paid* in F-minor currency in mm. 48–49 – long after due day, perhaps, but *after* giving in to the dictates of decency by modulating back to morally acceptable A_b -major behaviour. But in addition to the harmonic, “transactional” fact that a debt is settled, the F-minor passage is also associated with sublimation of thoughts. Thirdly, since the protagonist has contracted a medical debt allegedly falling due only in the recapitulation, the F-minor passage should rather stand for a reminder of his destiny. Indeed, even the word “discharge” is ambiguous when speaking of the F-minor outburst: it may refer to settling a debt, but also to what takes place when something that has been pent-up is released.

Furthermore, the essential point of Cone's interpretation (i.e. what happens in the recapitulation and why it happens) can do quite well without

relationships at disposal to serve as vehicles for them – presents a greater challenge to hermeneutic interpretation than does scarcity of meanings.

31 The association of the *supermediant* C major featuring a *raised* fifth, and E major, the key of the *flattened submediant*, with moral duty and forbidden desire, respectively, may appear very convincing to some people. But who am I to make Cone's analysis more Freudian than he is willing to do himself?

the “promissory” soprano note e_2^2 in m. 12, and Schubert’s music is not seriously damaged if we take it away. Keep the *forte*, supplant the right hand of the deviating phrase with that of its model in mm. 3–4, and play a C-minor chord instead of the C-major one at the following *piano* upbeat; cf. Ex. 5. Whereas this substitution makes the music less moving locally, it does not make the F-minor *forte* outburst in the development appreciably less convincing, musically or emotionally, nor does it of course affect what happens in the consequent of the recapitulation.

Arguably, the truly crucial note in Cone’s hermeneutic interpretation is not any “promissory” e_2^2 , but rather the potentially subversive, *promising*, flattened sixth $f\flat/f\flat^1$, first appearing in m. 17 and then persisting (partly disguised as e/e^1) until m. 41. Adopting Cone’s transaction metaphor, the problem for the protagonist is not any loan (e_2^2), but what he buys for his money ($f\flat/f\flat^1$).

But what about the syphilis? Isn’t the protagonist more likely to be infected with this disease during (say) the amorous E-major episode of the development – after all, the tpc $F\flat$ is internalized as tpc E, the root of the new tonic – than in m. 12 of the exposition? Presumably he is, but not as far as one can hear – syphilis is a crucial ingredient in Cone’s extra-musical narrative, but not something that one is likely to associate with mm. 29–39. The interpretation of the E-major episode emanates from the machinery of Cone’s narrative and makes up an example of top-down hermeneutics. The “promissory” e_2^2 in the exposition and its venereal consequences in the recapitulation require that an infection has been passed on in the development, no matter how arbitrary this fatal event seems to be in relation to the expressive qualities of the E-major episode as such. But since the very inception of *Treponema pallidum* cannot be felt, it may of course be argued that it is unreasonable to require that it must be audible. After all, the music might portray the very imperceptibility of this infection, hidden by desire and pleasure – which amounts to an interpretation that it is impossible to contest. Or are perhaps the stressed diminished seventh-chords in mm. 34 and 37 in fact blows of medical fate?

Furthermore and worse: there are even problems to understand the consequent of the recapitulation in the way Cone wants us to do, namely as a passage of dread due to the symptoms of an incurable disease. Words

like “infiltration” and “inimical to” suggest that Cone thinks in terms of competing tonalities – health vs. disease – and it is true that four flats are wiped out and replaced by four sharps as when bacteria overpower antibodies, but this is hardly borne out by the musical gesture.³² There is simply too much affirmative power and sense of liberation in this *expansion out of* the A \flat -major tonic to make devastation the first-choice of extra-musical referent, let alone the only one. As already pointed out the effect of this passage is fundamentally a matter of how it is played, but the locus of the catastrophe – if any – in the piece may arguably be elsewhere.

The dismissal of the medical component of Cone's reading means that the net result of the present criticism is that the “vice” has been divorced from its “marks”. To prevent misunderstandings, it should be pointed out that it has neither been denied that E/F \flat is a crucial pitch-class in this *Moment musical*, nor that E major, finally issuing into A major, is a most important, indeed decisive harmonic component in the narrative of the piece. And the possibility has not been excluded that an obsession with a foreign tonal region might be associated with gay desire (be it Schubert's or that of anybody else).

Some productive ideas in Cone's interpretation

Before presenting my first attempt at devising alternative interpretations, I should acknowledge three elements in Cone's reading that I accept and will capitalize upon.

Firstly, the association between the sonority beginning the development and the expansive third-inversion E⁷ chord turning up in the consequent of the recapitulation is very apt in spite of – or actually due to – the differences involved. Secondly, there might after all be some kind of meaningful relationship between the *forte* outburst in the exposition and the one in the development, but I prefer to analyse it in other terms and to give it

32 Incidentally, the battle involves over-killing; only three sharps are necessary for A major.

another, less crucial role in the musical narrative. Finally, a particularly productive element in Cone's account is his remark on what happens, and is just about to happen, when F \flat major gives way for E \flat major in mm. 41–42.

Two observations, involving a contradiction, in Cone's interpretation show how close he comes to the reading that will be advanced in the next section. The non-realized modulation from E major to A major, i.e. the harmonic turning point in the development, is described as "that temptation is resisted", while the passing right-hand combination c 2 /f 1 in the consequent of the recapitulation, eventually bringing about the realized modulation from E major to A major, is said to be "too strong to be resisted".

The association of these E-major dominant chords with things that are hard to resist is reasonable – dominants prompting modulations may have enticing as well as enforcing qualities. But A major seems to stand for two things in Cone's reading: first something pleasant but forbidden (vice), then something disastrous (disease). The A-major experience, held in prospect and then suddenly withdrawn by the deceptive modulation in the development, does not appear to be unpleasant. Is it then necessarily a "fatal disease" that is announced by the E 7 chords in the recapitulation and then makes itself felt when A major emphatically breaks through? And if we listen carefully to the deceptive turn of events in mm. 40–43: is there much of a resistance here, isn't this shift rather about something that is taken away or relinquished? Is this passage perhaps the true locus of the disaster – if any – in the piece?

But I do not want to exclude altogether that A major may be associated with disease. If E major in the development stands for "vice" and A major for its inescapable "marks", the consequent of the recapitulation, leading for a short moment to the "Neapolitan" A-major, *may* be symbolic of a fit of syphilis symptoms, whereas the merely implied presence of A major in the deceptive modulation of the development *may* refer to a premonition of disease. This modulation is ambiguous enough to support this content as well since the sudden occurrence of E \flat major in m. 42 may also be taken to suggest relief. But the problem in Cone's interpretation remains because the enticing quality of the E-major applied-dominant chords in mm. 40–41 is not compatible with the notion that the protagonist is resisting anything disastrous. A possible way out of this clash of referents is to stay with the

“let-go” rather than with the “have-got-you” qualities of the dominants in mm. 40–41 and 66–67, i.e. to keep the “vice” and do away with the “marks”.³³

All this being said, there is a symbolic card in support of the “promissory-note” reading, a card that Cone does not play – or plays very discreetly. Perhaps he did not realize that he had it up his sleeve, or perhaps he was reluctant to take any explicit advantage of it since it involves a further pun. Depending on whom you wanted to blame, syphilis was once known as the French or Italian disease, and sometimes it was even called the “disease of Naples”. So, given the fact that A major has the “Neapolitan” one-semitone-above relationship with A \flat major, it is (in a way) hard to deny that the A-major discharge in the recapitulation represents the “mark” caused by the E-major “vice”. Taking into account the power of language over thought, this association, based on questionable designations in medicine as well as in music, may work very well, but it is nevertheless very shaky ground.³⁴ Considering the number of “Neapolitan” sonorities in the music from (say) Scarlatti *senior* to (say) Rachmaninov, musical hermeneutics is open for great, perhaps irresistible temptations.

The promising-note reading

The reading to be advanced below will to a large extent be based on the same structural traits as Cone's – this agreement makes the alternative interpretation all the more worthwhile from a methodological point of view. Yet my interpretation will be significantly different in terms of structural

33 When I first played this *Moment musical* as a boy, the deceptive re-modulation in mm. 41–42 – seamlessly smooth and shockingly abrupt at the same time – struck me as the most deeply moving passage in the piece. I could not explain this effect in theoretical terms, of course, and even less did I suspect that this passage, charged with so much hope and disappointment, might have a crucial significance for the human message of the work. But again it should be pointed out that this modulation is rich enough to support Cone's reading of it as well: when playing it, longing and disappointment might be exchanged for a sense of temptation followed by relief.

34 As to music, isn't it about time to stop talking about “Neapolitan”, “French”, and “German” sixth chords?

narrative and extra-musical reference; the content suggested by Cone will be inverted. For reasons of economy, the account to follow will be more synthetic; the somewhat pedantic separation of hermeneutic layers in the presentation and critical discussion of Cone's reading will be abandoned.

The first two phrases may of course be played in a light-hearted way suggesting "satisfaction" and smoothing over the resolutions despite their harmonic instability. But another option is to render these phrases as expressing a sting of pain – the fact that the quasi-resolutions are delayed so as to occur at accented positions supports this interpretation – as disclosing a sense of uneasiness soon to be dispelled by the following four-bar phrase. If played in the latter way, you might feel that there is an element of dissatisfaction associated with the slightly dissonant, *descending* resolutions.

Turning specifically to the initial phrase, seminal for the entire piece, there are in fact many alternative resolutions of the four-note suspension chord exposed in m. 1. Ask Wagner, or take a look at Ex. 6 a/j, featuring ten variants of the first phrase, including Schubert's mm. 1–2. Suitable complementary phrases are also provided, showing that the proposed resolutions are not dead ends.

You can get rid of the major seventh causing the discord by moving the exposed outer notes so as to form an octave, i.e. you can either raise the anticipated soprano note c^2 to d^2 , getting a $D\flat$ -major subdominant chord, cf. Ex. 6a, or let the d^1 of the bass, having just pushed itself into focus by a rising fourth, produce a second-inversion F-minor chord by falling to c^1 , cf. Ex. 6b.

It should be noted that c^1 is the expected continuation of the implicative gap opened by the rising fourth, but in Schubert's piece this note is delayed until the second phrase. Before this happens, m. 2 comes up with an unusual resolution of the suspension: the soprano falls to b^1 , and the effort felt in the starting upbeat/downbeat impulse dissipates into a mildly dissonant and inactive, subdominant-with-added-sixth sonority, cf. Ex. 6c. But if the soprano just descends to c^2 , you get a $D\flat$ -major seventh-chord, a resolution that fits well with the transformed complementary phrase that Schubert eventually brings in mm. 11–12, cf. Ex. 6d.

But there are further options, some of which make for far-reaching associations in the piece. Retaining the falling inflection to b^1 in the upper voice, you can move the inner f^1 down to f^1 , so as to get a more poignant $D\flat$ -minor

added-sixth chord, cf. Ex. 6e, the same sonority as Schubert actually arrives at in mm. 63 and 65, and that also turns up in m. 21. The soprano descent to $b^{\flat 1}$ may also be balanced by letting the bass rise to $d^{\sharp 1}$, producing a first-inversion B^{\flat} -major seventh-chord, cf. Ex. 6f. And not bothering about the consecutive fifths caused when moving all right-hand voices downwards you may also arrive at a third-inversion E^{\flat} -major seventh-chord, cf. Ex. 6g.

The resolution to a third-inversion E -major seventh-chord is equally or even more forbidden due to its exposed consecutive fifths, gliding sensually downwards by a minor second, but the motion is anchored by means of the retained note $a^{\flat 1}/g^{\sharp 1}$ and met by a chromatic ascent to $d^{\sharp 1}$ in the bass, cf. Ex. 6h. This chord corresponds to the applied-dominant chord that Schubert eventually and after much ado comes up with in m. 66.³⁵ And if you venture to let two voices ascend and one descend above the sustained but enharmonically redefined bass note $d^{\flat 1}/c^{\sharp 1}$, the chromatic motions produce a first-inversion A -major chord, cf. Ex. 6i. This is the very chord emerging in m. 67 out of the insistent E^7 dominants.³⁶

Finally, there is another way out of the dissonant chord, a resolution to an altered G^7 chord, a sonority that Schubert refrained from using in mm. 9–10 although it would have prepared for what is to happen in mm. 11–12, cf. Ex. 6j. It should be observed that the releasing *forte* visit to the C -major chord with its “promissory” note is postponed to the complementary phrase; the seminal phrase, the very core of the music, is not involved.

Notwithstanding the fact that they make up double suspensions of A^{\flat} -minor six-four chords, the gentle root-position $F^{\flat 7}$ -like sonorities in mm. 17 and 25 *are* somehow related to the harsh third-inversion E^7 chords in mm. 66–67. But there is another relationship that must also be brought out, namely the retrospective and quite meaningful association between (say) the sad, visionary adoration inherent in the first phrase of the development

35 Consecutive fifths are funny things. My modern ears are not very offended by the voice leading in Exs. 6g and 6h. The only trouble I have stems from my pre-modern hands, trained to become allergic to such parallel motions. But if I play the tenor part of these resolutions with the left hand, the voice leading feels all right.

36 Needless to say, the E -major and A -major resolutions shown in Exs. 6h and 6i would be entirely out of place at the very start of an A^{\flat} -major piece by Schubert.

with its mellow and yet poignant chords and (say) the restrained pain of the first, seminal phrase of the exposition. The similarities are obvious, but it is more important to describe the differences in order to draw attention to the transformation that has taken place in mm. 17–18. Unlike the model in mm. 1–2, the sonority starting the development does not change between the upbeat and the downbeat, and the ensuing smooth activity is to be found in an interior voice and in the bass, not in the exposed upper voice having come to a standstill. Indeed, the inhibition of melodic motion spreads into the next phrase as well; whereas in the exposition the second, complementary phrase opened up a higher register, the development continues monotonously with a varied reiteration of the preceding phrase – the transformed seminal phrase is constantly in focus.

Turning to the pitch content of the chord starting the development, all notes can be derived from the forbidden E^7 -resolution latently abiding in the seminal phrase (cf. Ex. 6h) – the $e^{\sharp 1}$ turns up as the left-hand root f^{\flat} .³⁷ But this has been achieved without any struggle and pain, and without breaking any voice-leading rules, by simply substituting the initial A^{\flat} -major chord for an ambiguous E^7 -like, A^{\flat} -minor double-suspension six-four chord. The note $a^{\flat 1}$ is retained as tonic, but the diatonic set around it has changed, and the new section emerges as out of a dream or as being evoked by wishful thinking – or, considering that the very point of departure has been radically altered, as out of a new E-major-like state of mind, presenting itself without any effort.

Just as the soprano featured *descending* upper-voice resolutions in the pair of two-bar phrases opening the exposition, the f^{\flat} 's (then $f^{\flat 1}$'s) in the first part of the development *fall* to e^{\flat} 's (then $e^{\flat 1}$'s) – and this applies also to the soprano $f^{\flat 2}$ of the contrasting, more aspiring phrase mm. 21–24, eventually issuing into the E^{\flat} -major dominant. But finally the tpc F^{\flat} is stabilized as tpc E , an enharmonic redefinition allowing of both a fresh, non-retrospective melodic inflection from e^2 down to $d^{\sharp 2}$ in mm. 29–30 and a prospective, expansive inner-voice motion from e^1 via $e^{\sharp 1}$ to $f^{\sharp 1}$ in the extended contrasting phrase mm. 29–33.

37 It's a pity that I have discarded psychoanalysis since this occurrence of a resolution that may have been suppressed in the first phrase comes close to a Freudian slip of the tongue.

The flattened submediant E major, i.e. the furtively transformed point of departure of the development, and also one of the forbidden resolutions of the four-note chord in m. 1, has now been established as a new tonic. A distinctly foreign tonal region has been introduced, and yet a key that retains the former tonic note as the third degree in its diatonic set. The modulation is unexpected and inconspicuous: the E⁷-like sonorities of m. 17 and 25 have not disclosed any dominantic potential, and E major just emerges as the tonic-to-be by appearing as a six-four chord in m. 29. The mood is now one of satisfaction, happiness, and *Innigkeit*, and this state of mind is broadened and emphasized by two additional three-bar cadences, in which the melody is doubled to form parallel sixths.

In mm. 40–41 the listener is ignorant of the fact that the enharmonic equivalent F_b major is back, but the pianist reading the score knows and may choose to prepare or not prepare the listener for m. 42, where the return to the A_b-major domain is suddenly made manifest by the E_b-major suspension. One way of preparing for this deceptive re-modulation is to bring out the soprano's repeated a^{b1}'s leading into the suspension, motif (ys). One way of *not* preparing for this outcome is to prepare for what m. 42 does not offer – namely a shift to A major, a half step *above* the original A_b-major tonic – by emphasizing the alto voice that apparently heads for c^{#1}. A model for this falling motion can be found in the preceding melodic cadences, motif (xc) in mm. 35 and 38. This non-occurring, non-deceptive modulation to A major sounds very strange to people knowing Schubert's piece, of course; cf. Ex. 7. What happens in the *Moment musical* is that the apparent goal as well as the means to get there are changed at the last beat of m. 41: the F_b-major chord with its seventh (written as d^{#1}) striving to descend is tacitly redefined into a virtual second-position flattened-fifth B_b-major seventh-chord with its third d^{#1} heading upwards. The cadence motif (xc) is turned into a motif of modulation (xm) reaching e^{b1}, and the phrase issues into E_b major, a half step *below* its F_b-major point of departure.

But there is a further aspect of this passage that a keen listener might notice, but that the pianist, misled by the notation and the position of his/her hands on the keyboard, may be ignorant of. The iterated F_b-major chord in fact makes up a transposed copy of the very first chord of the piece. Just play three notes in the right hand to feel it! The (ys) phrase in mm. 40–43

may be regarded as an extended variant of the seminal phrase (s), a variant starting from an $F\flat$ -/E-major chord “out there”, and insisting for a moment on a still more remote, A-major tonic before it suddenly bends away in an unexpected direction, before it is suddenly bent *down* by a semitone to produce the $E\flat$ -major dominant of the original $A\flat$ -major tonic.³⁸

The very moment of modulation involves a possibly symbolic twist determining the course of events. Due to the (xm) motif the last chord of m. 41 is changed so as to clear away the left-hand consecutive fifths that would otherwise have blocked the retreat to the $A\flat$ -major domain. At the same time the modulation to the “strange” key of A major is prevented by the fact that the leading note $a^1/a\flat$ ($g\sharp^1/g\sharp$) is doubled.

A touch of bittersweet agony is introduced in the next (ys) phrase (mm. 44–47), now featuring $d\flat^2$ as the insistent top note eventually to be bent *downwards*.³⁹ The third (ys) phrase, to be played *forte* and being extended to six bars, emerges as the crowning stage of this passage of intensification, but as suggested above it might also be heard as a protest against, say, the preceding cadence to the tonic. But there is also a sense of repression: the repeated top note is first f^2 , but this note is contested as top note by a^2 , serving as the starting point for an (xc) motif that eventually, after the delaying clash in mm. 50–51, bends the F-minor outburst *down* to the $E\flat$ -major dominant.

Turning finally to the recapitulation, Schubert has in fact supplied a subtle premonition suggesting that its consequent may not turn out as the one in the exposition. Underscoring a gesture that deviates from all the falling suspensions in the piece – inflections that may be taken as suggesting dejection – there is no *diminuendo* sign rounding off the *rising* suspension closing the antecedent in mm. 60–61. And, which is most obvious, the consequent of the recapitulation, starting *forte* from its very beginning, does not feature

38 The right-hand slur in m. 39 diminishes this similarity since it robs the extended seminal phrase of its upbeat, but it is hard to avoid giving the impression that this $g\sharp^1$ is (also) an upbeat. Yet Schubert’s slur has a subtle point: if you succeed in rendering this note as an unequivocal afterbeat, the melodic cadence is undermined by the unexpected, last-moment rising third, and without its upbeat the following phrase breaks the prevailing rhythmic grouping of the piece by starting from a downbeat of exquisite stillness.

39 The melody in m. 45 may be understood as a diminution around $d\flat^2$.

any complementing higher-register phrase like the one in mm 11–12 (or mm. 3–4); instead there is an exact reiteration of the preceding phrase, and both phrases bring a crucial variant of the seminal motif.

Just as at the beginning of the development, what happens to the seminal phrase is what matters. It is true that the *fortissimo* third-inversion E⁷ chord reached in m. 66 may recall the E⁷-like sonority in m. 17. However, since it is not a substitute for the first chord of the seminal phrase as was the chord starting the development, but is produced out of the preceding, repeated and transformed, seminal phrase, it seems more adequate to understand it as the third-inversion E⁷-resolution that did not, and could not due to the consecutive fifths, turn up in m. 2; cf. Ex. 6h. The process that completely changes the consequent of the recapitulation and eventually leads into A major must be studied in detail.

In mm. 62 and 64, the major-seventh subdominant chord appearing in mm. 1, 9, and 54 does not turn up. What happens in the consequent of the recapitulation is that the upbeat A^b-major chord is dismantled or surmounted note by note in *forte* and with great determination, and this process is repeated as if to be on the safe side, or as if mustering strength for an even greater effort.

The first thing to happen is that the alto e^{b1} rises to f¹, a half-step lower than the f¹ of the suspension chord in the seminal phrase, but also an unexpected *ascending* chromatic motion that we cannot but notice. Rather than being painful, this deviation emerges as an active, assertive gesture contrasting with and inverting the passive, falling motions from f^b (or f^{b1}) down to e^b (or e^{b1}) repeatedly heard in the development and most notably in the deceptive modulation in mm. 40–43. The f^{b1} in mm. 62 and 64 supplants the f¹ of the seminal phrase, but it does not derive from this note. In terms of voice leading, there is no lowering involved: just as the f¹ in the seminal phrase, the f^{b1} comes from e^{b1}, and the new, perhaps somewhat sharper dissonance supplants the mild one of the seminal phrase. But this rise from e^{b1} to f^{b1} is not entirely unique within the piece. There is a precedent for it in the same register in mm. 20–21, where this motion contributes to the transformation of an A^b-minor chord into the same sonority that will turn up in mm. 63 and 65.

The eighth-note c^{b2} is passed when the soprano falls to b^{b1}, and (at least when the phrase is repeated) it is apparent that the f^{b1} has in fact

indicated a way out of the impasse: a relatively consonant note, c^2 , has been slid over, and hence the b^1 , which seems more dissonant, does not emerge as a resolution as it did in m. 2. The chord appearing at the downbeat of m. 63 and m. 65 is in fact the D^b -minor chord with added sixth shown in Ex. 6e.

Consequently, the upper line is expected to – and does – return to c^2 (i.e. b^1), another decisive motion *upwards*. This infuses a prospective meaning into at least the second transformed seminal phrase and suggests an energetic, goal-directed way of playing.⁴⁰ The return to b^1 in the top voice coincides with, is confirmed or perhaps even brought about by, an important change in the bass. Instead of giving in to its inherent fate – having risen by a skip, the bass voice is expected to descend as it did in m. 3 – the bass now pushes itself *upwards*, has now got the guts to *ascend* from D^b to D^{\natural} .

The net result of all this is that the original formulation of the seminal motif in mm. 1–2 with its passively falling top voice has been circumvented, and that the impossible resolution shown in Ex. 6h has been achieved – but not by means of forbidden, passively descending consecutive fifths, but as a result of three deliberate and determined *ascents*. If there is any truth in the association between descents and submission, and between ascents and defiance, this is a crucially important difference between the exposition and the recapitulation.

But what we get in m. 66 is not actually or just a resolution, but a dissonant, third-inversion E^7 chord of tremendous harmonic force that pounds its way towards release in A major. And in m. 67 the last trace of the original A^b -major tonic is annihilated when the leading-note $g^{\sharp 1}$, the enharmonic stand-in for the tonic note of the piece, at last gives in to a^1 – a final *ascending* chromatic motion producing a chord that is nothing but the “strange” resolution of the seminal phrase shown in Ex. 6i. The new tpc A is promptly confirmed as chord root and auxiliary tonic at the following accented position.

What has happened, then, in m. 62–68 is that the original A^b -major tonic has been *raised* by a semitone. Out of struggle and convulsions, out of a

40 It should be observed that, notwithstanding the rest, the soprano brings a rhythmically augmented, hemiola-like variant of the modulation motif (xm).

state of positive agony, has been born a sweeping gesture of liberation – rather than a disaster due to the “infiltration” of a note that is “inimical to its surroundings”.

The peak of triumphant satisfaction is quickly passed over, however. The music shrinks back from its new tonic, the inner-voice note e^1 again gives in and falls to e^b1 , and an A^b -minor six-four chord reinstates the original tonic note in a mood that might perhaps be described as resignation, disappointment, or loss.⁴¹ Bars 66–60 are then repeated in a subdued and pensive manner, and the piece closes with a third-less sonority, suggesting a sense of void.

Going back to the beginning of the piece, there is (perhaps) a further structural/symbolic scheme supplementing the one just proposed, a scheme that brings in Cone's idea of using the *forte* passages for hermeneutic purposes.

The initial pair of phrases is spanned by a quite prominent rising-falling gesture $a^b-d^b1-c^1$ in the bass whereas the soprano features two falling major seconds c^2-b^b1 and f^2-e^b2 (motif s). Instead of keeping these phrases together, letting both of them express pain or dissatisfaction, it is possible to imagine and express a sense of contrast between them. The first phrase sounds relatively more at ease than the second one, whose higher pitch, initial dissonance, and poignant minor quality suggest a certain discontent. In the re-harmonized consequent with its unexpected *forte* outburst in mm. 11–12, this mild contrast is heightened to a conflict. The transformed second phrase introducing the supermediant C major may be heard as a protest – either against the too submissive attitude of the seminal phrase or against the too lame reaction of its model in mm. 3–4 from which it deviates.

41 But minor six-four chords are not necessarily very tragic. Apart from the crucial question of how the suspension chords in mm. 69 and 74 are played, one might ask (in vain) whether these two minor chords are there for expressive reasons or because A^b minor is smoother than A^b major in terms of chord-to-chord re-modulation tactics. If you exchange these minor six-four chords for their major counterparts, the result is not impossible but admittedly somewhat odd – perhaps just because you have heard and played the piece many times and is uncomfortable with the substitution.

That the even more emphatic F-minor (or perhaps A \flat -major) *forte* passage of the development may stand for a sense of protest is obvious, and there is just before it a cadence reinstating A \flat -major, an event that may be understood as the cause of this strong reaction. In addition there are some motivic affinities associating this passage with mm. 1–4 as well as mm. 9–12; as a result there is connection making the second *forte* outburst emerge as an intensified reminiscence of the first one in mm. 11–12. Starting with the upbeat to m. 46 and continuing beyond m. 50, we may identify the same bass gesture as in mm. 1–4, extended by several bars and transposed to e \flat –a \flat –g, motif (z). Concurrently, the upper line essentially features the major second f 2 –e \flat 2 of mm. 3–4, motif (ys); cf. Ex. 1.

Hence, the *forte* consequent of the recapitulation may also be understood as a most emphatic expression of protest. But the predictability of the bass motion is lost when D \flat is raised to D \natural , and in the treble there is no complementing retreat to a higher register, no equivalent to the complementary phrase mm. 3–4. Later on in m. 67, the return to C \sharp (D \flat) in the bass is countered on the spot both by the crucial *ascent* g \sharp^1 –a 1 and the start of the defiantly *rising* soprano motion.

The Trio will be disregarded in this hermeneutic interpretation of the *Moment musical*. Speaking in terms of motivic integration, the Trio's initial idea (turning up several times later on) is related to the seminal motif (s) – just skip the two eighth-notes, and the same rhythmic pattern and melodic inflection comes to the fore; cf. Ex. 8. But the present “exercise” must be distinguished from exercises searching for elements of thematic integration, and therefore the two connecting eighth-notes cannot be left out of account. They make for an emphasis at the following accented note, a change amounting to a substantial rhythmic and melodic difference from the seminal motif. And there are important harmonic and syntactic differences as well: the Trio opens with two consonant chords and proceeds quite conventionally with a motion from tonic to dominant, and the initial motivic unit overlaps with the following one, promptly bringing the music back to the tonic.

Thus, granting the sub-surface motivic affinity, the dissimilarities between the Trio and the main part are decisive – the musical structure is changed, and so is the expressive content along with it. The intra-musical *persona*, possibly suggested by the main part of Schubert's piece, does not seem to

be present (or thinks of something else), and the Trio is therefore of no use in the hermeneutic account to follow.

The tonal process upon which the extra-musical interpretation is to be based will first be described; cf. Ex. 9 showing variants of the seminal phrase and the crucial modulations in the piece.

For metric and formal reasons, and despite its harmonic affinity to the third-inversion E-major dominant seventh-chord appearing in m. 66, the A \flat -minor double-suspension six-four chord (the F \flat 7 sonority) starting the development must be regarded as a substitute for the initial chord of the seminal phrase. It brings about a transformation to the effect that the upbeat chord and the following accented suspension chord collapse into the same sonority. Since the accented dissonant chords in mm. 62 and 64 result from an unexpected rise in a middle voice, these sonorities emerge as mutations of the suspension chord of the seminal phrase. While being also the start of a longer phrase, the third-inversion E 7 chord in m. 66 is understood as a replacement of the resolution chord of the seminal phrase – it makes up the second attempt at a resolution of the dissonance introduced in mm. 62 and 64. This E 7 chord, a result of several chromatic *ascents*, is equivalent to the resolution appearing in Ex. 6h, featuring *forbidden* descending consecutive fifths. In virtue of its potential as a dominant this E-major harmony is itself a chord requiring further resolution, and the motion to A major in m. 67 – the third and successful attempt at a resolution, effected by another chromatic *rise* – corresponds to the *strange* resolution shown in Ex. 6i. When the A-major root-position chord is a fact at the first beat of m. 68, it amounts to an exchange of the A \flat -major tonic of the piece in favour of a chord (and a tonality) that has got rid of the original tonic note – a radical overall shift by one semitone *upwards* and a seemingly irrevocable outcome.

It appears that Cone's "promissory" C-major outburst in the exposition fits in with this interpretation only if it understood as a gesture of protest. And "mm. 11–12" cannot turn up in the consequent of the recapitulation since protest is replaced by action, since the repeated and radically transformed seminal phrase prevents any complementary phrase by occupying its place.

Striking as this hermeneutic scheme may perhaps seem, there is an obvious snag in it. How, one might ask, is it possible to grasp an intra-musical

narrative that is ultimately based on things that do *not* happen? In m. 2 there is neither a resolution to a forbidden third-inversion E⁷ chord, nor to a strange first-inversion A-major chord, i.e. to chords corresponding to the sonorities in mm. 66 and 67, respectively. When you hear the seminal phrase at the beginning of the piece – and however much it may be rendered so as to suggest restrained pain – you do not have any reason to suspect that it suppresses such unusual resolutions as those shown in Exs. 6h and 6i.⁴²

But it may be argued that some of the best stories are understood only in retrospect – the very point of them being that they disclose something that was hidden or wrong in the state of affairs presented at the outset. Indeed, considering the extra-musical narrative to be told in Schubert's piece, it is essential that the forbidden and strange resolutions shown in Ex. 6h and Ex. 6i, and realized in mm. 64–67, are *not* suspected beforehand. And there *are* clues in Schubert's music for those who play and listen attentively. The sense of dissatisfaction or uneasiness potentially inherent in the seminal phrase can be rendered and can be heard, and this tension is first increased in mm. 62–65 and then overcome in mm. 66–68, i.e. where the seminal phrase is transformed so as to give rise to the E⁷-harmony that completely overthrows the tonal course of the consequent by introducing a new tonic. And this subversive chord might very well be furtively suggested when it appears as the sonority starting the development, although it is disguised as a root-position chord actually functioning as a double suspension of an A_b-minor six-four chord.

It seems that the repeats – most often obstacles when attempting to construe and convey musical narratives – are of some help when it comes to expressing and understanding the crucial chain of associations connecting the series of urging E⁷-dominants in m. 66 back to the dreamlike non-dominant E⁷-like sonority in m. 17, *and* connecting this sonority back, not to any non-occurring third-inversion E⁷-resolution in m. 2, but to the chord which it supplants, the very first chord of the piece. Listening to the piece with its repeats means that you have heard the seminal phrase four times before the

42 This would not pose a problem for hardened deconstructivists, trained as they are to handle intricate dialectics involving an absent Other. The promising-note interpretation, I am proud to say, features *two* absent Others right from its very start.

first phrase of the development turns up, a fact that cannot but better your chances of hearing its first A \flat -minor sonority as a peculiarly altered stand-in for the first chord of the seminal phrase. And if you have not noticed the harmonic affinity *and* the shift of meaning between m. 17 and m. 66 when listening to the recapitulation the first time, you may very well do so when the music is resumed from the double-bar. What you hear the second time is not likely to be a phrase issuing from a doubly suspended A \flat -minor six-four chord, but rather from a root-position E7 chord, a sonority related to those that you have just heard in the consequent of the recapitulation, and quite similar to the chords in m. 71.

A clever pianist can clarify the relationships that are essential for this interpretation by playing so as to support the associations between the start of the development and the seminal phrase, and between the third-inversion E7 chords of the consequent of the recapitulation and the root-position E7-like sonorities starting the development, respectively. One might think that it is a compromising fact that this reading to some extent depends on how the *Moment musical* is played. But this is a weakness (if a weakness it is) that it shares with Cone's reading, and probably with most other hermeneutic interpretations of this and countless other pieces. From a purely analytic point of view, it would of course be very convenient if there were only one object to deal with, namely the notes that Schubert wrote, but this is far too primitive a point of departure for any music analysis, and also a far too limited view if you want to account for the variety of extra-musical associations that this piece may evoke. Just as a piece of music will not "narrate" anything without a properly attuned listener, it cannot emerge as "narrative" without a perceptive musician. A good teller is sometimes needed if you are to trust a story.

Indeed, it turns out that this "weakness" is actually an asset. If a hermeneutic reading presupposes a certain way of playing in order to be conveyed, it means that the content claimed to be inherent in the music has better odds of being understood by the listeners. This state of affairs also implies, even requires, that the interpretation must not be merely a piece of esoteric and convoluted paperwork, but has to be based on musical events and qualities that are conspicuous and important enough to be expressed. And if such elements of expression can be brought together to form both a non-contrived rendition of the music as well as a convincing musical narrative, the

asset turns into a commendation: this is how an extra-musically informed reading may emerge as viable, and generally how interesting ways of rendering music may come about.

Had this reading just been a matter of two perhaps suppressed resolutions, one forbidden and one strange, both of them non-realized in m. 2 but eventually discharged one after the other in the recapitulation, it would not have “turned me on”. The important thing is that the hypothetic, and admittedly fairly intricate, structural mechanism for producing extra-musical meaning is based on traits that may very well be heard and be readily brought out in performance. The conspicuous rising motions in the recapitulation, contrasting to the falling tendencies so far prevailing in the piece, and the two modulations to A major – the soft, cancelled one in the development and the powerful, consummated one in the recapitulation – are obvious and expressible features that give substance to the overall narrative foreboded by the non-realized resolutions inherent in the seminal phrase.

One might boil down the intra-musical process of the piece to a story involving two persistent notes and their respective chords and keys – or, if you like, to a story about *a promising note* and *an impending chord*.

The pc F \flat /E turns up quite frequently in Schubert’s A \flat -major piece, starting in a mood that may be described as uneasy. Most often it occurs as a harmless but expressive flattened sixth-degree tpc F \flat *falling* to tpc E \flat , but it is potentially subversive since it holds out the prospect of an escape from the tonic. The promising pc F \flat /E is furtively present already at the very beginning of the development, and eventually it takes over: the music modulates to E major, to the flattened submediant sharing the pc G \sharp /A \flat with the original A \flat -major tonic. This shift happens without any effort, and it takes place concurrently with a change from a dreamlike, perhaps sad state of mind to a feeling of calm happiness and satisfaction. In the consequent of the recapitulation, on the other hand, e \flat ¹ is dramatically and as it were deliberately *raised* to f \flat ¹, a note that is subsequently redefined as e¹ in an E⁷-chord that discloses a non-realized harmonic resolution inherent in the seminal phrase, i.e. the *forbidden* option 6h, as well as a kinship with the start of the development. This chord has a power that irresistibly leads to A major, to a chord that corresponds to the *strange* option 6i, to a new key lacking

the original tonic note in its triad. But e^1 soon gives in to $e^{\flat 1}$, and the music reverts to its A^{\flat} tonic.

The sharpened fifth-degree $e^{\sharp 2}$ topping the half-cadence to C major in m. 12 is not an integral part of this intra-musical story: it falls immediately to $e^{\flat 2}$, it has no consequences, and it never returns. But this is not to say that it cannot be given a place within a more elaborated narrative – it might, as already suggested, belong to a set of phrases expressive of protest.⁴³ Anyway, it is a dead end: this kind of the tpc $E_{\sharp} - E_{\flat}$ as in C major – is not the protagonist's way out of A^{\flat} major.

The pc A^{\flat}/G^{\sharp} is even more frequent in the *Moment musical*, but being the tonic note in A^{\flat} major and the third degree in F^{\flat}/E major, it is not at all conspicuous – or rather, its almost constant presence is noticed only when it is dislodged or made to behave in an unexpected way. The close juxtaposition with emphasised $g^{\sharp 1}$'s in mm. 34 and 37 strikes as a suggestive detail, and so does certainly the deceptive course of events in the re-modulation in mm. 40–43, where the would-be rising leading-note $a^{\flat 1}$ ($g^{\sharp 1}$) eventually bends *downwards* to g^1 instead of ascending to a^1 – a move that avoids A major. But the crucial deviation from $a^{\flat 1}$ is still ahead: prompted by the repeated E^7 -chords, $g^{\sharp 1}$ *ascends* to a^1 in m. 67. For a short moment of complete devotion, the music has successfully modulated to A major, exposing a chord one semitone *above* and having *no note in common* with the A^{\flat} -major tonic triad of the piece, a chord that has been impending since the deceptive turn of events in m. 42 – or, if you like, a chord that has been furtively present as an unrealized potential since the seminal phrase in mm. 1–2.

This intra-musical narrative is related to the one told by Cone, and yet significantly different with regard to its structural mechanisms as well as its expressive meanings and overall hermeneutic tendency. The present interpretation operates with two foreign chords (keys) that, latent as *forbidden* and *strange* resolutions of the seminal phrase, respectively, have ramifications spanning the entire piece. They can be described as two harmonic attractors that eventually bring about a number of conspicuous and decisive *rising* semitone motions in the consequent of the recapitulation, motions

43 Or perhaps (and thanks again, Dr. Freud) this loud but abortive super-ego gesture bringing in the supermediant symbolizes (say) unattainable sublimation?

that militate against the submissive falling seconds prevailing elsewhere in the piece. Disregarding the two setbacks – the deceptive, $A\flat$ -major-instead-of-A-major re-modulation in the development, and the final, turning-back retreat(s) from A major to the $A\flat$ -major tonic note – the expressive qualities of the E-major and A-major passages are of a positive, affirmative kind. This applies particularly to the consequent of the recapitulation, marked by its metric and harmonic expansion and by four quite prominent *ascending* motions, and emerging as a musical process that leads out of the limitations of the initial condition, as defined by the seminal phrase, in a way that seems to stand for a sense of liberation.

It is of some symbolic and analytic interest that the crucial E-major and A-major keys of the promising-note reading make up a powerful, barely suppressed dominant/tonic framework at odds with the $E\flat$ -major/ $A\flat$ -major structure at the core of tonal analysis, and that it is the struggle between this subversive tonal scheme and the theoretically sanctioned, “natural” one that makes up the essence of the intra-musical narrative. Since the truly important things in any story are not the conventional, necessary doings, but the extraordinary moves, it seems that, generally speaking, hermeneutic interpretations involving large-scale tonal schemes are likely to turn the Schenkerian distinction between structural background and foreground upside-down, or inside-out, thus offering fresh insights into what actually goes on in the “tonal” framework. Methodologically, this implies that Schenkerian analysis is not a very productive starting-point for attempts at hermeneutic interpretation since what may eventually emerge as essential in terms of human content is likely to be degraded into secondary events in the analytic graphs.⁴⁴

It should be pointed out that it is not essential for bringing home the main point of presenting various hermeneutic “exercises” – namely, that music tends to be ambiguous enough to sustain several and perhaps substantially

44 Unless of course you use the graphs to locate events that are analysed as structurally insignificant, and hence perhaps will turn out to be hermeneutically crucial. But it seems to be a better, more straightforward approach to listen from the outset for events that emerge as extraordinary. Generally, what all this boils down to is the question of the vantage point for appreciating any piece of music: its commonplace or its deviating traits.

different extra-musical interpretations – that the intra-musical narrative just proposed is incontestable, or even that it is more convincing than the one advanced by Cone. If someone were to find that my reading of the musical process has some flaws, I would not be very surprised, nor would I bother to amend it, trying to produce a watertight and foolproof interpretation. What does matter in the present context is that Schubert's piece has given rise to another intra-musical narrative, based on a reasonable and consistent description of the musical events.⁴⁵

Finally, what about the extra-musical content of the “promising-note” reading? Let's use Schubert's sexual orientation once again and revise Cone's dismal (and by implication somewhat moralistic) interpretation, although it probably agrees quite well with the current idea of homosexuality in Schubert's days, and although it *might* also agree with how Schubert himself viewed his “vice”.⁴⁶ But even so, it should be allowed to base a reading on a less prejudiced, more up-to-date notion of gay desire, and to advance an interpretation of the musical events locating the disaster (if any) not to the forceful break-out from A♭ major into A major, but to the following hasty retreat to the tonic – or, before that, to the deceptive A♭-major-not-A-major modulation in the development. Anyway, the intra-musical narrative has already been abundantly provided with persuasive descriptions, so it just remains to drop the remaining fig leaf of formalistic decency and name the referents.

We first meet with a protagonist that, excepting perhaps a short C-major moment of protest (or sublimation) and at the cost of painful restraint, manages to hide his true, but socially unacceptable sexual proclivities behind well-mannered A♭-major gestures. In secret, however, he can devote himself

45 Still another hermeneutic reading of this *Moment musical*, devised by Lawrence Kramer and having the composer's syphilis affliction as its extra-musical referent, will be discussed in a section to come. And further “exercises” by the present writer will be added to the one just presented.

46 This is far from certain. A positive by-product of the debate concerning Schubert's sexual leanings is that we have been reminded of the fact that Schubert had more of a stature than we might have associated with the contented and cosy *Schwämmel* passed on by tradition. If he was gay, he might (considering the circumstances) have been so in a quite determined and self-assured, one might say modern, way.

to passions or reveries that eventually take on the character of an intimate friendship (the E-major episode with its final parallel sixths). At first he keeps his desire hidden – the E-major quality of the chords in mm. 17 and 25 is disguised as double A \flat -minor suspensions.⁴⁷ On the verge of disclosing his gay identity (A-major) his courage fails him, and he reverts to socially sanctioned behaviour (A \flat -major), a re-modulation of self-denial that causes him great distress (the F-minor *forte* passage). But it is not long before the dikes break. In the recapitulation – i.e. in the same situations as when it all started – and after two passages filled with both agony and determination, he ventures to do what he refrained from doing in the development: to expose his true self in full daylight (A major). There is pride and triumph in this affirmation – all notes *ascend* – but very soon his socially approved identity is forced upon him (A \flat -minor?).

The penultimate sentence in Maynard Solomon's "Peacock" article fits this reading quite well: "If this is true, we may well be witnessing the ultimate sign of the exercise of Schubert's free will – his decision to live and die in his own way, unrestrainedly, proudly, and creatively" (p. 206). In terms of the *Moment musical*, the protagonist first slides back from the amorous E-major section to A \flat major by means of a painful, deceptive modulation, but then he chooses to demonstratively tear down the A \flat -major identity of the seminal phrase, and to self-confidently transform the consequent into a long and repeated A-major phrase, signifying his true gender.⁴⁸

The "promising-note" story may of course be embroidered in various ways. To those who are fond of hermeneutics in realistic terms, the convulsive accumulation of pent-up energy, the pleasurable release, and the quick dissipation of tension in mm. 62–70 cannot but be suggestive of an orgasm. Other people

47 Literally as well as figuratively, the first portion of the development has a quality of *double entendre*.

48 If this makes sense, it was an extremely bad idea to use this piece as it was used in the operetta *Dreimäderlhaus*, namely as music for the fictional Schubert singing about the loss of the girl he loves to his best friend. On the other hand, it might after all have been a good idea, quite compatible with the general line of argument in the present "exercise". What does, for instance, the seminal motif express? It might in fact suggest several contents – not only frustrated gay desire, but also (say) lamentation of unrequited heterosexual love.

prefer abstractions. In m. 65 the f^{\flat} exchanged for e^{\flat} as in E major might stand for the overcoming of the frustrated gay desire of the protagonist, for the will that eventually throws off his false, covering A^{\flat} -major identity by preparing for the decisive *rise* to A major, symbolizing a parallel way of being, just a half step away and yet so distant and so hard to attain. (After all, what competing dominants try to do is to promise and prompt new tonics.) At the very end of the piece, the return to the proper A^{\flat} -minor (?) tonic may be taken to signify the social norms of society and the oppression of the individual.⁴⁹

Anyhow, the “promising-note” reading has an extra-musical snag as well. Are the inappropriate resolutions shown in Exs. 6h and 6i – to be realized only in the recapitulation – “forbidden” and “strange” in ways that can stand for gay desire? Nothing is known about Schubert's poetic intentions with regard to this *Moment musical*, and the neutral level of the semiosis is – neutral. If we want to understand these sounds as symbols, we are reduced to rely on our esthetic responses; if we want to find out what associations these resolutions (and various passages in Schubert's piece) actually evoke, we must go beyond hermeneutic analysis and turn to empirical investigations, highly problematic matters to be discussed later on.

On Schubert's modulations: Temperley and Pesic

According to David Temperley, changes as to mode and/or tonic are relevant for musical meaning, and he proposes this general principle: “I will suggest that shifts of pitch collection (maintaining the same tonic) generally imply a shift in perspective on a constant situation, whereas shifts in tonic imply an actual change in situation”.⁵⁰

49 This is the standard role for the main tonality, found in various hermeneutic pitch/key narratives, not least in feministic ones, which tend to equate tonics with male domination. Generally, if you want to discover the gendered power order in tonal music, just look at the key signature, based on a male-invented system defining five pitch-classes as dependent, in need of derivation from the seven ruling ones, and guaranteeing the ultimate harmonious subordination of all Others to the tonic note and his gang.

50 The quote derives from the abstract of Temperley's paper “Musical meaning and the line of fifths”, p. 266 in Susan A. O'Neill (ed.) *Abstracts for the 6th International Conference on Music Perception and Cognition; August 5–10, 2000; Keele University, UK*.

One of his illustrations is Schubert's *Moment musical* No. 6, and his hermeneutic principle fits the "promising-note" interpretation quite well. The unprepared shift to A \flat minor at the start of the development may indeed be likened to another "perspective on a constant situation" – the seminal phrase is there, but it is brought to a standstill – whereas the emergence of E major in the development and then the sudden, deceptive modulation back to A \flat major may certainly be described as "actual change[s] in situation". And the powerful thrust to A major in the recapitulation clearly brings about the most radical change since not only is a new tonic introduced, but also a new diatonic pitch collection that only keeps two notes of A \flat major – the former tonic note, for instance, turns up as the seventh degree in the A-major scale. Due to the enharmonic G \sharp /A \flat quasi-identity and the mediant relationship, you can easily slip back to A \flat major from E major, but the semitone modulation from A \flat major to A major closes the closet door behind the protagonist, as it were. When A \flat minor (?) nevertheless and almost immediately turns up, the effect is quite chilling.

Discussing various late works of Schubert, and especially the first movement of the B \flat -major Piano Sonata D. 960, Peter Pesic directs our attention to an encompassing modulation scheme involving two (three) consecutive shifts to the flattened submediant, i.e. (when transposed to A \flat major) the key sequence A \flat –E–C–A \flat . He brings this tonal layout in connection with Schubert's prose sketch *My Dream*, a story about two departures followed by a homecoming: the wandering off is associated with both love and pain, whereas the return to the home means that banishment is replaced by reconciliation.⁵¹

The interesting thing in the present context is that the *Moment musical* does *not* conform to this pattern. There is no circular modulation scheme in this piece, but two modulations away from the tonic, modulations that both involve the flattened submediant: the first leads to \flat VI, the second via a third-inversion \flat VI7 to its auxiliary tonic. And neither E major in mm. 29–39, nor A major in mm. 67–68 seems to return voluntarily to the fatherly A \flat -major tonic for reconciliation; in both cases the distress is associated with the

51 Cf. Peter Pesic, "Schubert's Dream", *19th Century Music* 23(1999/2000), 136–144. Schubert's dream has also been discussed by Maynard Solomon, cf. "Franz Schubert's 'My Dream'", *American Imago* 38(1981), 137–154.

home-coming of the protagonist (mm. 40–43 and 68–69) rather than with his going astray (mm. 28–29 and 62–67). C major, the failing key of Pestic's circle of thirds, appears only once and quite transiently in mm. 11–12 as an applied dominant deprived of its auxiliary tonic, i.e. as a dead end.

Replacing the current notion of the circle of fifths, David Temperley has proposed the “line of fifths”, a model of the tonal system that takes account of enharmonic differences since it is based on the concept “*tonal* pitch-class” (tpc) as opposed to just pitch-class (pc).⁵² Judging from the strict methods he develops in order to study problems in tonal music such as pitch spelling, key detection, and routes of modulation, the line of fifths appears to be a quite productive idea and, as already pointed out, it makes sense in Schubert's *Moment musical*.

The notion of a line of fifths offers an interesting perspective on the modulations in Schubert's piece. F_b major is four fifths flatwards from A_b major, a position that is not equivalent to E major, eight fifths sharpwards. You may get a glimpse of this difference in m. 66 when the F_b⁷ chord (for convenience written as E⁷) discloses its power as an applied dominant and brings forth B_b major (i.e. A major) – this is certainly a motion to a place far away from the A_b-major tonic.

Temperley's model involving tonal pitch-classes may also be used to explain the nature of Cone's Protean “promissory” note. With A_b major as its point of departure, the tpc E₄ topping the C-major chord of the deviating *forte* phrase in the exposition is very distant from the tpc F_b making up the (apparent) root of the seventh-chord-like sonority beginning the development; later on, the tpc F_b will force the consequent of the recapitulation to take an entirely different turn. Within the framework of Cone's “promissory-note” reading, one might say that E₄ is an economic tpc while F_b is a venereal one.

Pestic's major-third strides around the circle of fifths in the B_b-major Sonata do not amount to a final home-coming in terms of Temperley's line of fifths, extending infinitely in both directions from any chosen tonic in a way that precludes enharmonic short cuts. If the line-of-fifths model

52 David Temperley, “The Line of Fifths”, *Music Analysis* 19(2000), 289–319; cf. also *The Perception of Harmony and Tonality: An Algorithmic Approach* (Diss. Columbia University, 1996).

is adopted, returns to the tonic must be made by retreating to where you came from; they do not occur when pursuing your course along the line.

And yet “returns” of the latter, paradoxical kind are not uncommon in music. Due to the fact that returns to tonics sometimes emerge as something achieved (rather than just retrieved) by being signalled by rhetorical means, there may after all be a true sense of circularity in some consummated motions around the circle of fifths, a circularity that collapses enharmonic differences – at least to listeners having absolute pitch and perhaps to others as well.

Turning to Schubert's *Moment musical*, some possessors of absolute pitch might hear the sonority starting the development as a root-position E⁷ chord, rather than understanding it according to the preceding context as an A \flat -minor six-four chord with double suspensions. If so, they are more disposed than other listeners to entertain an association back to the beginning of the development when hearing the third-inversion E⁷ chords in the recapitulation.

These intriguing matters cannot be disentangled here, but another peculiarity of tonal space should be discussed since it is immediately relevant for Schubert's *Moment musical*. C-major and F \flat major (E major) surround A \flat major as super- and submediants in a symmetric way, and notwithstanding their considerable four-fifths distances from the tonic, they do not appear as very remote.⁵³ But if you consider F minor and A major, the non-realized and eventually-realized auxiliary tonics of these applied dominants, the symmetry breaks down.

F-minor chords, only three fifths away from A \flat major, turn up a few times in the piece, but they are never tonicized and they never appear in root position. Having two notes in common with the A \flat -major tonic chord and exhibiting also a minor-third root relationship with it, F-minor chords are quite at home in A \flat major. In other words, the relative minor cannot emerge as much of a threat to the stability of the tonic – or upset a protagonist's equanimity. The A-major (B \flat major) chord does not turn up in the deceptive modulation in the development, but it certainly does so in the consummate modulation making up the culmination of the piece. A major is (at least) five fifths apart

53 We no doubt also apprehend chord affinities in terms of third relationships and shared chord notes, and Temperley does not claim that the line of fifths alone explains all aspects of key relationships or modulation paths.

from the A \flat -minor tonic, and the A-major chord does not share any notes with the A \flat -major chord since it exhibits an alien, minor-second root relationship. No wonder, then, that it sounds very remote and may be used to suggest a radical liberation from a culturally preordained way of being.

On gay subjectivity in Schubert: Brett and McClary

Three further studies will be brought up since they deal with Schubert's music and capitalize on his presumed sexual orientation in order to arrive at a hermeneutic understanding of his works. Two of them will be presented and discussed in this section in order to find out whether they support, complement, or disagree with the two interpretations of the *Moment musical* so far accounted for.

Philip Brett has pursued the quest for a homoerotic content in Schubert's works by describing the music from the performers' point of view – an original and quite interesting approach.⁵⁴

The musicians' ideas of what happens in a piece of music, and of what message it may contain, are largely neglected, and yet they amount to a necessary complement to analysis in current sense, based on what you hear – or sometimes only on what you see. Furthermore, it seems that the performer's perspective is a vantage point as far as understanding is concerned. The musician must not only carry out with his/her own body what the score demands, he/she is also obliged to find, identify with, and speak convincingly for the *persona* embodied in the music, the *persona* entrusted to him/her by the music.

As Suzanne Cusick has formulated it: when playing, the music is the top partner in the intercourse, but a top who is very sensitive to initiatives from the bottom.⁵⁵ Turning to Brett, he quite correctly observes that there is perhaps not any more intimate way of making music than by playing *à quatre mains* – the two pianists share the same instrument like “two

54 Philip Brett, “Piano Four Hands: Schubert and the Performance of Gay Male Desire”, *19th Century Music* 21(1997/98)2, 149–176

55 Suzanne Cusick, “On a Lesbian Relationship with Music. A Serious Effort Not to Think Straight”, *Queering the Pitch*, pp. 67–84 (ed. Philip Brett, Elizabeth Wood, and Gary C. Thomas, New York/London 1994)

coachmen on the same carriage” as Thomas Tranströmer puts it in his poem *Schubertiana*, alluding to the F-minor Fantasy. (It might be added that when being two at a piano, the top lets the bottom take over the right pedal, arguably the most erotic gadget of the piano.)

Using analysis in current sense Brett devises a hermeneutic narrative of the slow, A \flat -major movement of the Sonata (*Grand Duo*) D. 812. Of particular interest in the present context is the frantic and dissonant outburst turning up, quite unmediated and after a moment of silence, just before the end. As the note F eventually falls to F \flat , then written as E \flat , the harmony changes from D \flat major (m. 223) over D \flat minor (m. 233) to A major (m. 234). This deviation into A major is soon over, however, when F \flat is re-introduced, and when the E 7 chord slips back into an A \flat -major six-four chord (mm. 237–241).

Apparently, the coda of the *Andante* movement in D. 812 matches essential traits in the *Moment musical* D. 780 and, due to the similarities and differences involved, it seems to give some support for both the “promissory” and “promising” interpretations. Generally, the drift from A \flat major towards “Neapolitan” A-major territory in the coda of D. 812 parallels the harmonic events at the end of the *Moment musical*. The path chosen in D. 812 to arrive at A major is unmistakably associated with pain and distress, just as Cone wants us to understand the consequent of the recapitulation of D. 780. On the other hand, in contrast to the powerful, *sharpening* voice leading of the consequent in D. 780, letting the A-major temporary tonic issue seamlessly out of its A \flat -major origin via the E-major applied dominant, the *flattening* path in D. 812 is very discontinuous and dramatic, featuring several abrupt, exclamatory gestures suggestive of an intrusion of frightening external forces. But it should be observed that just as in D. 780 the very arrival at A major in D. 812 is associated with a release of tension; in mm. 234–236 the music suddenly becomes calm and soothing, although perhaps somewhat brooding.

Whether coincidental or intentional, it is furthermore a striking fact that the converging motion towards the E 7 chord in mm. 234–235 of the *Andante* is a true retrograde counterpart to what happens in the *Moment musical* when the third-inversion E 7 chord diverges into the root-position A-major chord. Whatever hermeneutic content we may find when it comes to Schubert’s last-moment detours to “Neapolitan” territory, he seems to have done the trick twice (at least).

Susan McClary has ventured to trace a possible equivalent of gay consciousness in her analysis of the E-major second movement of the “Unfinished” Symphony.⁵⁶

Putting her observations in a nutshell, the current roles within the sonata form are exchanged in this movement. The first theme, featuring a vagrant tonality and standing for a “flexible” and “porous ego”, is contrasted with an intruding material that, “stomping between tonic and dominant”, heroically exhibits its “cadential decisiveness”. The second theme “remains stuck” in its tonal position, like being in “a kind of prison from which subjectivity cannot escape”, until “the motive splits into two *personae* that interact and together reach ravishing cadential unions”, thus abandoning the “rigid key identity” of this material. (pp. 215–216)

In addition, McClary pays particular attention to mediant relationships. “Providing the key to transcendence in this movement”, the note G \sharp /A \flat is “generated almost as though in a dream” already in the French-horn E–F \sharp –G \sharp melody of the first three bars, and then it reappears as a “magical pivot between E and A \flat major near the end”. (pp. 216, 223)

The opposition between vagrant and fixed tonal characteristics – often taken as signifying femininity and masculinity, respectively – may perhaps (given the smaller format of the *Moment musical*) have a counterpart within the antecedent and consequent in the exposition. The tonally open quality of the initial pairs of two-bar phrases makes for a contrast to the solid tonal anchoring of the following four-bar phrases issuing into the dominant and tonic, respectively. Adopting McClary's polarities, the exposition may represent irresolute gay subjectivity being suppressed by straight conventions.⁵⁷

56 Susan McClary, “Constructions of Subjectivity in Schubert's Music” in *Queering the Pitch* (Philip Brett, Elizabeth Wood, and Gary C. Thomas (eds.), New York/London 1994, pp. 205–233. In addition to her analysis, McClary reports on the indignation within the musicological community that was stirred up by Solomon's article, and she offers valuable and sensible suggestions as to what music criticism might gain from acknowledging the possibility of gendered representations in music.

57 As will be apparent in a later section, this shift in character can be exploited to support another, entirely different – or perhaps closely related – extra-musical narrative.

Like the symphony movement, the *Moment musical* also offers its imprisoned *persona* an escape in the form of “ravishing cadential unions” (mm. 34–39).⁵⁸ It is furthermore of interest to notice that the symphony movement also brings a deviation into a mediant realm – in this case, however, the temporary refuge is A \flat major, the *supermediant* of the E-major tonic. Whether this amounts to an important difference in terms of hermeneutic content is hard to tell; moreover, excursions into third-related keys are quite common not only in Schubert’s output but occur frequently in Romantic music. Hence, one should be wary not to over-interpret such observations. A common stylistic feature (albeit a feature introducing a contrast to the prevailing tonic/dominant regime) cannot unthinkingly be taken as a sign of gay subjectivity on part of the musical *persona* – or of the composer. These matters would of course emerge in a different light if it could be empirically established that there is in fact among music listeners in our music culture an associative link between shifts to mediants and gay desire/subjectivity.

The pervading figure: Kramer

Two competing extra-musical readings of the *Moment musical* have so far been presented: Cone’s interpretation dealing with “vice” and its “marks”, and my own keeping to the “vice”. Are there any further interpretations of this kind? Yes, it appears that there is at least one, Lawrence Kramer’s reading, relying on the “marks” to find the extra-musical content of the music.⁵⁹

Kramer identifies a harmonic/melodic figure that pervades the entire piece, including its Trio: the seminal motif and its derivatives; cf. Exs. 1 and 8. “The figure’s core is a prepared appoggiatura: consonant on the upbeat, the repeated note becomes dissonant on the downbeat – something that goes bad. In other cases the ‘preparation’ is itself dissonant, as if the upbeat had

58 The idea that these duet-like bars might be heard as a union, suggests that there may be a hermeneutic reading of the *Moment musical* in terms of polyphony; such an interpretation will be advanced in due time.

59 “Hermeneutics and Musical History. A Primer without Rules, an Exercise with Schubert” makes up the first chapter in Lawrence Kramer’s book *Musical Meaning. Toward a Critical History*, University of California Press 2002.

gone bad as well. In every case, the long note is harmonized as a poignant dissonance; in nearly all cases it resolves to an unstable or transitional sonority" (p. 21) The emotional content of this figure is also described: "the effect lies somewhere between pained resignation and resentful helplessness: a diffuse sense of being beset". (p. 21)

There is also an ominous note in Kramer's reading. The note in question is c^2 , and it is first introduced at the start of the development where it stands for a "deteriorating condition", i.e. the loss of the major tonic. "Presiding over the reiterations of the main figure", it is "harped on" for some time, until it is exchanged for its enharmonic equivalent b_4^1 in m. 29 – "a palpably illusory denial that the deterioration has already started". (p. 26) But even in the lyrical E-major part of the development the deterioration is never far away, and the "insidious hidden presence" of this persistent note becomes acute when in the consequent of the recapitulation c^2 "explicitly lowers to c^2 ", a descent that "inescapably" brings a close in the minor mode. (pp. 22, 24)

But some objections are due. Arguably against the grain the passage mm. 34–39 is described as "a less-than-idyllic counterstatement punctuated by harsh diminished-seventh chords". It takes quite ugly playing for this description to come true. And turning back to m. 29, why does the enharmonic redefinition of the crucial c^2 stand for a "palpably illusory denial"? Unless we accept to be ensnared in whatever-he-says-the-shrink-is-right logic, this change should be good news. Further on, the descent in the recapitulation does not "inescapably" make for "a close in the minor mode". Schubert's piece perhaps brings such a close, but it would have been quite possible to stay in A_b major.

Kramer requires that hermeneutic interpretations must be "culturally sensitive", and adheres to "a concept of potential or virtual meaning": the interpreter should venture to "say something consistent with what could have been said, whether or not it actually was".⁶⁰ (p. 20) Cone, on the

60 The spirit of musical hermeneutics is explained, or rather invoked, in quite inspired terms: "The trick is to align the interpreter's art of presupposition with the work of culture. [...] Proposing a meaning is the initiating gesture of an interpretation, not its result. The meaning proposed is actualized only by being

other hand, is said to base “his paraphrase on a historical (indeed medieval) concept of vice presented as if it were universal and on a recognition of syphilis as a physical pathology but not [...] as a cultural construction”. (pp. 20–21) Vice, including “the allegory of temptation and fall that goes with it”, is dismissed by Kramer as the content of Schubert’s piece, since “the music shows no trace of the religious rhetoric that might evoke the notion – standard in the discourse of syphilis – of a just return for sin”. (p. 26)

Kramer’s criticism of Cone’s interpretation is hard to concur with, and its function is apparently to make room for his own reading by exaggerating the difference between the two “exercises”. Simply put, Cone speaks of vice, not sin, and therefore he is not obliged to find any traces of “religious rhetoric” in Schubert’s piece.

But we have to deal for a while with murky matters: what was the “cultural construction” of temptation and syphilis at the start of the 19th century? Without denying that components of medieval thinking in terms of “just return for sin” were still afloat, it seems evident that the concept ‘temptation’ was applied beyond the religious sphere in Schubert’s times (as it does today), and that the idea of tempting things and actions predates “the allegory of temptation and fall” to be found in the Bible. While it is true that most people in Schubert’s Vienna were (to various extent and in various ways) Roman Catholics, they were not stupid, and it had not escaped them that some activities (vices perhaps, but not necessarily sins) had dire consequences.⁶¹ Nor were they ignorant of the fact that syphilis was a disease – in order to interfere with the “just return”, not very healing medications were sold – and a contagious disease at that;

dispersed through the discursive, figurative, expressive, and pragmatic activity of interpretation itself. The result is a bounded but open-ended process that affirms rather than negates the possibility of alternative meanings and elicits rather than abolishes active, positive forms of nonmeaning” (pp. 26, 28) It is harder to grasp (and stop quoting) this enthusiastic promotion talk than it is for feeble minds to embrace it.

61 We must be wary not to confuse “vice” and “sin”. ‘Vice’ is (was) not necessarily a religious category. Apart from which vices that are (were) considered to be sins, there are (were) certainly a number of habits of various kinds, some of which are (were) reprehensible because they are (were) detrimental to one’s

they knew the symptoms of syphilis and were aware about what had caused the affliction.

Thus, while Cone's idea of a "promissory note" must not necessarily be associated with any medieval notion of temptation and sin, his "promissory-note" reading is moralistic enough to warrant a hermeneutic account in terms of "vice" and its "marks", an account that seems to match the early 19th-century "social construction" of syphilis. Turning to Kramer, his referent is obviously the physical symptoms of syphilis – or perhaps the psychological predicament of someone who has contracted this disease. This is what his talk of an obsessive musical idea and of the constant reminders of the "marks" amounts to, and it scores low as a "cultural connotation" of Schubert's times considering the fact that these symptoms (and symptoms of fatal diseases in general) are much the same throughout the ages and certainly not socially constructed.

Kramer tells us very little about what syphilis as a "social construction" was like, so the question remains: how is it possible to critically assess the alleged connection between a certain musical pattern and a content (i.e. the social construction of syphilis in Schubert's times) that is almost vacuous? The vagueness of the referent opens up for several other diseases, serving just as well as "marks", diseases that like tuberculosis or caries were also capable of "besetting" people's minds.

Nevertheless, Kramer thinks that the character and frequent occurrences of the seminal motif (including its various transformations) match the cultural discourse on syphilis closely enough, and this warrants him to "hear this music as expressing a sense of suffocating paralysis from first to last". (p. 21) The "infamous figure" pervades the music from the exposition on: "As the source of infection, the A section of the Allegretto might even be said to illustrate a certain trope for the diseased body, tainting both the

health. Are (were) the habits of smoking tobacco, drinking alcohol, using drugs, and excessive eating sins or just vices? Evidently, there is (was) a scope for different opinions, even among Christians. This is not to deny the perennial great interest among religious (and other) people in sexual behaviour (especially that of their fellows) and the concomitant propensity for equating sexual appetite and sexual deviations (i.e. vices) with sin, a sin that will find you out – with or without the intervention of some supreme being in command of suitable diseases.

outer social world (the Trio) and its own inner core (the development) and thus growing inexorably worse (the recapitulation)”. (p. 22) Indeed, the insistence on the persistent note “may in this context seem like an act of courage or honesty”. (p. 26)

Apart from invoking the idea of “a certain trope”, isn’t all this a concession to the effect that the *Moment musical* à la Kramer is much more about pathology than social construction? “Paralysis”, “infection”, and “the diseased body” – doesn’t this talk come very close to saying that the referent of the music is a physical (or psychological) condition rather than a socially constructed, cultural discourse? At any rate, when comparing Kramer’s and Cone’s readings, the latter emerges as the better one since it brings a more sensitive and detailed account of the musical process than Kramer’s bad-getting-worse narrative.

When advancing the “promising-note” interpretation, the Trio was left out of account due to the decisive musical differences between the seminal motif and its offshoot in the Trio; moreover, there was no need for the Trio in the emerging hermeneutic scheme. As already pointed out, the similarity between the motifs may be sufficient for claiming that the work is motivically integrated, but the resemblance is not apparent or significant enough to support the overall description “suffocating paralysis from first to last” – at least if we require that hermeneutic interpretations (if they are not entirely based on notational symbolism and the like) should have a reasonable degree of immediacy as musical experiences. Particularly the fact that the initial motif of the Trio does not match Kramer’s own description of the structural properties and the human import of the “pervasive figure” cannot but affect his reading. If the similarity is remote and if the description does not fit, the pervading figure is not very pervasive.

But there is a more fundamental objection. Kramer’s reading is strongly predicated on the frequency of the “pervading” motif and its derivatives. It is admittedly heard a fair number of times in the main part of the piece, but considering the prevailing principles of Classical/Romantic composition – the iterative motivic machinery of well-wrought periodicity as well as the parsimonious ideal of making much out of little – this *Moment musical* is by no means exceptional. The fact that there are thousands of pieces just as obsessive in terms of recurring motifs as this one may seem irrelevant

to a dedicated hermeneutic “critic” deciphering a specific work, but if you are a sceptic it is hard to rid yourself of the suspicion that the basis for the analysis is arbitrary.⁶²

Kramer says: “My metaphor of infection, like Cone’s of vice, is a guess, but one prompted by the discourse on syphilis familiar to Schubert” (p. 22), and he also mentions that the *Moment musical* No. 6 was first published as *Pleintes d’un Troubadour*.⁶³ (p. 24) But if the widespread habit of repeating motifs over and over again is taken into account, the hermeneutic burden falls heavily back at the seminal motif itself. Notwithstanding Kramer’s extra-musical description of it, can its expressive qualities really bear the syphilis-as-social-construction, the “metaphor of infection” content imposed on it? How apparent, and how apt is Kramer’s extra-musical “trope”? No matter whether the pathologic or the socially constructed aspect of this disease is at the core of his interpretation, is the seminal phrase syphilitic enough?⁶⁴

Turning to statistics, is this motif perhaps a too common musical coin? Considering that it boils down to a consonant preparation, an accented dissonance, and a (not quite) consonant falling resolution, how rare is it in Schubert’s music, given the latitude for variance that goes with all artistic products? The problem of the expressive meaning of the seminal motif and its possible extra-musical *signifié* may perhaps be dealt with by means of empirical investigations – more on this later – whereas the question of its frequency in Schubert’s output (and elsewhere) must be answered by musicological statistics.

62 Just looking nearby, what about the Trio of *Moment musical* No. 4? There is certainly a “pervading figure” here as well – a quite conspicuous syncopated rhythm and a motion from consonance to dissonance (or to another chord) and back again over a pedal. What does this motif – and its quasi-inversion in the middle section, set in the flattened supermediant – mean? This Trio, “marked” by an almost total obsession by a certain “symptom”, must reasonably stand for a very late stage of syphilis. But, of course, this pervading figure does not sound like syphilis, no matter whether we think of the pathologic manifestations or the social discourse of this disease – or does it?

63 Was this title really Schubert’s idea, or is *Pleintes d’un Troubadour* just another “Moonlight”-title, just a fancy name invented by a publisher?

64 My reading has a similar problem, of course: is the seminal phrase gay enough?

Schubert's "fingerprint": Nettheim

Fortunately, it appears that information, highly pertinent for the question of the motif's frequency and also suggestive with respect to its meaning, is to be found in a thorough and multi-faceted study by Nigel Nettheim.⁶⁵

Nettheim's point of departure is Gustav Becking's "*Schlagfiguren*", i.e. spatio-temporal shapes or curves derived from the pulsating, "conducting" motions elicited in musically sensitive persons when listening to, imagining, or performing music. The motions are based on a comprehensive response to the musical structure, and the curves are claimed to be characteristic of individual composers, emanating from their personalities and pervading their works despite differences as to metre and tempo. In performance, these "pulses" correspond to specific and finely adjusted patterns of duration, emphasis, and articulation, and they are essential for an optimal rendering of the music – if a wrong curve is applied to a piece of music, the performance will sound inauthentic. These are bold claims and they have aroused both fascination and scepticism.⁶⁶

65 Nigel Nettheim, "A Schubert Fingerprint related to the theory of Metre, Tempo and the Becking Curve", *Systematische Musikwissenschaft* 6(1998) 4, 363–413

66 Gustav Becking, *Der musikalische Rhythmus als Erkenntnisquelle*, Augsburg 1928; similar ideas turn up in Alexander Truslit, *Gestaltung und Bewegung in der Musik*, Berlin 1938, and much later in the work of Manfred Clynes; cf. for instance Manfred Clynes & Janice Walker, "Neurobiologic Functions of Rhythm, Time, and Pulse in Music" (pp. 171–216 in Clynes, ed., *Music, Mind, and Brain*, New York 1982); Manfred Clynes, "Expressive Microstructure in Music, Linked to Living Qualities" (pp. 76–186 in Johan Sundberg, ed., *Studies of Music Performance*, Stockholm 1983), and Manfred Clynes, "What Can a Musician Learn about Music Performance from Newly Discovered Microstructure Principles?" (pp. 201–233 in Alf Gabrielsson, ed., *Action and Perception in Rhythm and Music*, Stockholm 1987). Becking's investigations are presented in English in Nigel Nettheim, "How Musical Rhythm Reveals Human Attitudes: Gustav Becking's Theory", *International Review of the Aesthetics and Sociology of Music* 27(1996), 101–122, whereas those of Truslit are made available in English in Bruno Repp, "Music as motion: a synopsis of Alexander Truslit's (1938) 'Gestaltung und Bewegung in der Musik'", *Psychology of Music* 21(1993) 1, 48–72. For a presentation and critical discussion of the ideas of Becking, Truslit, and Clynes, cf. Patrick Shove & Bruno Repp, "Musical motion and performance: theoretical and empirical perspectives", pp. 55–83 in

This is not the place for a detailed account of Becking's ideas or even of Nettheim's investigations, focussing on the works of Schubert. Using his own (reversed) Becking-curve for Schubert as a point of departure, Nettheim maps out how this pulse form relates to the notated metre as well as to the tempo of the music – typically, the pulse has a duration of 1–2 seconds. In order to arrive at a detailed description of the structural correlates of the curve, he then proceeds with analyses of passages that seem to embody Schubert's pulse shape in convincing ways, the ultimate aim being to establish the composer's "fingerprint".⁶⁷ In addition to the description of the fingerprint, Nettheim presents a list of passages culled from Schubert's entire output, passages exemplifying the composer's specific pulse form as specified by the fingerprint, and suggesting Schubert's individual signature as a composer – and perhaps (by extension) his personality. The list features 150 passages, held together by fairly strict structural constraints (and yet allowing of flexible compositional realizations) and exhibiting a perceptible family resemblance.

Among the items of the list there is the seminal phrase of *Moment musical* No. 6. In fact, Nettheim uses this motif as an introductory prototype when presenting Schubert's fingerprint.

What are the conclusions of Nettheim's study in the present context? The list suggests that, even if the seminal motif is a unique musical idea, there are plenty of similar motifs in other Schubert works – and some of these ideas may even be obsessively repeated. The fingerprint motifs (and/or their use in a particular composition) may or may not have some affinity with syphilis symptoms (or for that matter with how syphilis was "socially constructed" in Schubert's times), but the ubiquity of motifs related to this pulse form in Schubert's output means that picking out exactly *Moment musical* No. 6 to represent syphilis affliction cannot but seem arbitrary. On the other hand, the fact that the seminal motif of this very piece is selected by Nettheim as a specimen of a "fingerprint", i.e. as a formulation that might possibly be uniquely characteristic of Schubert as a composer and

John Rink, ed., *The Practice of Performance. Studies in Musical Interpretation*, Cambridge 1995.

67 Nettheim does not preclude that there are further structural "fingerprints" corresponding to the Schubert curve.

perhaps as a man, may indicate that Kramer, Cone, and I have stumbled upon something important.⁶⁸

But what is signified by the “fingerprint” heard so often in the main part of the *Moment musical*, and occurring in slightly different guises elsewhere in Schubert’s output? If we have just “vice” and “marks” to choose from – a very limited selection of referents, indeed – it seems more reasonable to settle on the former. After all, Schubert did not suffer from syphilis throughout his creative life, but he might very well have had a gay identity from quite early on, and certainly not only when composing *Moment musical* No. 6.

However, if we are to advance beyond vague probabilities, we must find out what extra-musical associations the “fingerprint” motifs actually bring. It would be possible to study a selection of Nettheim’s 150 specimens in order to establish whether they are associated with any extra-musical referents, perhaps even with notions related to gay subjectivity. Obviously, the songs offer the best prospects for a productive study of Schubert’s signification habits. The texts sung along with the fingerprint motifs might give clues to the extra-musical connotations involved, and so might perhaps also the entire song texts. Studying the meaning of the fingerprints in his instrumental pieces, on the other hand, would no doubt be more difficult. Turning particularly to *Moment musical* No. 6, a continued quest for the extra-musical meaning of its fingerprint motif might perhaps be pursued in empirical investigations. What does the seminal motif (and its various derivatives, including the one starting the Trio) in fact suggest to listeners of various kinds?⁶⁹

Some straight exercises

Disregarding Kramer’s interpretation, operating on a low level of specificity both in terms of the musical process and the cultural aspect of the disgraceful disease, it seems that (along partly different musical routes and

68 It should be pointed out that the beginning the Trio, bringing a variant of Kramer’s “pervading figure”, is by rights not included among the 150 fingerprint motifs in Nettheim’s list.

69 The problems associated with such research will be discussed in a section to come.

eventually arriving at quite different conclusions) Cone and I have made Schubert come out of his A \flat -major closet. But in a way these feats are not very impressive since both of us have been cheating – being guided or inspired by biographical information is like playing cards with an ace up your sleeve. Perhaps one should demand interpretations without crutches and ask for hermeneutic meanings emerging out of the music as such to attentive listeners. Or – if this *Moment musical* does have an inherent sense of gay subjectivity – perhaps only to those who are not only attentive but also properly attuned?

The heart of the matter is that extra-musical meanings grounded in an affinity, however faint, between sign and referent are more satisfactory (but of course less patent) than meanings established in virtue of contingent circumstances that we happen to know about. The question to be asked is therefore a sceptical one: apart from Franz Peter Schubert, how gay is *Moment musical* No. 6?⁷⁰ And there is of course also an ultimate question: is this piece gay at all?

In a first round these questions bring us back to a promissory note repeatedly sounded in this text. I have promised further alternative readings and two gendered stories will now be delivered, although in a less detailed way than before.

There is a pervading trait in the piece that has scarcely been used in the interpretations discussed so far, namely the division of the music into contrasting units, characterized mainly by their different, antithetic rhythms. The first kind of material is immediately presented by the seminal motif, and it is always exposed in paired two-bar phrases (mm. 1–2, 3–4, 9–10, 11–12, 17–18, 19–20, 25–26, 27–28, 54–55, 56–57, 62–63, and 64–65). This “fingerprint” unit consists of an upbeat chord, a suspension chord prolonged to fill an entire bar, and a seemingly delayed and hence relatively accented, more or less stable resolution chord. The other type of material

70 Or take him into account. However gay he might have been, writing music expressive of gay subjectivity was hardly an obligation for him, and we cannot reasonably require that his music must necessarily exhibit traces of gay subjectivity. No man, however gay, can be reduced to a simple formula, and one should not belittle people's creativity by denying them the ability to surpass their given conditions, to express what goes on in other minds than their own.

is more variable, featuring dissonance/consonance alternation and quarter-note-plus-half-note iambic rhythms; these units comprise four bars or more, and they issue into a suspension/resolution figure, akin to that of the first material. Passages of this sort are to be found in mm. 5–8, 13–16, 21–24, 29–39, 40–43, 44–47, 48–53, and 58–61. (Bars 21, 29, and 31 with their prominent second beat and syncopated rhythm may be understood as variants of this material.)

Despite their even-quarter-note rhythm, the two final units (mm. 66–70 and 71–77) can be included in the second type. According to the pattern of regular alternation between the two materials, positively established at this late stage of the piece, a unit featuring the second material is due, and the final dotted-half-note suspension discloses the kinship. It should be observed that the rhythm of the first-material bars 62 and 64 seems to be influenced by the rhythmic pattern characteristic of the second material, and that the strongly implicative harmony and the tight linear connections in mm. 64–65 make for continuity despite the rests. The consequent of the recapitulation emerges as an extended utterance that overcomes the clear separation between the materials prevailing so far in the piece.

Moment musical No. 6 can be likened to a dialogue or to a sequence of actions with two persons involved, and it is furthermore proposed that the first material can be associated with a woman while the second, contrasting material corresponds to a man. The description of the phrase structure of the piece as a kind of dialogue or sequence of actions is hardly very controversial, but what about the association between gender and the musical character of the phrases?

Schubert's two materials have been described in purely musical terms, but what do I (or you) know about gender characteristics? And how did people think of gender differences in early 19th-century Vienna, and what were Schubert's views? The embarrassing fact of the matter is that I have relied heavily on stereotyped notions – or on current “social constructions”, which amounts to the same thing but sounds better – on ideas that we all have access to and tend to use whenever we do not wish to be eccentric, and for which we simply assume that there is some evidence. When it comes to communication within a certain culture, the point is not whether such generalizations are true, i.e. based on empirical research or at least on reasonable arguments, but whether they are widely shared. Whether we

like it or not, prejudice makes for understanding, not of the subject matter concerned, but between people.

Thus, when proposing this interpretation in terms of gender, I have just chosen the mainstream idea, which means that, when it comes to everyday communication, the usability of this generalization as to gender characteristics is likely to extend far beyond the segment of white, heterosexual men, allegedly responsible for so many repressing fabrications. The short seminal phrase in mm. 1–2 with its lingering rhythm and mild dissonances, with its falling gesture towards resolution at a vaguely subdominant sonority craving no specific continuation – isn't it, between mammals, patently feminine?⁷¹ And certainly there is a masculine touch to the longer phrase in mm. 5–8, featuring full chords, steady rhythmic strides, and a determined motion towards the dominant which is arrived at with a rising, forward-heading thrust? If these descriptions of the two materials do not make up convincing arguments, you can easily support the proposed gendered reading at the keyboard, adapting the rhythm and the articulation so as to get supporting effects.

The parts have been cast – once, but not for all – and it just remains to watch the drama. Her shy presence releases a quite enthusiastic reaction, but something in his manners must have been displeasing, for in mm. 11–12 she closes with a rejecting, pre-emptive *forte* gesture that puts him off. And he responds in a much less assured way; indeed, mm. 13–16 sound like an apologizing retreat to a level of submissive expectation. The rhythm is nominally the same, but there is a clear difference in emotional quality between this mild four-bar phrase and the previous, chest-note go-getting attitude in mm. 5–8.

After the double bar there is a tone of pity, reconciliation, warmth, and compliance in her manners, and he is not slow to adapt his approach, which is not entirely free of syncopated aspirations.⁷² And the second time

71 Some people – for instance hardened white-men heterosexuals like Charles Ives – might even say that the first material is effeminate; after all, what can you expect from a composer like Schubert who was obviously a sissy? This is a complication to which we will return; meanwhile we cannot but wonder whether Ives had something closeted to conceal.

72 The pattern of exchange must of course not necessarily be uniformly applied throughout the piece according to the pattern in the exposition. When starting

he is able to persuade her; she gives in to him, and the amorous episode closes twice with a duet. But when he tries to drag her further away into the sharp-key domain, she apparently suspects mischief and slips away. After the re-modulation in mm. 41–42 he makes two further, more intense attempts to seduce her, but she resists.

The recapitulation starts and everything returns to *status quo*. But in the consequent he violently intrudes himself on her by taking over her phrases, and a murderous rape follows. Ruthless, pelvic E⁷-pounding leads to a blazing A-major moment of release and then to feelings of void – but so great is his rut that he immediately makes a further, less vigorous and less rewarding, attack.

Is the gruesome, but politically correct, final event of this interpretation, inspired by the new musicology at its widely cited best, not quite to your taste?⁷³ Well, you can easily change it. Returning to the “facts” of musical structure and expression, does he really demolish and take over her phrases? Not necessarily, since mm. 62–65 can also be played and heard in a way suggesting that she voluntarily complies with, or invites him: the inner-voice rise from e^{b1} to f^{b1} may indicate a favourable change in her attitude, and the masculine rhythm is imitated by the added eighth-note, which at the same time suggests a sensual chromatic inflection. And her f^{b1} and c^{b2} prepare tonally for the following expansive sharp-key phrase, which according to this reading of the consequent emerges as a happy sexual intercourse between consenting and dedicated equals.

And while we are about changing things, couldn't the basic association between musical material and gender be construed the other way around? Indeed it can, because there is also a masculine potential inherent in the first material and a touch of femininity in the second. All you have to do if you want your listeners to recast the dialogue and to change the extra-musical

the development, for instance, the activity is located to a lower register, and hence it may seem natural to allot the two-bar phrases to the male protagonist, adopting her attitude from mm. 1–2, whereas the following four-bar phrase, featuring an inviting high-register melody, may appear to belong to the female one.

73 Never mind Schubert, just imagine that Beethoven wrote this *Moment musical* – we are all by now aware of what outrageous structures he was capable of, unawares composing within an established tradition of tonal contempt for the Other.

idea of what happens in the piece, is to use the current gender stereotypes differently and to adjust the dynamic and rhythmic properties of your playing accordingly. Suggest first a weighty, slightly pompous, masculine way of being – give due emphasis also to the delayed, accented resolutions in mm. 2 and 4 – and then form the four-bar phrase so as to express elegant, feminine manners.

The readers are invited to make up the details of a “man-then-woman” alternative to the “woman-then-man” story just presented. Try something with masculine sense of duty being enticed and eventually overcome by the feminine art of seduction – a worn-out plot, once politically correct and yet still marketable.

It is of course most unsatisfactory for all friends of order that we cannot tell for certain whether someone is raped or if love is made with full consent, and even more disturbing that we do not know for sure which of the two musical protagonists that is the man and the woman.⁷⁴ And it seems that no amount of close reading can do away with these ambiguities. The interpretation is in the beholder's ears – and in the pianist's hands.

What else does this Schubert piece have that can be tapped for hermeneutic purposes? Well, in much music there is also another kind of dialogue – a dialogue between voices, successive or simultaneous – and it seems that a number of salient voice-leading situations in the *Moment musical* can be pieced together to form a story.

Four-part writing predominates, but there are often not more than three, sometimes only two, independent and significant voices active at the same time. For the present purposes, three voices are sufficient, and they will be called soprano (S), tenor (T), and bass (B). The account to follow is hardly controversial in musical terms – re-arrange the music for a string trio or as an opera scene with three characters on the stage. But since in a few places other strands might have been selected, and since other interpretations of the chosen voice-leading situations are possible, you may devise other, more or less different, structural narratives of the same kind as the one to be proposed. The signification mechanisms resorted to is quite simple (but not

74 Considering the fact that this *Moment musical* is composed by Schubert, you are free to recast it so as to feature two men with different personalities.

unequivocal): there is a long tradition that “naturally” associates parallel motions with unity and mutual understanding (or with keeping distance), converging motions with meeting and reconciliation (or with confrontation), and diverging motions with opposition and disagreement (or with a sense of plenitude).

In mm. 1–4, there are two ways to apprehend the situation: either S and T keep away from the rising B by moving to a higher register, or S makes two falling steps to meet B. Turning to mm. 5–8, B strengthens its authority by proceeding in octaves; S and T, lining up in octaves as well, first follow B downwards, and then uphold their independence by a rising cadence. In the consequent, the deep-register octaves of B break in unexpectedly and forcefully already in the second phrase – as if to preclude what happened in the antecedent – inducing S to yield completely to the falling half-step D \flat -C, and inhibiting T’s motion.

The first four bars of the development are characterized by the inactive S, and by resolving motions in T and B that seem to indicate that an internal agreement is reached. With little T interference, B is then allowed to meet S with a rising motion when the latter returns downwards from its excursion up to \flat^2 , a note just proposed by T when rising to \flat^1 . The consequent takes a radically different way: as if precluding an outcome akin to that of the antecedent, B keeps to the same note while T is allowed to rise chromatically from e^1 to \sharp^1 , prepared to meet with and then engage in a full and unanimous parallel-thirds cadence together with S, returning from e^2 , – again a note introduced by T. Apparently, T has seized the initiative, and S and T twice rejoice their union with a duet while B passively holds on to the new tonic. (Alternatively, the rising left-hand motions approaching the parallel-sixths descents in the right hand might be heard as belonging to B and as expressing lame protests or attempts to join the happy upper S/T voices.) In the next four-bar phrase, all three protagonists seem to agree that a return to the initial tonic is due, but this impression is illusory: T aims for yet another tonic but this motion is cancelled, and S needs one bar of suspense to accommodate. An overall rising tendency characterizes the next phrase, but S and T run ahead of B. Apart from the attempt at a further ascent in S, the *forte* exclamation is unanimous, but it issues into a discord that is resolved by the dragging, chromatic retreat of S.

As three-partite forms bid, and life sometimes affords, everything starts all over again – but the consequent of the recapitulation brings a decisive difference. Approaching the two upper voices, B unexpectedly intrudes with *forte* octaves already in the first phrase, an imperative takeover gesture that apparently brings T out of track – this voice cannot induce itself to rise more than a minor second, reaching unawares the hot spot f^1 . This turn of events is repeated as if B wanted to overcome all resistance, and then its further ascent to D_4 compels S to start from b_4^1 , not c^2 . It seems as if the two outer protagonists have taken over the E-major territory, held in prospect by the note f^1 and being once so rewarding for T in the development. While T in vain stutters its e^1 , B and S indulge in a well co-ordinated and culminating diverging/converging motion that attains A major (once the goal of T) and eventually resolves the discord of the sixth b^1/D_4 into the perfect consonance of the fifth b^1/E_b , a return to the A_b -major tonality that T cannot but confirm by falling back to c^1 . (Another, but perhaps less convincing, option is to understand the shadowing lower line of the right-hand parallel thirds as belonging to T; this would change the outcome of the story from depicting the final suppression of T and its aspirations in favour of B to representing a three-voice happy end.)

An intra-musical narrative has again taken form, but what does it mean in extra-musical terms? The gender problem can be solved quite easily – the soprano belongs to a woman, of course, while the bass must be allotted to a man.⁷⁵ Unfortunately, the *Who's Who in Music* does not give any reliable clue for identifying the middle voice of this *ménage-à-trois*, but depending on your preferences as a peeping Tom, you might choose either a T(enor) man or an A(lto) woman, and get two different stories. The reader is entrusted to use the structural-expressive descriptions suggested above to make up his/her own dime novel featuring promiscuous protagonists of flesh and blood.

Apparently, this *Moment musical* allows of straight readings as well. Indeed, these two additional interpretations are straightforward in a way that the

75 This “polyphonic” interpretation may seem obvious and attractive especially to people who are fond of vocal music, and are prepared to imagine the *Moment musical* as being sung by (say) a small vocal ensemble.

“promissory” and “promising” gay readings were not. The two heterosexual narratives are based on patent musical features – antithetic phrase structure and salient voice-leading situations, respectively – and the referents – grounded in widely spread gender notions and natural voice registers, respectively – are quite self-evident. The flat, sequential organization of these narratives and the simple (or superficial) hermeneutic interpretations form a contrast to the sophisticated sub-surface associative mechanisms of the two gay readings with their conjectural extra-musical meanings in need of biographical support. Otherwise put: the straight readings follow the music as a running hermeneutic commentary and represent analytic routine, while the gay interpretations, searching for hidden things, tickle the analyst’s conceitedness.

One might find it either exhilarating or troublesome that Schubert’s short piece is so wide open for hermeneutic access; it is indeed a pay dirt having something to offer all of us. It gives the hypochondriac a stimulating thrill, and it may boost the spirits of moralists by demonstrating the deterring effects of vice. It provides an example that may inspire gay people to come out of the closet, but on the other hand it can also fuel the resentment of straight homophobes. There is something in it that titillates the low taste of pornography addicts, and that may even give rapists a kick. Being useful when constructing models of gay identity, it serves the feminist agenda equally well as yet another instance of culturally mediated images of male oppression. And yet we have only probed into the below-the-belt regions of musical signification.

Having this variability of possible gendered readings in mind, it appears that we have arrived at a provisional answer to the question that motivated this exercise producing alternative interpretations. The *Moment musical* No. 6 cannot be a gay piece – or rather, it cannot be exclusively gay – since it allows of at least two heterosexual extra-musical readings as well. So again, apart from Franz Peter Schubert, how gay is this *Moment musical*? Are there any passages or details in it that are gay enough to make a listener, ignorant of the composer and his presumably deviant way of living, suspect this particular content? Indeed, is it gay at all?

These questions call for another investigation, involving empirical research on listening responses. For granted that we do not demand too much – and that we can stand gems of the piano literature being touched

by the coarse hands of behavioural science – listening tests might perhaps shed some light even on matters of musical signification.

Performance and hermeneutic interpretation

But before turning to hermeneutic interpretation as an empirical problem, the interpretation undertaken at the keyboard must be considered. After all, Schubert's *Moment musical* is not a score generously offering opportunities for construing extra-musical readings, but an auditory experience whose properties and concomitant hermeneutic meanings are substantially influenced by how the music is played.

When turning to the expressive potential of this piece as performed, we will specify as far as possible the relationship between means and conveyed content. The purpose is to show how the various hermeneutic readings proposed and discussed in this essay crucially depend on particular ways of rendering the music, and to demonstrate how a pianist might support one reading rather than another.⁷⁶ In this context, “support” means playing in a way that is compatible with a certain content or – negatively – at least not playing in ways that do not match a certain content. Needless to say, “supporting” a specific extra-musical content does not guarantee that it is conveyed to the listeners. However focussed the intentions of the pianist may be, and however exact his/her execution, musical expression cannot attain such reliability and precision when it comes to the mediation of extra-musical messages.

Turning from principles to particularities, what can a pianist do in order to make Cone's “promissory-note” reading work?

A touch of “restrained, carefully measured satisfactions” can no doubt be delivered in order to supply the necessary background for making the *forte* outburst in mm. 11–12 stand out as a shift in emotional attitude. Fairly light, inconspicuous upbeats, soft dissonances, and non-stressed resolutions

76 This section has benefited from my talks with Professor Hans Pålsson. Apart from enlarging the “empirical” basis from one person to two – a small step towards representativity – it has been most valuable to sift problems of execution and musical content with a friend having a vast experience both as an artist and a teacher.

will make the two-bar phrases suggestive of the appropriate mood, and the four-bar phrases can then be played with a gentle swing so as to comply with this character of calm plenitude. The suitable $D\flat$ -major quality of the seminal phrase will emerge if you give some prominence to the dissonant c^2 -about-to-rise-to- $d\flat^2$ top note of the suspension chord – or to all three right-hand notes – just as in the next phrase the inherent $A\flat$ -major quality will come to the fore if you bring out the dissonant f^2 -before- $e\flat^2$ in m. 3 – or the entire right-hand chord, especially the notes played by the thumb and index finger. If rendered in any of these ways, mm. 1–4 will emerge as two separate, major-quality phrases, of which the top voice of the second phrase imitates that of the first.

As Cone points out, a demonstrative *forte* contrast is essential if you want to suggest a link between the outburst in mm. 11–12 and the distant F-minor *forte* passage closing the development section.⁷⁷ But the *forte* phrase in the exposition, issuing into a C-major chord, must also sound as an utterance that in an ominous way demands, but is denied, an immediate F-minor auxiliary-tonic continuation. But this effect is hard to achieve since such a continuation lacks support in the harmonic and formal layout of the exposition at large, and since the *forte* phrase is obviously a deviation. The latter fact that cannot but direct the listener's attention backwards, either to the preceding seminal phrase (mm. 9–10) or to the corresponding phrase in the antecedent (mm. 3–4), i.e. to phrases that the *forte* outburst may seem to protest against or intensify, respectively. All you can do, then, is to play this phrase quite loud and in a way that separates it from its immediate context, and that does not sound agitated or angry, but fatal. Stressing the “promissory” top note $e\flat^2$ somewhat more than is becoming for an ordinary resolution might contribute to the effect that Cone's reading demands, as might a somewhat slower tempo and a slightly prolonged moment of silence before you proceed.

⁷⁷ For purely musical reasons the former phrase must be played *forte*, otherwise the harmonic deviation will not be convincing. A pianist not playing this phrase appreciably louder than the preceding one would seem to miss an important point; indeed, any competent musician would play this phrase louder, even if the dynamic indication were missing. But in order to be hermeneutically significant, the *forte* contrast must be excessive.

It turns out that the burden to convey Cone's *forte-to-forte* link between exposition and development is transferred to the F-minor outburst in m. 48, which must appear to pick up a distant impulse whose prospective long-range harmonic implication (if any) the listener is not likely to have been aware of – in other words, the association between the two passages is bound to be altogether retrospective. To attain this end there is one thing that the pianist has to do and another, related thing that he/she must refrain from doing. It is crucial that the *forte* is massive and quite sudden; consequently, there must not be any mediating *crescendo* during the preceding phrase, or during the entire passage starting in m. 40. But since the *forte* phrase is actually the third, most high-pitched phrase in a rising sequence, it is very hard to counteract the impression that the F-minor outburst is the final stage of an extended culmination. If the F-minor *forte* phrase seems to grow out of what has just been heard, it cannot very well also emerge as a late effect following from a remote harmonic cause.⁷⁸

The re-modulation in mm. 40–43 calls for an intervention from the pianist if it is to suggest the temptation-resisted content that Cone presupposes. To the listener the return to the tonic domain is manifest only when the E \flat -major suspension chord turns up, whereas the pianist, forewarned by the enharmonic re-notation of E major as F \flat major in m. 40, can – and is encouraged to – anticipate that this modulation is about to happen. Obviously, the “temptation” is A major, and the frustrated motion leading to it appears in the alto voice, eventually adding the crucial seventh d \flat to the F \flat /E-major chord, a note that heads for but does not arrive at the A-major third c \sharp . A sudden deceptive turn of events after the bar-line would not amount to much of a “resistance”. Resisting something takes some time and is associated with a deliberate and noticeable effort, and therefore it seems that the (otherwise merely surprising) switch back to the main A \flat -major tonality must be prepared – along with bringing out the falling alto motion implying A major. The sense of resistance may be underscored by concurrently giving a gradually increasing emphasis to the soprano a \flat 's

78 Schubert's dynamic marks in this passage may appear somewhat contradictory: there is a *crescendo* in m. 44 and a *piano* in m. 46 – the former indication obstructs while the latter one supports the sudden *forte* effect that Cone's reading presupposes.

(*not* $g\sharp^1$'s), showing that this note insists on having a future function as a suspended fourth in an $E\flat$ -major chord, a suspended fourth getting ripe for being deflected downwards to g^1 .

Finally, it is of course of decisive importance for Cone's reading that the consequent of the recapitulation is played in a way that supports a content of dread and devastation. It is necessary both to give mm. 62–65, twice exposing the transformation of the seminal phrase, a sense of frightening disorder and to prevent the ensuing forceful modulation to A major from releasing its inherent connotations of expansion and liberation. Quite loud dynamics is self-evident, and turning to the individual voices, the inner-voice $f\flat^1$'s and then the bass $D\flat_1$ must be rendered with sudden and vehement emphases so as to indicate pain and distress, so as to suggest that they turn up as unprepared blows of fate. Even the metrically insignificant passing-note c^2 may be stressed so as to sound as a sting of pain. The E-major seventh-chords should then be uniformly and loudly hammered down, and the crowning A-major root-position chord should (although it carries the metric accent) be understated by passing joylessly over it in strict tempo. It might be a good idea to give more emphasis to the descent to A_1 than to the (potentially triumphant) ascent to e^2 , and then to reverse the priority when approaching the $A\flat$ -minor six-four chord. In order to sound tragic this chord can be somewhat delayed and played *subito piano*. As to the following subdued replica of this phrase, it cannot very well represent disaster once more, but a sense of quiet desolation may be suggested if one brings out the grace-note motion $f\sharp^1$ - e^1 in a painful way.

What does it take to express the more sanguine perspective of gay subjectivity held up in the "promising-note" reading, or at least – keeping to intramusical meanings and to what seems possible to convey – to make listeners aware of the purely musical narrative upon which this reading is based?

The first thing to do is to render the seminal phrase and its immediate, complementary offshoot in mm. 3–4 in a way that may stand for the protagonist's initial state of uneasiness, dissatisfaction, or sadness. It seems that gentle and yet poignant emphases at the accented discords, together with some lamenting top-voice prominence bringing the sighing gestures into focus, can do much of the job – and take care that the not-quite-consonant resolutions do not sound insignificant. The suspension chord of the seminal

phrase should be rendered so as to exhibit the darker side of its double harmonic identity: if the dissonant $\text{d}^{\flat 1}$ -eventually-heading-for- c^1 in the bass is made prominent, the chord will emerge as an F-minor suspension.⁷⁹ As a consequence, the next phrase must be played with a prominent left-hand c^1 in m. 3 turning the top-voice suspension into a melancholy second-inversion F-minor chord. By sticking to F minor, the two phrases will be closely held together as a pair by the painfully rising-then-falling gesture in the bass voice.

The *forte* phrase in the consequent may be rendered either as a protest against the prevailing state of affairs or as a pathetically heightened expression of this sad predicament. (The latter alternative may apply also to its less emphatic model in mm. 3–4.) As regards the four-bar phrases of the exposition, they cannot very well suggest anything distressing, but played with light, gently forward-pushing upbeats, they can be used to convey a sense of evading relief.

When the development starts, it is essential to facilitate associations back to the seminal phrase. Generally, this means that the prospective harmonic affinity with the third-inversion E^7 chords in the recapitulation should be counteracted in favour of the contrasting allusion back to the A^{\flat} -major chord starting the exposition. This may be accomplished by emphasizing the poignantly sad A -minor third $\text{c}^{\flat 2}/\text{a}^{\flat 1}$ of the chords in mm. 17–20 – a flattening corresponding to depression – and by bringing out the static upper voice showing that the sighing seminal motif is now immobilized. But the two suspension notes $\text{d}^{\flat 1}$ and f^{\flat} of the initial A^{\flat} -minor six-four chord must be held back, and this applies especially to the f^{\flat} which as a potential root would disclose the concurrent E -major quality of the sonority. Following this passage of deep sorrow, the soprano melody of the next four bars should be expressive of lament.

This way of playing the first four bars of the development might be used for the parallel passage mm. 25–28 as well, which would mean that

79 Recalling that the soprano note c^2 should be emphasized in order to give the suspension chord in m. 1 a brighter D^{\flat} -major quality, a paradox seems to be involved. The fact of the matter seems to be that in both cases our hearing is guided by the voice-leading expectation evoked by the stressed note, rather than by the emphasized note as such.

the change to happier feelings occurs either as a sudden revelation at the *mezzoforte* E-major chord after the double-bar or perhaps (anticipating the dynamic shift) at the F-major six-four chord just before it. But there are further options. The emotional quality might be transformed from the utter resignation in mm. 17–20 into a state of warm adoration if the first two chords of the consequent are played so as to emerge as redefined from A \flat -minor double suspensions to gently prompting F \flat^7 (E \flat^7) sonorities, preparing for the pleasant dream that eventually takes form in the following five-bar soprano melody. To achieve this, the bass $f\flat$ and the right-hand $d\flat^1$ must be brought out together with the thirds $a\flat$ and $a\flat^1$.⁸⁰ Still another way to prepare for the soprano effusion in mm. 29–33 is to let it emerge as the last link of a chain of imitations of a motif that finally overcomes its earth-bound descending tendency: $f\flat-f\flat-e\flat$ (bass), $f\flat^1-f\flat^1-e\flat^1$ (alto), $c^2\flat-b\flat^1-c\flat^2$ (soprano). In any case, a slightly raised tempo after the double bar may suggest the sense of relief associated with the change of mode.

According to the “promising-note” reading, the passage mm. 40–43 does not stand for resistance, but for deprivation, and A major is to disappear at the very moment when the deceptive modulation is a fact. While not entirely hiding the $a\flat^1$ (*alias* $g\sharp^1$) potential leading-note in the soprano, sufficient concurrent prominence must be given to the active agent of the frustrated modulation, i.e. to the alto line reaching the triggering seventh $d\flat^1$ just before it unexpectedly veers off upwards to $e\flat^1$ instead of proceeding down to $c\flat^1$. To mark the sudden loss involved, it might be a good idea to linger somewhat before the E \flat -major suspension chord and then play it very gently.

The next two phrases may be understood as imitative reminders of the sense of abortion expressed in mm. 40–43. While Schubert’s *piano* mark in m. 46 retrospectively corroborates the proposal just given for rendering the deception in m. 42, it arrests the drive forwards/upwards, and if you want to play the entire passage as a culmination in progress, you may have to understate this *subito piano* effect. On the other hand, if you wish to turn the *forte* passage into a protest against the disappointing return to A \flat -major,

80 If you succeed in this, the A \flat -minor chords in mm. 26 and 28 will be heard as passing sonorities rather than as resolutions.

you must give decisive, closing prominence to the tonic chord in m. 47, and then play the F-minor chords with sudden vehemence to be followed by poignant passing-notes after the dissonant clash in m. 50.⁸¹

A positive, liberating content can be heard in the consequent of the recapitulation if you consistently attend to and bring out its chromatically rising motions. Thus, it is of crucial importance to show that the alto f^1 does not just occur in m. 62, but issues out of the upbeat e^1 in a very determined way – it must emerge as something that is voluntarily produced. Consequently, both these notes have to be emphasized. As regards the second, decisive attempt at breaking out, you have to prepare for what is about to happen, making it unavoidable. The second rising skip up to D^b in the bass should be rendered more prominent than it was the first time in order to pave the way for the forthcoming rise to D^b , and the soprano c^2 should be rendered as a passing-note that heads for the (even more) dissonant b^1 , requiring a returning, rising resolution. This means that when the way out, the third-inversion E^7 chord, occurs, it does so as a result of chromatic ascents to D^{\natural} and b^1 , i.e. as the necessary result of bass and soprano motions already brought into focus. Since the connection between the second transformed seminal phrase and its provisional E^7 resolution should be tight, one might understate the crotchet rest by shortening its effective duration.

The final chromatic ascent from $g^{\sharp 1}$ to a^1 in m. 67 does not need to be brought out; it is more important to thrust forwards from the first applied E^7 dominant chord up to the culminating root-position A-major chord in m. 68 in a sweeping, expansive gesture with little interior accentuation or articulation, except for some durational emphasis at the A-major climax. Rather than being very loud, the sound should be rich and resonant. The following recession into the second-inversion A^b -minor chord has to be smooth; a moderate amount of *diminuendo* will help to suppress the

81 Just as the F-minor-like chord in m. 3, these chords are potentially ambiguous. It is possible to give them an A^b -major quality by bringing out the two lower notes in both hands, but understating the f^2 's would destroy the series of rising entries in the passage as a whole as well as diminish the local climax by hiding away the fact that the soprano melody reaches a^2 – hardly a convincing option.

sadness of this minor chord. The inner-voice return from e^1 to e^b1 , whatever symbolic significance it may have, is hard to bring out convincingly.⁸²

When repeating the development, it would be counterproductive to bring out the A^b -minor thirds topping its first chords and associating back to the beginning of the exposition. In order to make for associations to the third-inversion E^7 chords just heard in the recapitulation, the latent E-major quality of the chords in m. 17 should be clarified. The thirds are important to get a full sonority, and one might slightly stress the d^b1 's. The liberating force of E major has already been exposed in the recapitulation, and this fact motivates that E major is given a more active role as a potential applied dominant right from the start of the development.

Turning to Kramer's hermeneutic exercise, suggesting that there is a pervading figure suggestive of "pained resignation" underlying the music like a constant idea of a fatal disease, it is quite possible to play the piece in a way that complies with this not very detailed content – the seminal phrase and its derivatives can readily be given a suitable sense of distress. In order to intensify this mood after the double-bar, the option of bringing out the two upper notes should be chosen since it makes you hear the A^b -minor quality of the chords.

But what about the "palpably illusory denial that the deterioration has already started" that Kramer wants to associate with the enharmonic exchange of c^b2 for b^b1 , making way for E major in m. 29? Just like the C-major outburst in the exposition, this passage demands raised dynamics in order to sound convincing, and this is also what Schubert prescribes. A sudden *mezzoforte* fits well with the sense of relief that goes with denying deterioration, but this change in dynamics might also express feelings associated with having a non-illusory, positive experience.⁸³ Later on, however, Kramer wants us to render the passage mm. 34–39 as less of an idyll than we are perhaps willing to do. Whereas the right-hand diminished chords

82 Unless (perhaps) this motion is carefully prepared from early on; see below.

83 It seems that neither the composed structure, nor the performance of it can distinguish between these two closely related attitude shifts. But one should not ask for the impossible: the hermeneutic meaning of this passage must obviously be derived top-down from the extra-musical narrative suggested by the piece/performance as a whole.

must be stressed for purely musical reasons, excessive emphasis is required in order to make them sound disrupting enough to suggest the content that Kramer assigns to the passage. The same goes for the subdominants with their grace-notes in the following bars.

The relationship between proposed content and performance in the Trio is problematical. Kramer himself calls attention to the decisive role of performance: "Depending on the performance, the result [of the hidden presence of the pervading figure] is to imbue the would-be lyricism with an undercurrent of brittleness, halfheartedness, even debility; the music seems to be putting a good face in a bad situation". (p. 22) But the music of the Trio is so sonorous, safe and secure, its mood is so healthy, and the presence of the "pervading" motif so hidden, that it simply cannot deliver the content that Kramer wants it to convey. And this applies no matter what you do at the keyboard; it is very hard to conceive of a rendering running so much against the grain of the music that it can suggest the "undercurrent" that Kramer speaks of.

There is a patent contrast between the main part of the *Moment musical* and its Trio, and if any of these parts is "brittle, halfhearted, and debilitated", it is the former. This contrast of mood is bound to come to the fore in any non-contrived performance that respects the expressive attitude embodied in the Trio.⁸⁴ The "situation" in the outer parts of the work may be a bad one, but in the Trio a good situation obviously prevails, and this is a fact that makes it very hard for the pianist to contribute to any impression of "putting a good face in a bad situation". It is true that the way you play may sometimes be decisive when it comes to hermeneutic interpretation, but it cannot bring about miracles. It is extremely difficult to distinguish between "real" feelings – i.e. emotions that are reflected in the music beyond reasonable doubt, as is the sense of happiness in this Trio, and that therefore can be readily expressed – and feelings that are merely pretended.

84 It is interesting to note that while the main part of the piece can take a rather slow tempo, allowing for a serious content, the Trio seems to demand a fairly brisk pace that does not weigh down its quite happy message. Thus, if you want to adopt a consistent tempo throughout the *Moment musical*, which is not necessary, the lower limit is set by the Trio.

The first of the two “straight” readings implies that the musical material of the piece is split into two categories, and (speaking of the exposition) this means that the first two phrases of the antecedent and consequent are to be given a feminine character, while the ensuing four-bar phrases must be contrasted by suggesting a sense of masculinity. How can this be achieved? Well, don’t be too slow, underscore the inherent elegance of the falling inflections, and avoid any emphasis at the upbeats and resolutions in the feminine phases! And according to the same standard idea of gender characterization, don’t hurry when playing the masculine four-bar phrases, and render the upbeats with determination!

As already pointed out, the exposition allows of the inverse gender casting as well. Play the first two phrases with some stress on the upbeats, and don’t sneak away the resolutions but overstate them as becomes a man! To bring out a feminine contrast in the four-bar phrases, quicken the pace somewhat, and avoid stressing the upbeats!⁸⁵

Returning to the woman-then-man reading, it is not necessary to account in detail for all means to be employed in order to tell the erotic narrative. Given suitable musical structures to play, and using dynamic nuances, voice balancing, rhythmic accents and displacements, tempo modifications, etc., a creative pianist can with reasonable accuracy suggest such states of mind as shyness, enthusiasm, rejection, retreat, submission, expectation, reconciliation, aspiration, and tender love. But when arriving at the recapitulation, is it possible to play so as to distinguish between a rape and an intercourse

85 Recalling the Becking curve for Schubert and its alleged relationship both to musically authentic execution and to some constant in the composer’s mental make-up, one might object that some of the proposals just given for expressing the woman-then-man and the man-then-woman interpretations are likely to militate against the true sense of the music as embodied in the composer’s “pulse”. Anything does not go, and either the feminine or the masculine way of playing (say) the seminal phrase is perhaps inauthentic. On the other hand, however composer-specific the pulse form may perhaps be, it must allow the musician some scope for expressing and distinguishing between different emotions and characters. Furthermore, an element of friction between the underlying composer pulse and the element of characterization might bring a certain hermeneutic content in relief, paving the way for further insights as to the emotional attitude inherent in the music and the personality of its composer.

between two consenting partners? Well, granted that the consequent bears any resemblance at all to a sexual act, the prospects are not too bad.

If you crown the preceding masculine four-bar phrase (mm. 58–61) with a mighty *crescendo*, cravily pushing towards the dominant, and then play the consequent with ruthless vehemence right from its start, the changes inflicted upon the feminine material cannot but suggest some kind of assault, presumably committed by the male protagonist who was obviously preparing for it. But there is also an inviting and insisting way of rendering the two feminine phrases in mm. 62–65 – phrases that may seem to imitate the masculine rhythm, and that deviate quite conspicuously from the otherwise merely expectant attitude of the seminal phrase. The pace might be somewhat hastened, and just as there is a touch of sensuality in the chromatic sighs of the soprano to make the most of, there is a potentially voluptuous ascending minor second in the alto. These two seducing gestures – not necessarily very loud – might then lead smoothly over into the rhythmically unanimous sequence of dominant chords that eventually bring climax and satisfaction. This modulating passage belongs to the male protagonist according to the overall pattern of gender alternation, but if prepared for in this way, levelling out as far as possible the difference and demarcation between the feminine and masculine materials, the culmination may appear to be shared.

Some words should also be said about the second straight interpretation and its realization at the keyboard. As the analysis has suggested, there are various alternatives of the basic narrative, but an accomplished pianist will not have any problems in clarifying the voice-leading situations that are crucial for expressing a reading of this polyphonic kind.

Thus, if you want to give the listener an impression that the bass protagonist tries to dominate in mm. 5, the bass voice must of course be played rather loud, and it is important that the descending-triad upbeat leading down to its first note is highlighted so as to match the ascending triad introducing the renewed entry of the upper line. Turning to the first part of the development, the antecedent and the consequent may start as duets between the bass and the “tenor”, but in a reading based on a polyphonic approach there is a further, attractive option. One or both of these passages might (as already described) be formed as a chain of imitations extending from the bottom to the top register. In mm. 29–33, it is essential that the

tenor motion $e^1-e^{\sharp 1}-f^{\sharp 1}$, doubled to so as to form octaves and approaching the soprano line, is clearly audible. As regards the *fortissimo* passage of the recapitulation, it can naturally and effectively be rendered as an upper line involved in a contrary motion with the bass.

Even if the idea of a dialogue may appear quite acceptable as a description of the musical structure, and even if the extra-musical gender casting is not far-fetched, it is not certain whether a performance devised according to a polyphonic approach will be understood as a dialogue (or sequence of actions) that is gendered in terms of register. The conventional nature of this reading rather implies that a corresponding performance would be heard intra-musically, as just a polyphonic way of rendering the music. Another question is whether this hermeneutic interpretation of the *Moment musical*, a reading mainly based on local voice-leading features, makes for interesting listening if allowed to thoroughly imprint a performance.

So far in this section the aim has been to indicate suitable means to convey various extra-musical readings, but the problem may be reversed. Given a performance of the *Moment musical* featuring a set of non-random properties, is it possible to find a hermeneutic interpretation that fits in with it? Are there any further performance options that may be assembled to form a consistent intra-musical narrative? If so, we may try to find the corresponding extra-musical reading.

It turns out that mm. 1–4 may be played with a prominent right-hand thumb, producing an inner, rising $e^{\flat 1}-f^1-g^1-ab^1$ line, a motion that turns the phrase pair into a unified and determined, but also somewhat hard-won ascent to the (fairly unstable) tonic note; cf. motif *q* in Ex. 1. In the consequent, however, the slowly rising motion is arrested at g^1 – this time the other voices do not seem to allow the “thumb line” to arrive at the tonic note. But the following quiet four-bar phrase may be played so as to give the impression that this line persists and eventually succeeds: with the motion $g^1-g^1-ab^1-f^1-g^1-g^1-ab^1$, the inner strand finally joins the soprano.

For most of the development section, the thumb line stays passive, just visiting the upper and lower neighbour-notes of $e^{\flat 1}$. Only in mm. 42–48, it manages to drag itself up from $e^{\flat 1}$ to ab^1 – but then it is quite vehemently forced downwards by the dissonant eight-voice chord so as to return to the left-hand $e^{\flat 1}$ in m. 52. Turning to the recapitulation and its extended

consequent, the inner line is prevented from reaching any higher than f^1 , merely a semitone above its e^1 point of departure; the whole orchestra, as it were, is violently against the thumb line.

All this is quite possible to bring out at the keyboard. It requires that the exposition is played in a way conveying a sense of confidence, and throughout the piece it is necessary that the other voices make sufficient room for the thumb line that, even when it is more or less passive, must remain in the listeners' attention. But whereas this reading in terms of a frustrated rise is playable, the question remains whether a rendering focusing on this idea makes up worthwhile listening – if not, the notion of a “thumb line” throughout the *Moment musical* should be discarded. In particular, giving sufficient emphasis to the motion $e^1-f^1/e_4^1-e^1$ in mm. 61–70 commands a high price.

But what would such a rendering mean in terms of extra-musical content? Let's go for another gay reading. What was hidden in the inner self of the musical *persona* (mm. 1–4) is released upwards already in the first two phrases of the exposition. But after the double bar this motion towards self-realization is suppressed – it does not reach beyond f^1 – and it is eventually replaced by socially acceptable manners of straight flirtation, as expressed in the E-major part of the development, and especially in the duet passage. In the recapitulation, when the “coming-out” arrival at the tonic note were to be repeated and confirmed, it is brutally crushed by the vehement modulation to A major. So, given what we think we know about Schubert, isn't the *Moment musical*, played in this way, about the composer's frustrating experiences as a homosexual? At any rate, this hermeneutic interpretation – notice the authentic elements of social construction when it comes to the situation of gay men – fully satisfies Kramerian standards.⁸⁶

It should be pointed out that this interpretation makes use of the same three *forte* outbursts as Cone's “promissory-note” reading, but they are given other meanings. The shifts between opposed tonalities are also used, but in comparison especially with the “promising-note” reading, the poles

86 “The result is a bounded but open-ended process that affirms rather than negates the possibility of alternative meanings and elicits rather than abolishes active, positive forms of nonmeaning”.

have been reversed. According to the interpretation just proposed, the A₁-major passages stand for the protagonist's true self whereas the modulations into E major and A major are associated with heterosexual behaviour being forced upon him.

Generally, the three gay readings are arrived at along different symbolic-narrative routes, and they issue from different attitudes towards homosexuality. In contrast to the "promising-note" interpretation, the "promissory" reading and the "frustrated-rise" one just proposed eventually turn out to be tragic. While Cone's story is about final disaster due to indulgence in vice, the "promising" one eventually issues into a triumphant moment of self-realization. The gay aspirations of the "frustrated-rise" reading are not allowed to reach ultimate fulfilment.

The relative merits of the various renderings specified by the present author is not a primary issue, but it seems that the evaluation is largely independent of the merits of the hermeneutic interpretations that the renderings are designed to support (or merely fit in with). Just as a performance cast as a dialogue in terms of polyphonic configurations may seem strained and unwarranted if consistently applied, an approach involving frequent, regular, and clear-cut alternation of feminine and masculine phrases would probably turn out as being too predictable in the long run. A "thumb-line" performance is bound to detract too much attention from the expressive content of the other voices; indeed, one might even question whether this way of playing is justified. Generally speaking, consistent and obvious adherence to a certain hermeneutic blueprint is seldom an asset in performances – nor does, fortunately, painstaking observance of such blueprints seem necessary in order to express a particular content.

As pointed out in the introduction, assessing the appropriateness of hermeneutic readings and renderings might run both ways. Just as a certain performance can be explained by, and appear legitimate due to, the fact that it is grounded in a convincing hermeneutic idea, the evaluation may proceed the other way around from the merits of a performance to the plausibility of its underlying extra-musical idea – to the extent that it can be identified. If an extra-musical idea seems to enhance the quality of the performance, there may be some truth in it; conversely, if a performance

turns out as inferior due to its hermeneutic commitments, the reading is likely to be a bad one that should be abandoned.

It should perhaps be added that you must not entertain any extra-musical ideas in order to find out how to play a piece of music. There are likely to be intra-musical narratives or structural findings that are equally (or more) productive when it comes to devising worthwhile renderings. For example and leaving hermeneutics altogether, repeats and other parallel passages may be varied so as to exhibit different musical functions and/or expressive content. You must not have an extra-musical reason for playing the start of the development in the A \flat -minor or the E-major way.

Generally, it seems that different ways of playing are most often introduced not to serve a certain narrative scheme, but to provide variety and to take advantage of expressive options inherent in ambiguous structures. The beginning of the exposition in the *Moment musical* is an apt example; you may use this inherent source of meaningful differences without having a particular hermeneutic interpretation in mind.

Prospects of empirical research

Most of us feel that we somehow get to know a composer's personality when listening to or playing his music. No mystery seems to be involved in this: we learn about people from what they do, and although composing is in many ways regulated by conventions, it still offers a quite informative kind of behaviour. Why should not the musical ideas that composers come up with, and the way they work with them, disclose anything about their personalities and (by extension) suggest anything about their way of life? Part of what makes listening to music rewarding is that we think that we somehow meet with the composers, and it is an important (but perhaps mistaken) belief that by listening to, say, Schubert's works, we may learn more and other things about him than we can gather by reading ever so many biographies.

But what listening yields is of course "soft" knowledge, crucially dependent on our musical sensibility and our capacity for human empathy, and the cues are easy to misinterpret. There are certainly differences between (say) Beethoven's music and that of Schubert – most listeners are able to immediately hear it – but to what extent do these differences, stylistic in a

very comprehensive sense, betray anything about their personalities? And if you are interested in matters of gender, which elements of the musical information can be taken to reflect this particular aspect of a composer's personality? This problem cannot but bring in our notions of gender and ensnare us into two related intellectual risks that are involved in our thinking about personality traits.

Starting with the risk of *totalizing*, it is often taken for granted that the gender identity is by far the most important element when constructing one's self, and that it thoroughly permeates one's personality. Be that as it may, but if you want to pursue serious investigations, you had better open up for some scepticism. In practice, this simply means that you should consider the possibility that people are not cast in one piece. Thus, even if Schubert was gay, you must allow him to transgress the border to non-gay ways of expression – now and then, perhaps quite often since such ways of expression were part and parcel of the musical language that he inherited and mastered to perfection. You must also, since he was a great composer, grant him a capacity for emotional empathy and allow him to now and then, perhaps quite often deliberately reproduce the subjectivities of other genders than his own. It furthermore means that if you want to find out whether or not a certain composer expresses his gay subjectivity when writing music, you must be wary not to draw far-reaching conclusions from just one work, and indeed not from just a few passages in a certain work.

The risk of *essentializing* is not that easily dealt with, because it is both something that should be resisted *and* something that cannot be avoided – an element of this fallacy is, regrettably, necessary for obtaining any results at all. Irrespective of their own gender, many people think that they know what this or that gender is like. No matter whether they are right or wrong, the problem is that they tend to require representatives of a certain gender to match a number of personality traits that they have decided upon, traits belonging to a personality type that they consider being constitutive of the gender in question. But just a minimum of reflection indicates that this kind of thinking is far too square. The intra-group personality differences among (say) homosexual men are of course considerable – most of us will at least have encountered both the machos and the effeminates – just as there are many kinds of heterosexual men.

The tendency towards essentializing is not effectively countered by maintaining that genders are socially constructed. The social construction of group identities obviously works in two ways. The subjectivities of gay men are no doubt to an appreciable extent formed by society and by how they fare in it, but the ideas held by people in general as to what it is like to be gay is no less a product of the social context, including homosexual men. As regards the expression of gay subjectivity in music (if there is such a thing in music), it is likely to be far more finely individuated than the notions of gay identity brought to bear on music and its composers by most listeners.

Turning to the possibilities of psychological investigations aiming at the identification of representations of gender in music, the regrettable conclusion is that a most elusive aspect of extra-musical content is likely to be discerned by means of largely unknown and often quite crude, even prejudiced notions. And as if this were not enough, we must also take into account the possibility that the ideas of gay subjectivity once held by gay (?) composers and the ideas nowadays entertained or taken for granted by music listeners may not match each other very well – or at all – due to historical and cultural changes. Hence, we cannot with any certainty hear from a piece of music, or even from an entire output, whether the composer was gay. There are simply too many dubious musical perceptions involved, and too many psychological and cultural factors that are out of control.

But if the quest for the gender of the composer is exchanged for an interest in the musical *persona* that might be heard in specific compositions, the problem is put in more reasonable and, when it comes to psychological research, more productive terms. If the musical process of a particular work is heard as peculiar in a certain way, a musical *persona* may be identified that seems to be inseparably associated with this work, and that – granting that our listening is also conditioned by various learned responses – we may perhaps have access to if we use our sense of empathy. The musical *persona* is actually the one we meet with when we listen – as opposed to the composer who is a distant person that we may perhaps approach only by means of cautious, piecemeal generalizations based on his entire output. The notion that there is (or might be) a *persona* in a particular piece of music cannot but improve the prospects of finding musical traits that may stand for gay subjectivity, whereas on the other hand the chances of generalizations fall off correspondingly.

To ask for such things as “a uniquely gay way of composing rondo, variation, or sonata forms” (p. 80) is certainly to ask for too much; and such things as Schubert’s “choice of unconventional modulatory schemes”, his “formal loosening”, and his “preference for repetition and variation over genuine development” are indeed insufficient “proofs that he composed as a homosexual” (p. 82).⁸⁷ Agawu is obviously quite right: these and other generalizations are too ambitious to be of primary concern in analytic studies as well as in empirical research. But if you engage in investigations aiming at the *persona* embodied in a particular musical work, neither specifically gay ways of composing rondos, nor typically gay shifts between tonalities are necessary as prerequisites for getting started.

A further advantage of replacing the quest for the composer’s gender for the identification of the *persona* inherent in a certain musical work is that it relieves you of the burden to find various, more or less specific, and often quite comprehensive structural configurations that you then have to interpret in some more or less theory-laden way. Turning to *Moment musical* No. 6 and its possible content in terms of gender, this means that the investigation must not be bound up with any specifically gay narrative, or with any other preconceived structural scheme pertaining to gender, which may or may not be exemplified in the music. If gay subjectivity is equated with a musical *persona*, it can be expressed in various ways, pervading the music or just showing up transiently. The latter option is important from a methodological point of view since one should take into account the fact that many (perhaps most) people tend to listen to music in a fairly fragmented “concatenationist” way; they are not likely to make up complex and integrated mental representations of the music and its corresponding extra-musical aspects, if any.⁸⁸

But what are the prospects of finding any correlates to gay subjectivity in Schubert’s music, and particularly in this *Moment musical*, by means of empirical research?

Susan McClary reports that on several occasions she has got spontaneous reactions from both straight and gay men to the effect that they have

87 Kofi, Agawu, “Schubert’s Sexuality: A Prescription for Analysis?”, *19th Century Music* 17(1993/94)1, 79–82

88 Cf. Jerrold Levinson, *Music in the Moment*, Ithaca 1997.

heard a quality of gay desire in Schubert's music, or suspected that the composer must have been gay.⁸⁹ (p. 209) These responses were elicited by the "Unfinished" Symphony (and presumably by other works as well) and this evidence, however anecdotal, cannot but support the idea that it might be worthwhile to subject *Moment musical* No. 6 (and other pieces by Schubert) to listening tests.

In addition, and starting with Schumann's gendered comparison between Beethoven's and Schubert's music, there is a long, and often depreciating, tradition of associating the music of the latter with femininity.⁹⁰ Gay men are not necessarily effeminate, but quite a few people have held (and still hold) this view. All the same, this aspect of the Schubert reception suggests that a number of commentators actually did identify a gay quality in his music, an observation that was couched in inadequate, often mitigating and yet depreciating, terms – Schubert's music did not sound gay, but just feminine. This confluence of notions may still be quite common and makes for a problem when judging present-day listener responses. Responses to the effect that there are touches of femininity in, say, this *Moment musical* might in fact mean that traces of gay subjectivity have been discerned.

There are at least three variables that must be studied with respect to their influence on what extra-musical ideas listeners are inclined to associate with music. The first and foremost variable is of course the properties of the musical structure itself. In addition, and as has already been repeatedly pointed out, the rendering of the music may make for decisive differences; the second variable to be studied is therefore the influence of performance characteristics on the listening responses. Thirdly, since various individuals may respond differently to the same musical stimulus, the outcome must be related to relevant personality traits of the listeners.

89 Susan McClary, "Constructions of Subjectivity in Schubert's Music" in *Queering the Pitch*, ed. Philip Brett, Elizabeth Wood, and Gary C. Thomas. New York/London 1994, pp. 205–233, especially p. 209 and p. 232

90 Cf. David Gramit, "Constructing a Victorian Schubert: Music, Biography, and Cultural Values", *19th Century Music* 17(1993/94), 65–78

The ten resolutions shown in Exs. 6 a/j make up a suitable preliminary material for a study of the relationship between musical structure and extra-musical content. Which extra-musical associations do the various resolutions bring, and can any of them be associated with gay desire? But already these systematically varied fragments introduce a quandary. In order to sound fully convincing each one of these resolutions should be rendered in its own, quite specific way with respect to accentuation, dynamic shape, and balance between the voices, differences that are bound to contaminate the various structures with performance qualities that may themselves be suggestive of some extra-musical, perhaps gendered content. If you want to lay bare the relationship between structure and perceived content, the performance variable should therefore be neutralized. But dead-pan performances have a serious drawback: they often sound uncommitted to the point of annihilating the effects deriving from the structure. Perhaps it is possible to find a musically acceptable, middle-of-the-road rendering fitting all the resolutions reasonably well.

A number of crucial excerpts from the *Moment musical* might of course also be tested. But in doing so, it seems pointless to filter out the influence of performance. It would be more informative to use renderings tailored for the experiment, renderings played by the same pianist and being optimized so as to be suggestive of certain feelings, moods, and personality traits. This means that the performance variable is introduced to full extent: each stimulus would consist of a given musical passage, upon which a rendering, controlled with regard to its *intended* expression, is superimposed. But since any two pianists may choose somewhat – or even radically different – means to achieve the same expressive end, the performance variable is still far from controlled. To make up for this, several pianists could be engaged to play the passages.

The *Moment musical* is just one Schubert piece, and it may be idiosyncratic in ways making it less representative. To enlarge the basis for conclusions, a few excerpts from some other works by Schubert might be included. In a first round, a number of “fingerprint” examples from Nettheim’s list can be used to complement the passages from D. 780, No. 6.

It would also be of great interest to test whether the entire piece generates a musical narrative, suggesting a more or less elaborate extra-musical content. Since the performance factor is again of crucial importance for the outcome, one must carefully select the performances to be used. There are

many recordings available, some of which are likely to exhibit differences that may be highly relevant with respect to the overall hermeneutic content of the music, but the expressive/narrative intentions of the pianists are unknown. For this reason, it may again be advisable to use performances specifically made for the experiment, performances devised to suggest certain extra-musical ideas.

A potentially very interesting approach to the performance factor would be to contrast renderings that faithfully observe the Schubert "fingerprint pulse" with performances that in various ways violate it. To the extent that performances of the first kind are more authentic, they are likely to yield the most reliable insights as to the musical *persona* embodied in the music and perhaps also as to the personality of its composer.

Since the core of these imagined experiments is the question of whether there is in fact anything in this *Moment musical* that elicits associations to gay desire or gay subjectivity, it seems likely that the sex and the sexual orientation of the listeners are of vital importance for the outcome.

Separating responses from male and female listeners does not make up a problem, whereas telling gay subjects from straight ones requires special care. Since it is of course essential that the listeners cannot guess the aim of the experiment, one possibility is of course to ask the subjects about their sexual orientation only after the session is completed, but the risk of getting a fair amount of less than honest declarations is obvious. Another way to get an idea of the peculiarity, if any, of gay responses to the *Moment musical* might be to run the experiment on a homosexual group of listeners, and then to contrast the outcome with the results obtained from men and women, respectively, in two control groups. But this approach entails a risk of compromising the results. The gay listeners, suspecting that they have been selected for their gender identity, may be tempted to give responses that are not representative of their actual way of experiencing music.

Another problem is that of collecting responses in a manner that does not destroy the phenomenon to be studied, namely the reactions to music under ordinary conditions. This dilemma can, at least to some extent, be met by a careful experimental design. The presentation of the musical excerpts is important, and even more crucial is the procedure used to obtain

the responses. It is necessary to collect the data in ways that, for both short excerpts and extended sections, as far as possible reflect genuine listening experiences.

Performance is not only a vitally important, inevitably interfering factor in listening tests designed to study whether and how musical structures convey extra-musical content. It is also of considerable interest in itself for what it may reveal about the communication of extra-musical meanings. The pianist is the first to “read” the *Moment musical*, and what he/she has found in it is somehow encoded in the performance that the listeners come to “read”.

A great many recordings have been made of this *Moment musical*, and several intra-musical narratives have been discussed and proposed in this essay – narratives that are associated with extra-musical content on the one hand, and with specific structural details on the other, details that have to be played in certain ways if they are to support (or fit in with) one or the other of the extra-musical interpretations.

Several gay readings have been presented in this essay, but whether this *Moment musical* actually embodies a gay *persona* has certainly not been established as a fact. And it seems that the various readings cannot be corroborated by listening to how the work is played. How many “hits”, i.e. performance traits that may be associated with one or the other of the gay readings, are required to make up a gay rendering of the music? And even if a performance turns up that exhibits a great many “hits” matching one of the gay readings, it is quite possible that each and any of these conforming performance traits actually came about as an artistic choice made by the pianist when responding to purely musical demands.

And yet, hermeneutically relevant findings from recordings might to some extent support the extra-musical interpretations proposed. A certain gendered reading of the music can certainly not be proven to be “true”, but a consistent set of “hits” may back it up in the sense that the reading is not analytically far-fetched; at any rate, the performance reflects the pianist’s understanding of the musical structure.

Would it be possible to draw any conclusions as to the gender identity of a “hit” pianist? Or, putting this question in a way that brings out the premise upon which it is based: do gay pianists play this piece in specific, gay ways because they are properly attuned, because they somehow

recognize something in the music that other pianists do not capture? But the premise – the supposed affinity between musician and music when it comes to shared gay subjectivity – can of course neither be verified, nor falsified as long as we do not know which of the recordings that were made by gay pianists, and as long as we are not certain whether *Moment Musical* No. 6 is a gay piece. But one thing may be taken for granted: no pianist, straight or gay, navigates by means of a gender autopilot.

It will no doubt have emerged from the discussion in this section that empirical investigations aiming at the relationship between musical structure and gendered content involve a host of intricate problems. The issue seems virtually intractable by experimental methods, but the readers are invited to have a try.

Conclusion

Concluding means to round off, but also, in a more pretentious vein, to utter some words of wisdom that the investigation and the discussions may have put in one's mouth.

If “diversity of opinion” is a criterion indicating that a work is “new, complex, and vital”, as Oscar Wilde once put it, Schubert's *Moment musical* No. 6 is indeed a first-rate piece. Several substantially different hermeneutic readings have been produced like rabbits out of a hat. Some people – Lawrence Kramer is evidently one of them – think that this is all right, because this is what music “criticism” is like and should be like. Others, preferring more solid and enduring varieties of insight, are prone to ask why musical hermeneutics should be granted such generous criteria of truth and relevance.

A general and quite modest methodological conclusion is that it might be a good idea to stipulate that, in addition to the reading they want to advance, “new musicologists” should always propose at least one further, substantially different extra-musical interpretation. A rule to that effect would force them to come up with reasons for why a certain hermeneutic content is to be preferred rather than another, or even to consider whether their cherished reading merits to be advanced at all.

There are perhaps some readers who have read my “exercises” in musical hermeneutics, and particularly my “promising-note” reading, with

disgust – as they probably also disliked Cone’s “promissory-note” interpretation and Solomon’s article on Schubert’s sexual leanings. Pretending a scholarly purpose (they are likely to think) I have produced another of those revolting interpretations that poke into people’s most private affairs. To dedicated adherents of absolute music my “promising-note” story is simply unwarranted nonsense, whereas ardent advocates of Great Music are likely to regard it as a way of dragging a Masterpiece and its composer into the dirt, even as an assault on core values of our culture.

Indeed? From time to time, from place to place, there has been a more or less heated debate on sexual politics, a dual aspect of which is to claim, for instance, composers and their works for one’s own gender group, and conversely to deny members of such groups musical models or images that might help them in consolidating their identities. There may of course be a fair share of nonsense involved in both these endeavours, but whether the former ambition is worse than the latter is an open matter.

As to myself, I can only declare my intention once more: my main purpose was to make a critical study of how extra-musical, in this case gendered, readings of music are constructed. In doing so, I might have stumbled upon other problems, great ones as well as small ones. Thus, I might have dealt with matters of Man and his/her Music – a very elevated topic. But more likely I have just tried to decipher a small, but great piano piece composed by a unique person; I have ventured to read a message once thrown into the sea, if sealing a bottle was what Schubert did. But we cannot exclude the possibility that he merely was about to cultivate a musical idea, making it form a *Moment musical*.

Music examples

Chapter 1

Ex. 1

Andante grazioso

10

5

9

10

13

17

10

3

M

m1 m2

m2 m2

m6

m1 m2

m2r m2r

M!

m1 m2 m4 m1r (m2r) m5

(m5i)

(m3)

m3 m4 m6

m3

sf *p*

sf *p*

sf *p*

sf *p*

Ex. 2

Example 2 is a piano piece in 6/8 time, marked with a key signature of two sharps (F# and C#). The melody in the treble clef consists of eighth and quarter notes, while the bass clef provides a steady accompaniment of eighth notes.

Ex. 3

Example 3 begins at measure 11. The treble clef features a melodic line with slurs and accents, while the bass clef has a more rhythmic accompaniment with some rests.

Ex. 4

Example 4 starts at measure 17. The treble clef has a melodic line with slurs and accents, and the bass clef provides a harmonic accompaniment.

Ex. 5

Example 5 begins at measure 17. The treble clef features a melodic line with slurs and accents, and the bass clef has a rhythmic accompaniment.

Ex. 6

Example 6 is a sequence of chords in 6/8 time, marked with a key signature of two sharps. The chords are labeled with Roman numerals and figured bass notation below them.

Chord sequence (Roman numerals): I, I⁶, I⁴, I⁴, V, V⁷, V⁶, V³, V³, V₂, II⁶, II⁴, II₂, II⁷, II⁶, II⁴, II, #IV, #IV⁶, VI⁷

Figured bass notation: T, T₃, T₆, D⁶, D, D⁷, D₃⁷, D₆⁷, D₇⁷, S₂⁶, S₃⁶, S₅⁶, Sp⁷, S⁶, S₃⁶, Sp, S_{1c}⁶, Sp⁶⁺, Tp⁷

Ex. 7

Andante grazioso

A: I I⁶ V⁶ v₃⁶ VI⁷ V⁶ I II⁶ I⁴ V

A: T T₃ D₃ D₃⁷ Tp⁷ D₃ T S⁶ D₄⁶ -₃⁵

5 VI⁷ v⁶ I II⁶ I⁴ V⁷ I

A: T T₃ D₃ T S⁶ D₄⁶ D₃⁷ T

9 I IV⁶ I I V⁶ I #IV⁶ I⁴ V

A: T T₃⁶ T T D₃⁷ T S₃¹ < D₄⁶ -₃⁵
or S₃cp⁶⁺

13 I⁴ V I

A: T D₄⁶ D T D - T
or T₇⁹ -₈¹⁰

17 I v₃⁶ I⁶ IV I⁴ V⁷ I

A: T D₃⁷ T S D₄⁶ D₃⁷ T

Ex. 8



Musical score for Ex. 8, featuring a treble and bass clef staff in 6/8 time. The key signature is two sharps (F# and C#). The melody in the treble clef consists of four measures: the first measure has a dotted quarter note followed by an eighth note; the second measure has a quarter note followed by an eighth note; the third measure has a quarter note followed by an eighth note; the fourth measure has a quarter note followed by an eighth note. The bass clef accompaniment consists of four measures of chords, each with a dotted quarter note and an eighth note.

Ex. 9



Musical score for Ex. 9, featuring a treble and bass clef staff in 6/8 time. The key signature is two sharps (F# and C#). The melody in the treble clef consists of two measures: the first measure has a dotted quarter note followed by an eighth note; the second measure has a quarter note followed by an eighth note. The bass clef accompaniment consists of two measures of chords, each with a dotted quarter note and an eighth note.

Ex. 10



Musical score for Ex. 10, featuring a treble and bass clef staff in 6/8 time. The key signature is two sharps (F# and C#). The melody in the treble clef consists of two measures: the first measure has a dotted quarter note followed by an eighth note; the second measure has a quarter note followed by an eighth note. The bass clef accompaniment consists of two measures of chords, each with a dotted quarter note and an eighth note. Below the bass clef staff, the text "II Sp" is written.

Ex. 11

12

sf

(Ø') D₃

Ex. 12

12

sf

S₃

cf.

S₃ 1<

Ex. 13

12

sf

Scp₃

Ex. 14

T

Tp⁷

T

Ex. 15

10

Ex. 16

Andante grazioso

Measures 1-4 of the piece. The music is in 6/8 time with a key signature of two sharps (F# and C#). The melody in the right hand features eighth-note patterns with accents (>) and slurs. The bass line consists of eighth-note chords with accents (>) and slurs.

Measures 5-8. Measure 5 begins with a fermata over the first measure. The right hand continues with eighth-note patterns. The bass line features a dynamic shift from *f* to *p* in measure 8. The piece concludes with a double bar line and repeat dots.

Measures 9-12. Measure 9 begins with a fermata over the first measure. The right hand features eighth-note patterns with slurs. The bass line has a dynamic shift from *f* to *f* in measure 10. The piece concludes with a double bar line and repeat dots.

Measures 13-16. Measure 13 begins with a fermata over the first measure. The right hand continues with eighth-note patterns. The bass line features a dynamic shift from *f* to *p* in measure 14. The piece concludes with a double bar line and repeat dots.

Measures 17-18. Measure 17 begins with a fermata over the first measure. The right hand features eighth-note patterns. The bass line features a dynamic shift from *f* to *p* in measure 17. The piece concludes with a double bar line and repeat dots.

Ex. 17



Musical score for Ex. 17, featuring a treble and bass clef. The key signature is two sharps (F# and C#), and the time signature is 6/8. The melody in the treble clef consists of a sequence of eighth notes: F#4, G4, A4, B4, C5, B4, A4, G4, F#4. The bass clef accompaniment consists of a steady eighth-note pattern: F#3, G3, A3, B3, C4, B3, A3, G3, F#3.

Ex. 18



Musical score for Ex. 18, featuring a treble and bass clef. The key signature is two sharps (F# and C#), and the time signature is common time (C). The melody in the treble clef consists of a sequence of eighth notes: F#4, G4, A4, B4, C5, B4, A4, G4, F#4. The bass clef accompaniment consists of a sequence of chords: F#3-G3, F#3-G3-A3, F#3-G3-A3-B3, F#3-G3-A3-B3-C4, F#3-G3, F#3-G3-A3, F#3-G3-A3-B3, F#3-G3-A3-B3-C4.

Ex. 19

Andante grazioso

Andante grazioso

1
A
T

5
A¹
T

9
B
T

13
A
A¹
T

17
c
f
T

Ex. 20

5

The musical score for Ex. 20, measures 5-8, is written in G major (one sharp) and 4/4 time. The right hand (treble clef) features a melodic line starting with a half note G, followed by quarter notes A, B, and C. The left hand (bass clef) provides a rhythmic accompaniment of eighth notes. The dynamics are marked *sf* (sforzando) and *p* (piano). The piece concludes with a double bar line and repeat dots.

Ex. 21

1 *m1* *m2*

2

3

4 *cD*

5

6

7 *m3*

8 *cT*

9 *mx* *my* *mz* *m4*

10

11 *cD*

12

13

14 *cT*

15

16

17 *mx* *cT*

Ex. 22

1 $m1$ $m2$

2

3

4 c^D

5 $M1/2$

6 $m2v$

7 c^T

8 mx my $m2$ $m3$

9

10 c^D

11

12 3

13 $M1/2v$ c^T

14

15 $M1/2+$ mx c^T

4 5

Detailed description: The image shows a musical score for 15 staves, numbered 1 through 15. Each staff is in a treble clef with a key signature of two sharps (F# and C#) and a time signature of 8/8. The notation includes various rhythmic patterns, rests, and specific annotations. Annotations include 'm1', 'm2', 'm1/2', 'm2v', 'mx', 'my', 'm2', 'm3', 'c^D', and 'c^T'. Some staves have bracketed groups of notes with numbers below them, such as '3' on staves 12 and 13, and '4' and '5' on staff 15. The score is presented on a single page with a vertical line on the left side.

Ex. 23a



Musical score for Ex. 23a, featuring a treble and bass clef. The piece is in 6/8 time and D major. The first system shows a melodic line in the treble and a bass line with chords. The second system is marked with a '5' above the treble clef. The third system is marked with a '17' above the treble clef and includes a forte (*f*) dynamic marking.

Ex. 23b



Musical score for Ex. 23b, featuring a treble and bass clef. The piece is in 6/8 time and D major. The first system shows a melodic line in the treble and a bass line with chords. The second system is marked with a '5' above the treble clef and includes a forte (*f*) dynamic marking. The third system is marked with a '17' above the treble clef and includes a forte (*f*) dynamic marking.

Ex. 23c



Musical score for Ex. 23c, featuring a treble and bass clef. The piece is in 6/8 time and D major. The first system shows a melodic line in the treble with a trill (*tr*) and a bass line with chords. The second system is marked with a '5' above the treble clef and includes a forte (*f*) dynamic marking. The third system is marked with a '17' above the treble clef and includes a forte (*f*) dynamic marking.

Ex. 23d



Musical score for Ex. 23d, featuring a treble and bass clef. The piece is in 6/8 time and D major. The first system shows a melodic line in the treble and a bass line with chords. The second system is marked with a '5' above the treble clef and includes a forte (*f*) dynamic marking. The third system is marked with a '17' above the treble clef and includes a forte (*f*) dynamic marking.

Ex. 23e

Musical score for Ex. 23e, piano, 6/8 time signature. The score consists of three measures. The first measure starts with a piano (*p*) dynamic and features a melody in the right hand with eighth-note chords and a bass line in the left hand. The second measure begins with a forte (*f*) dynamic and includes a fingering of 5. The third measure continues with the forte dynamic and includes a fingering of 17. The piece concludes with a final chord in the right hand.

Ex. 23f

Musical score for Ex. 23f, Adagio, 6/8 time signature. The score consists of three measures. The first measure starts with a piano (*p*) dynamic and features a melody in the right hand and a steady eighth-note accompaniment in the left hand. The second measure begins with a forte (*f*) dynamic and includes a fingering of 5. The third measure continues with the forte dynamic and includes a fingering of 17 and a triplet of eighth notes in the right hand. The piece concludes with a final chord in the right hand.

Ex. 23g

Musical score for Ex. 23g, Allegro, 6/8 time signature. The score consists of three measures. The first measure starts with a piano (*p*) dynamic and features a melody in the right hand and a steady eighth-note accompaniment in the left hand. The second measure begins with a forte (*f*) dynamic and includes a fingering of 5. The third measure continues with the forte dynamic and includes a fingering of 17. The piece concludes with a final chord in the right hand.

Ex. 24

1

2

3

Andantino

4

5

6

0

Bass

The image shows a musical score for Ex. 24, consisting of seven staves. The top staff is numbered 1 and contains a series of notes with stems pointing right. The second staff is numbered 2 and contains notes with stems pointing left. The third staff is numbered 3 and contains notes with stems pointing right. The fourth staff is numbered 4 and contains notes with stems pointing left. The fifth staff is numbered 5 and contains notes with stems pointing right. The sixth staff is numbered 6 and contains notes with stems pointing left. The seventh staff is numbered 0 and is labeled 'Bass' and contains notes with stems pointing right. The tempo is marked 'Andantino'. The key signature has two sharps (F# and C#) and the time signature is 8/8. The score includes various musical notations such as notes, rests, and stems.

A musical score for guitar, consisting of seven staves and a bass line. The music is written in G major (one sharp) and 6/8 time. The staves are numbered 1 through 6, and the bass line is labeled 'Bass' and numbered 0. The score includes various musical notations such as eighth notes, quarter notes, and slurs. A double bar line is present at the end of the first staff. The bass line starts with a double bar line and contains a few notes.

Ex. 25



Musical score for Ex. 25, featuring a treble and bass clef with a key signature of two sharps (F# and C#) and a 6/8 time signature. The piece consists of two measures. The treble clef part begins with a dotted quarter note followed by an eighth note, then a quarter note, and ends with a quarter note. The bass clef part features a steady eighth-note accompaniment with chords.

Ex. 26



Musical score for Ex. 26, featuring a treble and bass clef with a key signature of two sharps (F# and C#) and a 6/8 time signature. The piece consists of two measures. The treble clef part begins with a dotted quarter note followed by an eighth note, then a quarter note, and ends with a quarter note. The bass clef part features a steady eighth-note accompaniment with chords.

Ex. 27



Musical score for Ex. 27, featuring a treble and bass clef with a key signature of two sharps (F# and C#) and a 6/8 time signature. The piece consists of two systems of three measures each. The first system shows the initial melody and accompaniment. The second system, marked with a '4' above the first measure, shows a continuation of the melody with some rhythmic changes and a final measure with a fermata.

Ex. 28

Musical score for Ex. 28, piano arrangement in 6/8 time, key of D major. It consists of two systems of two staves each. The first system includes dynamics markings *sf* and *p*. The second system starts with a measure number 5 and includes *sf* markings.

Ex. 29

Musical score for Ex. 29, piano arrangement in 6/8 time, key of D major. It consists of two systems of two staves each. The first system includes dynamics markings *sf* and *p*. The second system starts with a measure number 5 and includes *sf* markings.

Ex. 30

Musical score for Ex. 30, piano arrangement in 6/8 time, key of D major. It consists of one system of two staves. Above the staff, there are annotations: "not" followed by a bracketed "U" and a bracketed "U" with a horizontal line above it, and another bracketed "U" with a horizontal line above it.

Ex. 31

The image displays a musical score for Example 31, consisting of four systems of piano accompaniment and vocal line notation. The score is written in 8/8 time and the key of D major (two sharps). Each system includes a piano part with a treble and bass clef, and a vocal line with four staves numbered 1 through 4. The piano part features a rhythmic accompaniment with eighth and sixteenth notes, often in a triplet pattern. The vocal line consists of rhythmic patterns and rests, with some notes indicated by stems and flags. The score is divided into four systems, with measure numbers 1, 9, and 14 marking the beginning of the first, second, and third systems respectively. The fourth system concludes with a double bar line and repeat dots. Dynamics such as *sf* (sforzando) and *p* (piano) are indicated in the piano part. The vocal line includes various rhythmic values, including eighth, sixteenth, and dotted rhythms, as well as rests.

Ex. 32

U — U — (U) — U

7 10

Ex. 33a

The musical score for Ex. 33a is presented in three systems. The top system shows two vocal staves in G major, 3/8 time. The second system shows the piano accompaniment in the same key and time signature. The piano part includes detailed harmonic and performance annotations:

- Right Hand (RH):** Labeled 'm' (mezzo). Annotations include $(R\sim)$, $(R+)$, $(R\sim)$, $Po(R\sim)$, $(R\sim)$, Po , $(R\sim)$, (i) , and M . Pitch labels include a , b , a' , b' , a'' , b'' , a''' , and x . Performance markings include 'parallel', 'tenor pedal', and 'parallel'.
- Left Hand (LH):** Labeled 'm'. Annotations include $(R+)$, $(R\sim)$, $P\sim$, and R . Performance markings include 'contrary' and 'oblique'.

Below the piano part, a series of chords and intervals are listed:

I_3^5 6_3 V_3^6 4_3 vi_3^7 V_3^6 I_3^5 ii_3^6 I_4^6 V_3^5

Below these are further annotations for the vocal parts:

- h:** P $P\sim$ $P\sim$ $P\sim$ $P\sim$
- $P\sim$ $P\sim$ $P\sim$ $P\sim$ $R\sim$ $R\sim$
- $(R\sim)$ $(R\sim)$ $(R\sim)$ $(R\sim)$ $x(o)$

Sch 1

Mozart, Sonate A dur, K.v. 331, 1.S. Thema

5 T 1 2 3/4 5 6 7 8

(-I II V)

Sch 1a

d)

(!)

Sch 1b

c)

Sch 1c

Mozart, Sonate A dur (K.v. 331), 1. Satz (vgl. Fig.157)

6 T 1 4

I II V

FG 1

EXAMPLE 139. Mozart, *Sonata in A major*, K. 331, I

a.

b.

I V₅⁶ I II⁶ V I V₅⁶ I II⁶ V I

FG 1a

b. Mozart, mm. 1–2

becomes

I -⁶ V₅⁶ -₃ I V₅⁶

FG 1b

c. Mozart, mm. 3–4

not becomes and not

V₁⁷ V₆⁶ I V V₁⁷ V₆⁶ I V I V V₁⁷ V

Sch 2

$\overset{\wedge}{5}$ (Nbn 5 4 3 2)

FG 2

9

$\overset{5}{3}$ $\overset{N}{8}$ $\overset{5}{3}$

$\overset{5}{3}$ — $\overset{6}{4}$ $\overset{6}{4}$ — $\overset{5}{3}$ 6 5 $\overset{\#6}{5}$ V

Sch 3

Mozart, Son. A dur, K.v. 331, 1. Satz, Thema

Sch 3a

Mozart, Son. A dur, K.v. 331, 1. S., Thema T. 17-18

FG 3

Exs. L. 1-4

Exs. L. 1-4 are presented in three systems of piano and bass staves. The first system includes measures 1 through 18, with measure numbers 1, 2, 3, 4, 5, 7, 9, 11, 13, 15, 17, and 18 indicated above the piano staff. The second system continues the piece. The third system concludes with measures 1 through 10, with measure numbers 1, 5, 9, 12, and 10 indicated above the piano staff. The notation includes various rhythmic values, accidentals, and articulation marks.

Ex. N

Ex. N is a musical score for piano and bass. The piano staff features several annotations: a fermata over a triplet of eighth notes, a slur over a group of notes labeled "fourth", and another slur over a group of notes labeled "fifth". The bass staff includes a slur over a group of notes labeled "2", and a slur over a group of notes labeled "3". The score concludes with a double bar line and the instruction "(10-10)".

Ex. LJ 1

3.33

Musical score for Ex. LJ 1, measures 3.33. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). The bass line features a rhythmic pattern of eighth notes with accents, grouped by brackets and labeled 'a' and 'b'.

Ex. LJ 2a

4.4

Musical score for Ex. LJ 2a, measures 4.4. The score is in treble clef with a key signature of two sharps (F# and C#). The melodic line is accompanied by a Braille transcription below it.

Ex. LJ 2b

2.21

a

Musical score for Ex. LJ 2b, measures 2.21. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). The bass line features a rhythmic pattern of eighth notes with accents, grouped by a bracket and a Braille transcription below it.

Ex. LJ 2c

2.20

Musical score for Ex. LJ 2c, measures 2.20. The score is in treble and bass clefs with a key signature of two sharps (F# and C#). The bass line features a rhythmic pattern of eighth notes with accents, grouped by a bracket and a Braille transcription below it. Dynamic markings *(p)* and *(sf)* are present.

Ex. LJ 3

5.12

I I⁶ V⁶ V⁴ “vi⁷” V⁶ I V
 I V⁶ “vi⁷” V
 I V
 I

Ex. LJ 4a

7.20

a b

c

harmonic } either → p. p. — p. — p.
 rhythm } or → p. p. — p. — p.
 metrical } : · ·
 structure }

Ex. LJ 4b

9.11

a

b

c

d

e

e

d

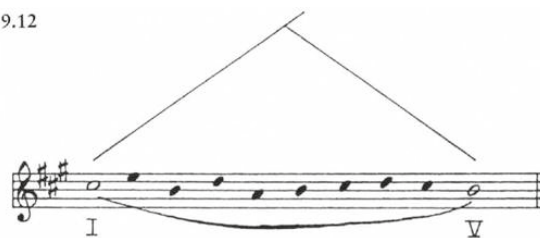
c

b

a

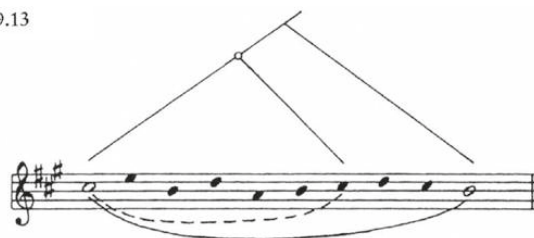
Ex. LJ 5a

9.12



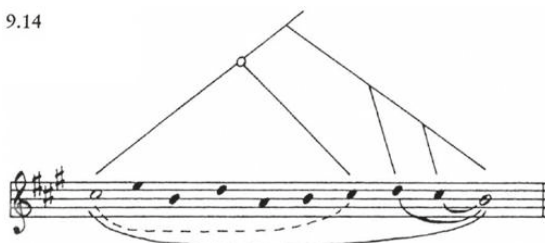
Ex. LJ 5b

9.13



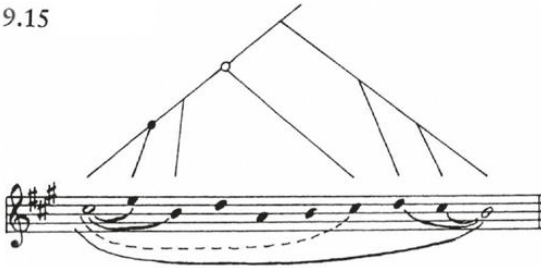
Ex. LJ 5c

9.14



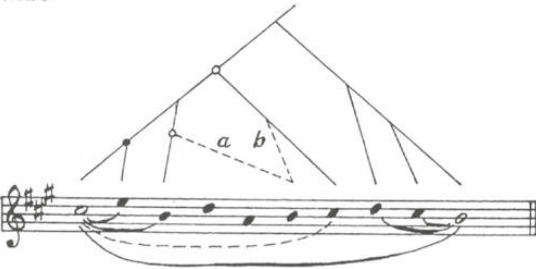
Ex. LJ 5d

9.15



Ex. LJ 5e

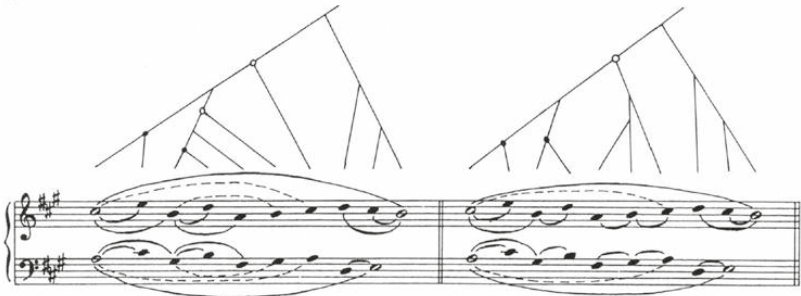
9.16



Ex. LJ 5f

9.17
a

b



Ex. 34

The image shows a musical score for a piano piece, labeled 'Ex. 34'. The score is written on two staves, a treble clef staff on top and a bass clef staff on the bottom. The key signature is three sharps (F#, C#, G#). The melody in the treble staff consists of a series of eighth notes: G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4. The bass staff provides a harmonic accompaniment with a similar rhythmic pattern: G3, A3, B3, C4, B3, A3, G3, F#3, E3, D3. Above the treble staff, a dynamic diagram is drawn. A diagonal line starts from the first note and rises to the eighth note. A vertical line drops from the peak of this diagonal line to the eighth note. From this point, a series of vertical lines drop to the notes of the eighth measure, with an exclamation mark (!) placed above the first of these vertical lines. This diagram illustrates the dynamic contour of the melody, showing a crescendo leading to a peak at the eighth note, followed by a sharp dynamic change (indicated by the exclamation mark) and a subsequent decrescendo.

Ex. LJ 6

7.26

Diagram illustrating a hierarchical structure (tree) with nodes labeled *a*, *b*, *b'*, *c*, *c'*, and *d*. The tree structure is shown above the musical score. The musical score consists of four staves labeled *d*, *c*, *b*, and *a* from top to bottom. The *d* staff is divided into measures 1-2, 3-4, 5-6, 7-8, 9-10, 11-12, 13-16, and 17-18. Brackets under the *d* staff group measures (1-2, 3-4, 5-6, 7-8) and (9-10, 11-12, 13-16, 17-18). The *c*, *b*, and *a* staves show the corresponding musical material for each level of the tree.

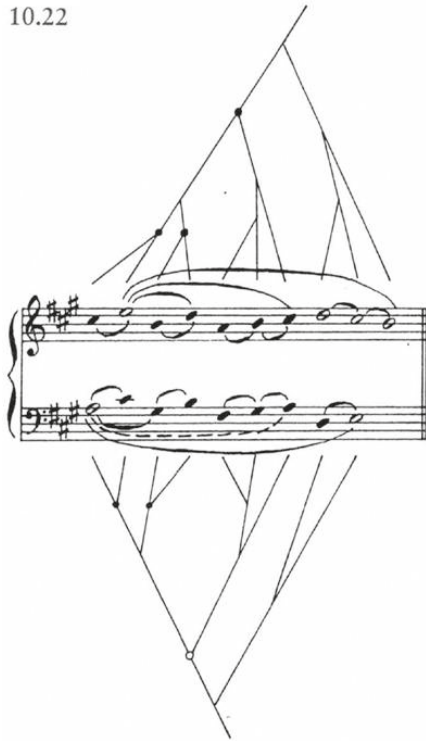
Ex. LJ 7

6.23

Diagram illustrating two hierarchical structures (trees) labeled *a* and *b*. Both trees have a root node *I*. In tree *a*, the root *I* branches to *V I* and *V-I*. A dashed line labeled *Prolongation* connects the two *V* nodes. In tree *b*, the root *I* branches to *V I* and *V-I*. A dashed line labeled *Prolongation* connects the two *I* nodes.

Ex. LJ 9

10.22



Ex. 35 A

Ex. 35 A is a piano exercise in G major, 2/4 time. It consists of two systems of four measures each. The first system shows a treble clef with a melodic line of quarter notes: G4, A4, B4, C5, B4, A4, G4. The bass clef accompaniment consists of a steady eighth-note pattern: G3, B2, D3, E3, G3, B2, D3, E3. The second system continues the melodic line: G4, A4, B4, C5, B4, A4, G4. The bass clef accompaniment remains the same. The piece concludes with a double bar line. Dynamics include *f* (forte) and *p* (piano) markings.

Ex. 35 B

Ex. 35 B is a piano exercise in G major, 2/4 time. It consists of two systems of four measures each. The first system shows a treble clef with a melodic line of quarter notes: G4, A4, B4, C5, B4, A4, G4. The bass clef accompaniment consists of a steady eighth-note pattern: G3, B2, D3, E3, G3, B2, D3, E3. The second system continues the melodic line: G4, A4, B4, C5, B4, A4, G4. The bass clef accompaniment remains the same. The piece concludes with a double bar line. Dynamics include *f* (forte) and *p* (piano) markings.

Ex. 35 C

Ex. 35 C is a piano exercise in G major, 2/4 time. It consists of two systems of four measures each. The first system shows a treble clef with a melodic line of quarter notes: G4, A4, B4, C5, B4, A4, G4. The bass clef accompaniment consists of a steady eighth-note pattern: G3, B2, D3, E3, G3, B2, D3, E3. The second system continues the melodic line: G4, A4, B4, C5, B4, A4, G4. The bass clef accompaniment remains the same. The piece concludes with a double bar line. Dynamics include *f* (forte) and *p* (piano) markings.

Ex. 35 C1

Musical score for Ex. 35 C1, showing a piano piece in G major (one sharp). The score consists of two staves: a treble staff and a bass staff. The melody in the treble staff features eighth-note patterns with slurs and ties, while the bass staff provides a steady accompaniment of eighth notes.

Ex. 35 D1

Musical score for Ex. 35 D1, showing a piano piece in G major. The score consists of two staves: a treble staff and a bass staff. The melody in the treble staff features a series of eighth notes with slurs, and the bass staff provides a steady accompaniment of eighth notes.

Ex. 35 E1

Musical score for Ex. 35 E1, showing a piano piece in G major. The score consists of two staves: a treble staff and a bass staff. The melody in the treble staff features a series of eighth notes with slurs and ties. Roman numerals VI and IV are placed below the bass staff to indicate the harmonic structure.

Ex. 35 F1

Musical score for Ex. 35 F1, showing a piano piece in G major. The score consists of two staves: a treble staff and a bass staff. The melody in the treble staff features a series of eighth notes with slurs and ties. Roman numerals I, V, and I are placed below the bass staff to indicate the harmonic structure. Above the treble staff, there are accents (^) and numbers (3, 2, 3, 2, 1) indicating fingerings or articulation.

Ex. 35 C2

Musical score for Ex. 35 C2, featuring a treble and bass clef with a key signature of two sharps (F# and C#). The piece consists of eight measures. The treble clef contains a melodic line with eighth and sixteenth notes, while the bass clef provides a harmonic accompaniment with chords and moving lines.

Ex. 35 D2

Musical score for Ex. 35 D2, featuring a treble and bass clef with a key signature of two sharps (F# and C#). The piece consists of eight measures. The treble clef contains a melodic line with eighth and sixteenth notes, while the bass clef provides a harmonic accompaniment with chords and moving lines.

Ex. 35 E2

Musical score for Ex. 35 E2, featuring a treble and bass clef with a key signature of two sharps (F# and C#). The piece consists of eight measures. The treble clef contains a melodic line with eighth and sixteenth notes, while the bass clef provides a harmonic accompaniment with chords and moving lines. Roman numerals VI, I, VI, I, IV are written below the bass clef staff.

Ex. 35 F2

Musical score for Ex. 35 F2, featuring a treble and bass clef with a key signature of two sharps (F# and C#). The piece consists of eight measures. The treble clef contains a melodic line with eighth and sixteenth notes, while the bass clef provides a harmonic accompaniment with chords and moving lines. Roman numerals I, VI, V, I, VI, V, I are written below the bass clef staff. Fingerings are indicated by numbers 1, 2, and 3 with hats (^) above the notes.

Ex. 36a

Ex. 36a is a piano piece in 6/8 time with a key signature of two sharps (F# and C#). The score consists of two systems of music. The first system has four measures. The second system starts with a measure number '5' above the treble clef and also has four measures. The piece concludes with a double bar line and repeat dots. The right hand features a melodic line with eighth and sixteenth notes, while the left hand provides a rhythmic accompaniment with eighth notes and chords.

Ex. 36b

Ex. 36b is a piano exercise in 6/8 time with a key signature of two sharps (F# and C#). The score consists of two systems of music. The first system has four measures. The second system has three measures. The piece concludes with a double bar line and repeat dots. The right hand features a melodic line with eighth and sixteenth notes, while the left hand provides a rhythmic accompaniment with eighth notes and chords. Fingerings are indicated by numbers 1-4 above the notes. A dashed line connects the first measure of the first system to the second measure of the second system.

Ex. 35 C3

Musical score for Ex. 35 C3, showing a piano accompaniment in G major. The piece consists of eight measures. The right hand features a melodic line with eighth-note patterns and slurs. The left hand provides a steady bass line with quarter notes and eighth notes.

Ex. 35 D3

Musical score for Ex. 35 D3, showing a piano accompaniment in G major. The piece consists of eight measures. The right hand features a melodic line with eighth-note patterns and slurs. The left hand provides a steady bass line with quarter notes and eighth notes. A Roman numeral 'IV' is placed below the fourth measure.

Ex. 35 E3

Musical score for Ex. 35 E3, showing a piano accompaniment in G major. The piece consists of eight measures. The right hand features a melodic line with eighth-note patterns and slurs. The left hand provides a steady bass line with quarter notes and eighth notes. Roman numerals are placed below the bass line: 'I' under the first measure, 'V I' under the fifth and sixth measures, and 'V I' under the seventh and eighth measures. Accented notes are marked with a caret (^) above them: the fifth note of the first measure, the second and fifth notes of the fifth measure, and the second and first notes of the seventh measure.

Ex. 37 A



Musical notation for Ex. 37 A, starting at measure 9. The piece is in G major (one sharp) and 2/4 time. The right hand features a melodic line with eighth-note patterns and slurs. The left hand provides a harmonic accompaniment with chords and moving bass lines.

Ex. 37 B



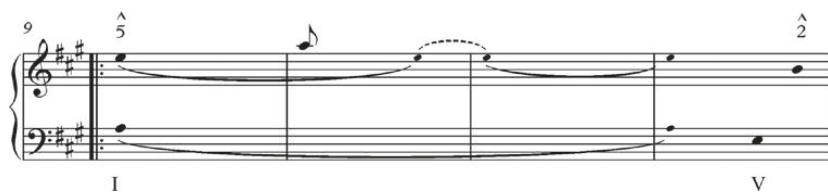
Musical notation for Ex. 37 B, starting at measure 9. The piece is in G major (one sharp) and 2/4 time. The right hand features a melodic line with slurs and ties. The left hand provides a harmonic accompaniment with chords and moving bass lines.

Ex. 37 C



Musical notation for Ex. 37 C, starting at measure 9. The piece is in G major (one sharp) and 2/4 time. The right hand features a melodic line with slurs. The left hand provides a harmonic accompaniment with chords and moving bass lines.

Ex. 37 D



Musical notation for Ex. 37 D, starting at measure 9. The piece is in G major (one sharp) and 2/4 time. The right hand features a melodic line with slurs and ties. The left hand provides a harmonic accompaniment with chords and moving bass lines. Roman numerals I and V are indicated below the bass line, and fingerings $\hat{5}$ and $\hat{2}$ are indicated above the treble clef staff.

Ex. 38 A1

Musical notation for Ex. 38 A1, showing a two-measure phrase in G major. The first measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note, with a slur over the last two notes. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note. The second measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note, with a slur over the last two notes. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note.

Ex. 38 B1

Musical notation for Ex. 38 B1, showing a two-measure phrase in G major. The first measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note. The second measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note.

Ex. 38 C1

Musical notation for Ex. 38 C1, showing a two-measure phrase in G major. The first measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note. The second measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note.

Ex. 38 D1

Musical notation for Ex. 38 D1, showing a two-measure phrase in G major. The first measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note. The second measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note.

IV

Ex. 38 E1

Musical notation for Ex. 38 E1, showing a two-measure phrase in G major. The first measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note, with a slur over the last two notes and a '3' above the slur. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note. The second measure features a treble clef with a G4 quarter note, an A4 quarter note, and a B4 quarter note, with a slur over the last two notes and '^ 2' above the slur and '^ 1' above the final note. The bass clef has a G3 quarter note, an A3 quarter note, and a B3 quarter note.

I

V

I

Ex. 38 A2



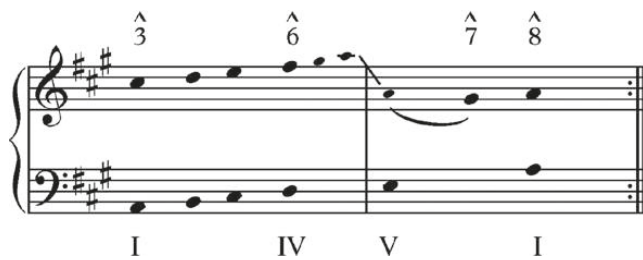
Musical notation for Ex. 38 A2, showing a piano accompaniment in G major. The piece consists of two measures. The first measure features a treble clef with a G4 chord and a melody of G4-A4-B4-C5, and a bass clef with a G2 chord and a bass line of G2-A2-B2-C3. The second measure features a treble clef with a G4 chord and a melody of G4-A4-B4-C5, and a bass clef with a G2 chord and a bass line of G2-A2-B2-C3. The key signature has two sharps (F# and C#).

Ex. 38 B2



Musical notation for Ex. 38 B2, showing a piano accompaniment in G major. The piece consists of two measures. The first measure features a treble clef with a G4 chord and a melody of G4-A4-B4-C5, and a bass clef with a G2 chord and a bass line of G2-A2-B2-C3. The second measure features a treble clef with a G4 chord and a melody of G4-A4-B4-C5, and a bass clef with a G2 chord and a bass line of G2-A2-B2-C3. The key signature has two sharps (F# and C#).

Ex. 38 C2



Musical notation for Ex. 38 C2, showing a piano accompaniment in G major. The piece consists of two measures. The first measure features a treble clef with a G4 chord and a melody of G4-A4-B4-C5, and a bass clef with a G2 chord and a bass line of G2-A2-B2-C3. The second measure features a treble clef with a G4 chord and a melody of G4-A4-B4-C5, and a bass clef with a G2 chord and a bass line of G2-A2-B2-C3. The key signature has two sharps (F# and C#). Above the treble staff, the notes are labeled with fingerings: ^3, ^6, ^7, and ^8. Below the bass staff, the chords are labeled with Roman numerals: I, IV, V, and I.

Ex. 39

Musical score for Ex. 39, measures 46-48. The score is in 3/4 time with a key signature of two sharps (F# and C#). Measure 46 features a complex melodic line in the right hand with slurs and a trill (tr.) in measure 47. The left hand provides a steady accompaniment with chords and single notes.

Ex. 40

Musical score for Ex. 40, a single measure in 6/8 time with a key signature of two sharps. The melody consists of a quarter note followed by an eighth note, ending with a repeat sign.

Ex. 41

Musical score for Ex. 41, a single measure in 6/8 time with a key signature of two sharps. The melody consists of a quarter note followed by an eighth note, ending with a repeat sign.

Ex. 42a

Musical score for Ex. 42a, measures 15-16. The score is in 6/8 time with a key signature of two sharps. It shows a piano accompaniment with chords in the right hand and a melodic line in the left hand. Arrows indicate connections between notes in the two hands.

Ex. 42b

Musical score for Ex. 42b, measures 16-18. The score is in 6/8 time with a key signature of two sharps. It shows a piano accompaniment with chords in the right hand and a melodic line in the left hand. Arrows indicate connections between notes in the two hands. Measure 17 includes a trill (tr.) and a grace note (-8) in the right hand, and a grace note (+8) in the left hand.

Ex. 43 A

Ex. 43 A is a piano piece in D major, consisting of a 12-measure phrase. The right hand features a melodic line with slurs and fingerings (3, 5, 2, 3, 5, 2, 1). The left hand provides harmonic support with chords and fingerings (10, 12). Roman numerals I, V, and I are indicated below the bass staff.

Ex. 43 B

Ex. 43 B is a piano piece in D major, consisting of a 12-measure phrase. The right hand features a melodic line with slurs and fingerings (5, 2, 5, 2, 1). The left hand provides harmonic support with chords and fingerings (3, 7, 3, 7, 1). Roman numerals I, V, and I are indicated below the bass staff.

Ex. 43 C

Ex. 43 C is a piano piece in D major, consisting of a 12-measure phrase. The right hand features a melodic line with slurs and fingerings (5, 2, 5, 2, 1). The left hand provides harmonic support with chords and fingerings (3, 7, 3, 7, 1). Roman numerals I, V, and I are indicated below the bass staff.

Ex. 44 A

Ex. 44 A is a piano accompaniment in G major, consisting of three systems of two staves each. The first system (measures 1-6) features a treble clef with a melodic line and a bass clef with a supporting bass line. Chord symbols below the bass staff are I, V, I, V, I. Fingering numbers are placed above notes: $\hat{3}$ above the first measure, $\hat{2}$ and $\hat{3}$ above the second measure, and $\hat{21}$ above the fifth measure. The second system (measures 7-12) continues the piece with chord symbols I, I, V, I, V. Fingering includes $\hat{5}$ above the first measure, $\hat{5}$ above the second measure, $\hat{3}$ above the fourth measure, and $\hat{2}$ above the fifth measure. The third system (measures 13-16) concludes the example with chord symbols I, IV, V, I. Fingering includes $\hat{3}$ above the first measure, $\hat{6}$ above the second measure, $\hat{7}$ above the third measure, and $\hat{8}$ above the fourth measure.

Ex. 44 B

Ex. 44 B is a piano accompaniment in G major, consisting of three systems of two staves each. The first system (measures 1-6) features a treble clef with a melodic line and a bass clef with a supporting bass line. Chord symbols below the bass staff are I, V, I, V, I. Fingering numbers are placed above notes: $\hat{5}$ above the first measure, $\hat{2}$ above the second measure, $\hat{5}$ above the third measure, and $\hat{21}$ above the fifth measure. The second system (measures 7-12) continues the piece with chord symbols I, V, I, V, I. Fingering includes $\hat{5}$ above the first measure, $\hat{2}$ above the second measure, $\hat{3}$ above the third measure, and $\hat{2}$ above the fifth measure. The third system (measures 13-16) concludes the example with chord symbols I, IV, V, I. Fingering includes $\hat{3}$ above the first measure, $\hat{6}$ above the second measure, $\hat{7}$ above the third measure, and $\hat{8}$ above the fourth measure.

Ex. 45

9

10

1.

5

5

2.

3.

5

3

I

V

Ex. 46

5

3

9

17

3

5

1

I

VI⁷ I

I IV⁶

I

5

3

Ex. 47

Musical notation for Ex. 47, showing a two-staff piece in 6/8 time with a key signature of two sharps (F# and C#). The melody in the treble clef consists of two measures: the first measure contains a dotted quarter note followed by an eighth note, and the second measure contains a quarter note followed by an eighth note. The bass clef accompaniment consists of two measures of chords: the first measure has a dotted quarter note followed by an eighth note, and the second measure has a quarter note followed by an eighth note.

Ex. 48

Musical notation for Ex. 48, a single-staff piece in 6/8 time with a key signature of two sharps (F# and C#). The piece is divided into five measures across five lines of notation. Measure 1 (line 1) starts with a treble clef and a key signature of two sharps. Measure 2 (line 2) is marked with a '5' above the staff. Measure 3 (line 3) is marked with a '9' above the staff. Measure 4 (line 4) is marked with a '13' above the staff. Measure 5 (line 5) is marked with a '17' above the staff and a forte (*f*) dynamic marking below the staff. The notation includes various rhythmic patterns such as eighth and sixteenth notes, and rests.

Chapter 2

Ex. 1a



Ex. 1b



Ex. 1c



Ex. 1d



Ex. 1e



Ex. 1f



Ex. 1g



Musical notation for Ex. 1g, featuring a single staff in 2/4 time with a key signature of two flats. The melody begins with a half note G4, followed by quarter notes A4, Bb4, and C5. A fermata is placed over the G4. The second measure contains a half note G4. The third measure contains quarter notes A4, Bb4, and C5. The fourth measure contains quarter notes D5, E5, and F5. The fifth measure contains quarter notes G5, A5, and Bb5. The sixth measure contains quarter notes C6, Bb5, and A5. The seventh measure contains quarter notes G5, F5, and E5. The eighth measure contains quarter notes D5, C5, and Bb4. The piece concludes with a half note G4. Dynamics include *ff* at the beginning and *p* at the start of the second measure. The bass line consists of sustained chords: G2-Bb2-E2 in the first measure, G2-Bb2-E2 in the second, G2-Bb2-E2 in the third, G2-Bb2-E2 in the fourth, G2-Bb2-E2 in the fifth, G2-Bb2-E2 in the sixth, G2-Bb2-E2 in the seventh, and G2-Bb2-E2 in the eighth.

Ex. 1h



Musical notation for Ex. 1h, featuring two staves in 2/4 time with a key signature of two flats. The top staff contains the melody, and the bottom staff contains the bass line. The melody begins with a half note G4, followed by quarter notes A4, Bb4, and C5. A fermata is placed over the G4. The second measure contains a half note G4. The third measure contains quarter notes A4, Bb4, and C5. The fourth measure contains quarter notes D5, E5, and F5. The fifth measure contains quarter notes G5, A5, and Bb5. The sixth measure contains quarter notes C6, Bb5, and A5. The seventh measure contains quarter notes G5, F5, and E5. The eighth measure contains quarter notes D5, C5, and Bb4. The piece concludes with a half note G4. Dynamics include *ff* at the beginning and *p* at the start of the second measure. The bass line consists of sustained chords: G2-Bb2-E2 in the first measure, G2-Bb2-E2 in the second, G2-Bb2-E2 in the third, G2-Bb2-E2 in the fourth, G2-Bb2-E2 in the fifth, G2-Bb2-E2 in the sixth, G2-Bb2-E2 in the seventh, and G2-Bb2-E2 in the eighth. A measure rest is indicated by a '10' above the staff at the beginning of the second measure.

Ex. 1i



Musical notation for Ex. 1i, featuring a single staff in 2/4 time with a key signature of two flats. The melody begins with a half note G4, followed by quarter notes A4, Bb4, and C5. A fermata is placed over the G4. The second measure contains a half note G4. The third measure contains quarter notes A4, Bb4, and C5. The fourth measure contains quarter notes D5, E5, and F5. The fifth measure contains quarter notes G5, A5, and Bb5. The sixth measure contains quarter notes C6, Bb5, and A5. The seventh measure contains quarter notes G5, F5, and E5. The eighth measure contains quarter notes D5, C5, and Bb4. The piece concludes with a half note G4. Dynamics include *ff* at the beginning. The bass line consists of sustained chords: G2-Bb2-E2 in the first measure, G2-Bb2-E2 in the second, G2-Bb2-E2 in the third, G2-Bb2-E2 in the fourth, G2-Bb2-E2 in the fifth, G2-Bb2-E2 in the sixth, G2-Bb2-E2 in the seventh, and G2-Bb2-E2 in the eighth.

Ex. 1j



Musical notation for Ex. 1j, featuring a single staff in 2/4 time with a key signature of two flats. The melody begins with a half note G4, followed by quarter notes A4, Bb4, and C5. A fermata is placed over the G4. The second measure contains a half note G4. The third measure contains quarter notes A4, Bb4, and C5. The fourth measure contains quarter notes D5, E5, and F5. The fifth measure contains quarter notes G5, A5, and Bb5. The sixth measure contains quarter notes C6, Bb5, and A5. The seventh measure contains quarter notes G5, F5, and E5. The eighth measure contains quarter notes D5, C5, and Bb4. The piece concludes with a half note G4. Dynamics include *ff* at the beginning. The bass line consists of sustained chords: G2-Bb2-E2 in the first measure, G2-Bb2-E2 in the second, G2-Bb2-E2 in the third, G2-Bb2-E2 in the fourth, G2-Bb2-E2 in the fifth, G2-Bb2-E2 in the sixth, G2-Bb2-E2 in the seventh, and G2-Bb2-E2 in the eighth.

Ex. 1k

Musical notation for Ex. 1k, featuring a treble clef and a 2/4 time signature. The piece begins with a dynamic marking of *ff* (fortissimo) and a fermata over the first note. The melody consists of eighth and quarter notes, with a dynamic shift to *p* (piano) in the second measure. The bass line features a steady eighth-note accompaniment with some rests.

Ex. 1l

Musical notation for Ex. 1l, featuring a treble clef and a 2/4 time signature. The melody starts with a dynamic marking of *ff* (fortissimo) and a fermata. The bass line is characterized by a series of chords, with a dynamic marking of *p* (piano) appearing in the fourth measure.

Ex. 1m

Musical notation for Ex. 1m, featuring a treble clef and a 2/4 time signature. The melody includes a dynamic marking of *ff* (fortissimo) and a fermata. The bass line has a complex texture with many beamed notes and rests.

Ex. 1n

Musical notation for Ex. 1n, featuring a treble clef and a 2/4 time signature. The melody starts with a dynamic marking of *ff* (fortissimo) and a fermata. The piece concludes with the word "etc." above the final notes.

Ex. 2a

Ziemlich langsam

p

5

9

13

Ex. 2a (cont)

17 **langsamer**
pp

21

24

27

Ex. 2b

Musical score for Ex. 2b, featuring a treble and bass clef with a key signature of three flats and a 6/8 time signature. The piece consists of four measures. The treble clef part features a melodic line with eighth and sixteenth notes, often beamed together, and includes slurs and accents. The bass clef part provides a harmonic accompaniment with eighth and sixteenth notes, also featuring slurs and accents.

Ex. 2c

Musical score for Ex. 2c, featuring a treble and bass clef with a key signature of three flats and a 6/8 time signature. The piece consists of four measures. The treble clef part features a melodic line with eighth and sixteenth notes, often beamed together, and includes slurs and accents. The bass clef part provides a harmonic accompaniment with eighth and sixteenth notes, also featuring slurs and accents.

Ex. 2d

Musical score for Ex. 2d, featuring a treble and bass clef with a key signature of three flats and a 6/8 time signature. The piece consists of four measures. The treble clef part features a melodic line with eighth and sixteenth notes, often beamed together, and includes slurs and accents. The bass clef part provides a harmonic accompaniment with eighth and sixteenth notes, also featuring slurs and accents.

Ex. 2e

Musical score for Ex. 2e, featuring a treble and bass clef with a key signature of three flats and a 6/8 time signature. The piece consists of four measures. The treble clef part features a melodic line with eighth and sixteenth notes, often beamed together, and includes slurs and accents. The bass clef part provides a harmonic accompaniment with eighth and sixteenth notes, also featuring slurs and accents.

Ex. 3a

①

p

Interp. A :

⑥

Interp. B :

⑫

(A) :

(B) :

⑮

p

Detailed description: This musical score for Ex. 3a is in 2/4 time and consists of four systems. The first system (measures 1-4) is marked *p* and includes a circled measure number 1. Below the staff is the label 'Interp. A' with vertical lines indicating phrasing. The second system (measures 5-8) includes a circled measure number 6 and is labeled 'Interp. B' below. The third system (measures 9-12) includes a circled measure number 12 and has two phrasing lines labeled (A) and (B) below. The fourth system (measures 13-16) includes a circled measure number 15 and is marked *p* again.

Ex. 3b

8

10

(p)

rad. U - ↓U U

cons. U - U -

12

rad. - U - U -

cons. U - ↓U - U -

Detailed description: This musical score for Ex. 3b is in 2/4 time and consists of two systems. The first system (measures 8-11) is marked *(p)* and includes circled measure numbers 8 and 10. Below the staff are two lines of articulation markings: 'rad. U - ↓U U' and 'cons. U - U -'. The second system (measures 12-15) includes a circled measure number 12 and has two lines of articulation markings: 'rad. - U - U -' and 'cons. U - ↓U - U -'.

Ex. 5

44 *Allegretto*

Ex. 6a

Ex. 6b

Ex. 6c

Ex. 6d

Ex. 6e

Ex. 6f

Ex. 7a

(a)

VERSUS

Mezzo

Chord diagrams:

| | | | |
|-------|--------------|---|---|
| I | ————— | V | I |
| not I | —————IV————— | V | I |
| not I | —————IV————— | V | I |

(b)

PT PT

Chord diagrams:

| | | | | |
|---|----|-------|---|---|
| I | IV | ————— | V | I |
|---|----|-------|---|---|

Ex. 7b

5

Ex. 7c

Musical notation for Ex. 7c: A single melodic line on a treble clef staff in G major. The notes are G4, A4, B4, A4, G4, F#4, E4, D4. Fingerings are indicated by ^5, ^4, ^3, ^2, ^1 above the notes. Chord symbols below the staff are I, IV, I, V, I.

Ex. 7d

Musical notation for Ex. 7d: A piano accompaniment in G major. The right hand has a melodic line with slurs and ties. The left hand has a bass line with chords. Chord symbols below the staff are V I, IV I, IV I, V I.

Ex. 7e

Musical notation for Ex. 7e: A single melodic line on a treble clef staff in G major. The notes are G4, A4, B4, A4, G4, F#4, E4, D4. Chord symbols below the staff are E7?

Ex. 7f

Musical notation for Ex. 7f: A piano accompaniment in G major. The right hand has a melodic line with slurs and ties. The left hand has a bass line with chords. Chord symbols below the staff are E7?, D7, S7. Dynamics markings "cf." are above the staff.

Ex. 8a



Ex. 8b



Ex. 8c



Ex. 8d



Ex. 8e



Ex. 8f



Ex. 9a

Musical score for Ex. 9a, measures 27-39. The score is in 3/4 time and consists of three systems. The first system (measures 27-32) begins with a treble clef and a bass clef. The treble staff contains a melodic line with a *cresc.* marking and a *f* dynamic. The bass staff contains a bass line with a *p* dynamic. The second system (measures 33-38) features a *ff* dynamic in the bass staff. The third system (measures 39-44) includes a *fz* dynamic in the bass staff and a *p* dynamic in the treble staff.

Ex. 9b

Musical score for Ex. 9b, measures 29-33. The score is in 3/4 time and consists of one system. The treble staff contains a melodic line with a *f* dynamic at the start, followed by *p* dynamics. The bass staff contains a bass line with a *pp* dynamic. The system concludes with a *ff* dynamic in the bass staff.

Ex. 9c

Musical score for Ex. 9c, measures 29-33. The score is in 3/4 time and consists of one system. The treble staff contains a melodic line with a *f* dynamic at the start, followed by *p* dynamics, and a *ff* dynamic at the end. The bass staff contains a bass line with a *pp* dynamic. The system concludes with a *ff* dynamic in the bass staff.

Ex. 9d

Musical score for Ex. 9d, measures 29-33. The score is in 3/4 time and features a piano (p) dynamic. The right hand plays a melodic line with chords, while the left hand provides a harmonic accompaniment. The piece concludes with a fortissimo (ff) dynamic.

Ex. 9e

Musical score for Ex. 9e, measures 35-40. The score is in 3/4 time and features a piano (p) dynamic. The right hand plays a melodic line with chords, while the left hand provides a harmonic accompaniment. The piece concludes with a fortissimo (ff) dynamic.

Ex. 9f

Musical score for Ex. 9f, measures 29-33. The score is in 3/4 time and features a piano (p) dynamic. The right hand plays a melodic line with chords, while the left hand provides a harmonic accompaniment. The piece concludes with a fortissimo (ff) dynamic.

Ex. 9g

Musical score for Ex. 9g, measures 29-33. The score is in 3/4 time and features a piano (p) dynamic. The right hand plays a melodic line with chords, while the left hand provides a harmonic accompaniment. The piece concludes with a fortissimo (ff) dynamic.

Ex. 9h

Musical score for Ex. 9h, measures 29-37. The score is in 3/4 time and features a piano (p) dynamic. The right hand plays a melodic line with chords, while the left hand provides a harmonic accompaniment. The piece concludes with a fortissimo (ff) dynamic. The score includes a fermata over measure 37 and a dynamic marking of $\hat{9} \rightarrow \hat{7}$.

Chapter 4

Ex. 1 Burkhart

Allegro

A G F E

A enlargement (sim.) G F E

Detailed description: This musical example consists of two staves of music. The top staff is in treble clef with a common time signature. It begins with a series of quarter notes (C4, D4, E4, F4, G4, A4) followed by a half note (B4) and a quarter rest. Above the staff, the letters A, G, F, and E are placed over the notes G4, F4, E4, and D4 respectively. The bottom staff is also in treble clef with a common time signature. It starts with a series of sixteenth notes (C4, D4, E4, F4, G4, A4, B4, C5) followed by a half note (B4) and a quarter rest. Above the staff, the letters A, G, F, and E are placed over the notes G4, F4, E4, and D4 respectively. The word 'enlargement' is written above the first few notes, and '(sim.)' is written below the notes starting from the second measure.

Ex. 2 a/c Rothgeb

1

18

(h)

(b)

Detailed description: This musical example is a piano score consisting of three staves. The top staff is in treble clef with a key signature of two flats and a common time signature. It begins with a series of eighth notes (C4, D4, E4, F4, G4, A4, B4, C5) followed by a half note (B4) and a quarter rest. The middle staff is in bass clef with a common time signature. It begins with a series of eighth notes (C3, D3, E3, F3, G3, A3, B3, C4) followed by a half note (B3) and a quarter rest. The bottom staff is in bass clef with a common time signature. It begins with a series of eighth notes (C3, D3, E3, F3, G3, A3, B3, C4) followed by a half note (B3) and a quarter rest. The number '1' is written above the first measure of the top staff, and '18' is written above the first measure of the middle staff. The letters '(h)' and '(b)' are written below the notes in the bottom staff.

Ex. 3 a/b Rothgeb

34

(h)

(b)

Detailed description: This musical example is a piano score consisting of two staves. The top staff is in treble clef with a key signature of two flats and a common time signature. It begins with a series of eighth notes (C4, D4, E4, F4, G4, A4, B4, C5) followed by a half note (B4) and a quarter rest. The bottom staff is in bass clef with a common time signature. It begins with a series of eighth notes (C3, D3, E3, F3, G3, A3, B3, C4) followed by a half note (B3) and a quarter rest. The number '34' is written above the first measure of the top staff. The letters '(h)' and '(b)' are written below the notes in the bottom staff.

Ex. 3c

Musical score for Ex. 3c, measures 15-20. The score is in 3/8 time and features a melodic line in the right hand and a bass line in the left hand. The key signature has two flats. The right hand melody consists of eighth and quarter notes, with some notes beamed together. The left hand provides a simple harmonic accompaniment. Brackets below the bass line indicate two measures, each labeled with a Roman numeral (V).

Ex. 4 Rothgeb

Musical score for Ex. 4 Rothgeb, measures 53-60. The score is in 3/8 time and features a melodic line in the right hand and a bass line in the left hand. The key signature has two flats. The right hand melody is highly rhythmic and melodic, with many beamed eighth notes. The left hand provides a simple harmonic accompaniment. Brackets below the bass line indicate two measures.

Ex. 5a Rothgeb

Musical score for Ex. 5a Rothgeb, measures 62-65. The score is in 3/8 time and features a melodic line in the right hand and a bass line in the left hand. The key signature has two flats. The right hand melody is highly rhythmic and melodic, with many beamed eighth notes. The left hand provides a simple harmonic accompaniment. Brackets below the bass line indicate two measures.

Ex. 5b

Musical score for Ex. 5b, measures 23-26. The score is in 3/8 time and features a melodic line in the right hand. The key signature has two flats. The right hand melody is highly rhythmic and melodic, with many beamed eighth notes. The tempo marking "Allegro" is present above the first measure. Brackets below the bass line indicate two measures.

Ex 6a Rothgeb (Schenker)

Musical score for Ex 6a Rothgeb (Schenker), measures 1-4. The score is in 3/8 time and features a melodic line in the right hand. The key signature has two flats. The right hand melody is highly rhythmic and melodic, with many beamed eighth notes. Brackets below the bass line indicate two measures.

Ex. 6b

Musical score for Ex. 6b, measures 1-4. The score is in 3/8 time and features a melodic line in the right hand. The key signature has two flats. The right hand melody is highly rhythmic and melodic, with many beamed eighth notes. Brackets below the bass line indicate two measures.

Ex. 7 Rothgeb (Jonas)

Moderato cantabile molto espressivo



Ex. 8 a/b Burkhart (Schenker)

Allegretto



(Adagio)



Ex. 8 c/d

Allegretto (transition)



Allegro



Ex. 9a Rothgeb (Schenker)

Ex. 9a Rothgeb (Schenker) musical score showing three staves. The top staff is a vocal line with a melodic line and a star symbol above it. The middle staff is a piano accompaniment with a bass line and a treble line. The bottom staff is a piano accompaniment with a bass line and a treble line. The score includes measure numbers 74, 79, 81, 84, 88, and 89. Dynamics include *p*, *sf*, and *p*.

Ex. 9b

Ex. 9b musical score showing two staves. The top staff is a vocal line with a melodic line and a star symbol above it. The bottom staff is a piano accompaniment with a bass line and a treble line. The score includes measure numbers 73 and 81. Dynamics include I, IV, I₄, V⁷, I, IV, II, V⁷, and I.

Ex. 10 a/b Rothgeb

Ex. 10 a/b Rothgeb musical score showing three staves. The top staff is a vocal line with a melodic line and a star symbol above it. The middle staff is a piano accompaniment with a bass line and a treble line. The bottom staff is a piano accompaniment with a bass line and a treble line. The score includes measure numbers 25, 29, 33, 34, and 37. Dynamics include *fe* and (1).

Ex. 10c

25

33

6

1

6

1

Ex. 11a Burkhart (Oster)

first theme

1

2

closing theme

140

Ex 11b

(Allegro)

5

140

144

a

c

a

b

c

a

b

c

Ex. 12 a/b Réti

Moderato cantabile**FUGA***Allegro ma non troppo*

Ex. 12 c/d Mitchell

(Moderato cantabile) (end)*Allegro ma non troppo*

Ex. 13a Burkhart

Ex. 13b

Ex. 14 a/b Rothgeb

The image displays a musical score for 'Ex. 14 a/b Rothgeb'. It consists of several systems of music. The first three systems are piano accompaniment, each with a grand staff (treble and bass clefs). The first system includes a '1' above the first measure and a fermata over the final measure. The second system features a '7' above the first measure. The third system has a '7' above the first measure and a fermata over the final measure. The fourth system is a single-staff violin part, starting with a '1' above the first measure and a fermata over the final measure. Below this is a bar numbering system: 'bar 1' is under the first measure, '2' under the second, '3' under the third, '4' under the fourth, '5' under the fifth, '6' under the sixth, and '7' under the seventh. The final system shows a detailed piano accompaniment with a grand staff, including a dashed box around measures 3-7 and a specific fingering '(4-5-4-5-4-3)' indicated above the bass line.

Ex. 15a Burkhart (Schenker)

Menuetto
Allegretto

contraction

I 5/3 6/4 -5 -3 V I

Ex. 15 b

Allegretto

Ex. 15 c/d

(Allegretto)

29

(Allegretto)

15

Ex. 17 Burkhart

Ex. 17 Burkhart is a musical score consisting of four staves. The key signature is three flats (B-flat, E-flat, A-flat), and the time signature is 3/4. The first staff features a melodic line with a long slur over the first four measures, followed by a more active line. The second and third staves are primarily chordal, with some rhythmic patterns. The fourth staff continues the chordal texture with some melodic fragments.

Ex. 18 a/c Rothgeb

Ex. 18 a/c Rothgeb is a piano score with two systems. The first system shows a treble clef staff with a triplet of eighth notes (bar 34), a sixteenth-note pattern (bar 41), and a sixteenth-note pattern (bar 43). The second system shows a grand staff (treble and bass clefs). The treble clef staff has markings for *p* (piano), *sfp* (sforzando), and *dolce* (dolce). Bar numbers 34, 41, 43, 47, 49, 52, 56, 58, and 60 are indicated. Performance markings include *p*, *sfp*, and *dolce*. A *(vic)* marking is present above bar 56. A long slur covers the bass clef staff from bar 52 to bar 60.

Ex. 19 Rothgeb (Schenker) vs. Edlund

Musical score for Ex. 19, showing two systems of piano music. The first system contains measures 1-16, divided into 'Sch 1' and 'Sch 2'. The second system contains measures 17-24, divided into 'Sch 3' and ending with a fermata 'N'. The score includes Schenkerian annotations: 'a' for phrase structure, 'b' for sub-phrases, 'c' for sub-phrases, 'd' for sub-phrases, 'e' for sub-phrases, and 'f' for sub-phrases. A triplet '3' is marked above measure 10.

Ex. 20a (Burkhardt)

Musical score for Ex. 20a (Burkhardt), showing a single melodic line. The notes are labeled with phonetic symbols: t, x, y, ty, x1, x2, yi.

Ex. 20b

Musical score for Ex. 20b, showing two systems of piano music. The first system contains measures 1-6, and the second system contains measures 7-12. The score includes Schenkerian annotations: 'x1' for phrase structure, 't' for sub-phrases, 'x' for sub-phrases, 'x2' for phrase structure, 'y' for sub-phrases, 'ty' for sub-phrases, and 't' for sub-phrases.

Ex. 20c

Musical score for Ex. 20c, showing two systems of piano music. The first system contains measures 19-24, and the second system contains measures 25-30. The score includes Schenkerian annotations: 'x1' for phrase structure, 't' for sub-phrases, 'x1' for phrase structure, 't' for sub-phrases, 'yi' for sub-phrases, 't' for sub-phrases, 'x1' for phrase structure, 't' for sub-phrases, and 'y' for sub-phrases.

Ex. 21 a/d Rothgeb

bar 34 36 41 46

pp *f*

bar 36 41 46 49 36 48 49

F: I F: I⁵

168 170 180 184

fp *f*

bar 170 175 182 183 184

I II V I II V

Ex. 21 e/f

Two systems of piano accompaniment in 6/8 time. The first system shows a treble clef staff with a melodic line and a bass clef staff with a bass line. The second system continues the piece with similar notation.

Ex. 21g

Three systems of piano accompaniment in 6/8 time. The first system starts at measure 230 and includes dynamic markings *p* and *f*. The second system starts at measure 236 and includes a *p* marking. The third system starts at measure 241 and includes markings *p*, *calando*, and *pp*. The piece concludes with a double bar line.

Ex. 22 a/c Rothgeb

Allegro Siciliano e scherzando

The score consists of four systems of music. The first system shows the beginning of the piece in G major, 6/8 time, with a tempo of *Allegro Siciliano e scherzando*. The piano part features a rhythmic accompaniment of eighth notes, while the violin part has a melodic line with slurs. The second system includes dynamic markings of *p* and *f* in both parts. The third system is marked with bar numbers 1, 7, and 8. The fourth system is a close-up of a fingering exercise for the violin, showing a sequence of notes with fingerings I, IV^b, and V[#].

Ex. 22d

The score consists of two systems of music. The first system shows a melodic line in the violin part with a slur and a fingering of *n* (natural). The piano part has a simple accompaniment. The second system shows a more complex melodic line in the violin part with slurs and fingerings of *n* and *(n)*. The piano part includes first and second endings, marked with *1.* and *2.*.

Ex. 23a Burkhart

Musical notation for Ex. 23a, showing a single staff with a treble clef, key signature of two flats, and a common time signature. The music starts at measure 5 and features two triplet eighth notes followed by a quarter note, and then a quarter note followed by a triplet eighth note. A bracket spans the first two measures.

Ex. 23b

Musical notation for Ex. 23b, showing a grand staff with treble and bass clefs, key signature of two flats, and a common time signature. The music includes a section marked "enlargement" and various fingering numbers and symbols. Above the staff, fingering numbers are circled: 49, 55, 61, 63, 69, 71, 73, 74, 75, 76, 77, 78, and 81. Below the staff, there are symbols: III⁵ ·, 6 - (5) 6 - (5) 6, - 6 (IV), and V.

Ex. 23 c

Musical notation for Ex. 23c, showing two staves with a treble clef, key signature of two flats, and a common time signature. The music includes slurs and arrows indicating phrasing. Measure numbers 49 and 55 are indicated at the start of the first and second staves respectively.

Ex. 24 Burkhart

Musical score for Ex. 24 Burkhart, showing a single melodic line in treble clef. The key signature is three sharps (F#, C#, G#) and the time signature is 2/4. The score is divided into four systems:

- System 1: Measures 1-7. Measure 1 has a triplet of eighth notes marked with a ^ and 3 above. Measure 2 has an N ornament. Measure 3 has a 1 below the first note.
- System 2: Measures 8-16. Measure 16 has a #2 below the second note.
- System 3: Measures 17-24. Measure 17 has a V below the first note. Measure 23 has an N ornament. A dashed line indicates a slur over measures 17-24.
- System 4: Measures 25-30. Measure 25 has an N ornament. Measures 33, 39, 43, and 46 are marked above the notes.

Ex. 25 Burkhart vs. Edlund

Musical score for Ex. 25 Burkhart vs. Edlund, showing two systems of piano accompaniment in treble and bass clefs. The key signature is three sharps (F#, C#, G#) and the time signature is 2/4. The score is divided into two systems:

- System 1: Measures 38-57. Measure 38 has a treble clef. Measure 58 has a bass clef. A double bar line is between measures 57 and 58.
- System 2: Measures 61-72. Measure 61 has a treble clef. Measure 72 has a bass clef. A double bar line is between measures 71 and 72.

Arrows and brackets indicate phrasing and connections between measures across systems.

Ex. 26 Burkhart

Motive

mm
Narrator (32) "Du liebes Kind" (58) "Willst keiner Knabe" (87) "Ich liebe dich" (112) (117) (123) (129) (131) Nar.

I trans. III trans. IV trans. I^b II V I^b - II⁶ V I

Detailed description: This musical example shows a melodic motive in bass clef with a 7-measure span. Below it, the same motive is transposed to various positions and registers, indicated by Roman numerals (I, III, IV, I^b, II, V) and the word "trans.". German lyrics are written under the notes, with circled measure numbers (32, 58, 87, 112, 117, 123, 129, 131) marking specific instances of the motive. The characters "Narrator" and "Nar." are also indicated.

Ex. 27a David

1 2 3 4 5

56/244

6 7 8 9 10

Detailed description: This example consists of two systems of musical notation. The first system shows five notes on a treble clef staff, numbered 1 through 5. Below this, a melodic line is written in a 2/4 time signature, starting with a treble clef and a common key signature. The second system shows notes 6 through 10 on a treble clef staff, with a corresponding melodic line below it.

Ex. 27b

Detailed description: This example shows a single melodic line in treble clef with a common key signature. The line consists of a sequence of notes and rests, including some beamed eighth notes and sixteenth notes.

Chapter 5

Exs. 1a, 1b1, 1c1: *Liederkreis* Op. 98, 1, *An die Hoffnung* Op. 32, and *Les Adieux* Sonata Op. 81a Ex. 2 a/c Rothgeb

Musical notation for Ex. 1a, showing a piano piece in 3/4 time with a treble and bass staff.

Musical notation for Ex. 1b1, showing a piano piece in 3/4 time with a treble and bass staff, marked *p*.

Musical notation for Ex. 1c1, showing a piano piece in 2/4 time with a treble and bass staff, marked *p espressivo*, with the lyrics "Le - - be wohl!".

Exs. 1b2, 1c2

Musical notation for Ex. 1b2, showing a piano piece in 3/4 time with a treble and bass staff, with German lyrics:

, der ei-ne zar-le See-le quält,
ver-ü-del die Er- inn-rung stütz:
die letz-ten Strah-len un-ter-gehn:

Musical notation for Ex. 1c2, showing a piano piece in 2/4 time with a treble and bass staff, marked *p*.

Exs. 1b3, 1c3

Exs. 1b3, 1c3

Exs. 1b4, 1c4

Exs. 1b4, 1c4

Exs. 2a1, 2b, 2a2: sketch for *Liederkreis* Op. 98, 1 and *An die Hoffnung* Op. 32

Exs. 2a1, 2b, 2a2: sketch for *Liederkreis* Op. 98, 1 and *An die Hoffnung* Op. 32

Exs. 3 a/d: *Les Adieux* Sonata Op. 81a and *Liederkreis* Op. 98, 1

The image displays four systems of musical notation for piano and voice. The first system (measures 17-20) features a complex piano accompaniment with sixteenth-note patterns and triplets. The second system (measures 21-24) includes a vocal line with a *pp* dynamic marking and a *attaca subito l'Allegro* instruction. The third system (measures 25-28) shows a vocal line with a dashed box indicating a phrase. The fourth system (measures 29-32) continues the piano accompaniment with a dashed box under the bass line.

Exs. 4 a/b: *Liederkreis* Op. 98, 1 and *La Tiranna* WoO 125

The image displays three systems of musical notation for piano and voice. The first system (measures 1-4) shows a vocal line with a melodic line and a piano accompaniment. The second system (measures 5-8) features a more complex piano accompaniment with sixteenth-note patterns. The third system (measures 9-12) continues the piano accompaniment with a melodic line in the bass.

Exs. 5 a/ar: *Tremate* Op. 116

Exs. 5 br/b: *Liederkreis* Op- 98, 1

Exs. 6 a/6ar, 6d, 6b/6br, 6c/6cr: *Liederkreis* Op. 98, 1 and Piano Trio Op. 1, 3, II, third and second variations

First system of musical notation for Ex. 6a/6ar, showing a piano and right-hand part in 3/4 time with a key signature of two flats.

Second system of musical notation for Ex. 6a/6ar, including harmonic analysis labels: I, II_6 to V, I, 6, and $IV V_8-7 \begin{smallmatrix} 6-5 \\ 4-3 \end{smallmatrix}$ to I.

Small musical notation fragment showing a chord progression with labels: I, II_3 , II_6 , or IV.

Third system of musical notation for Ex. 6a/6ar, including harmonic analysis labels: I, II to V, I, 6, and II_6 to $V_8-7 \begin{smallmatrix} 6-5 \\ 4-3 \end{smallmatrix}$ - I.

Exs. 10 a/d: *Maigesang*, Op. 52, 4. Piano Trio Op. 1, 3 II, theme and var. 2, *Liederkreis*, Op. 98, 1

The first system of musical notation shows a piano trio in 2/4 time, key of B-flat major. The right hand (treble clef) plays a melody with eighth and quarter notes, while the left hand (bass clef) provides a harmonic accompaniment. Fingerings are indicated with 'i' and 'ii' in the right hand and 'i' in the left hand. A breath mark 'y' is placed above the first measure, and a fermata 'z' is placed above the second measure.

The second system continues the piano trio. The right hand melody features a sequence of eighth notes and quarter notes. Fingerings 'i' and 'ii' are shown. A breath mark 'y' is above the first measure, and a fermata 'z' is above the second measure. A slur '(ii)' is placed over the first two measures of the right hand. In the left hand, a slur '(i)' is placed over the first two measures, and a breath mark 'y' is below the first measure.

The third system shows a violin (vln.) and a cello/bass (vc. 8va bassa) part. The violin part has a complex rhythmic pattern with sixteenth and thirty-second notes. A breath mark 'y' is above the first measure, and a fermata 'z' is above the second measure. The cello/bass part is a simple accompaniment. A breath mark 'y' is below the first measure.

The fourth system shows the piano trio continuing. The right hand melody has a more active eighth-note pattern. Fingerings 'i' and 'ii' are shown. A breath mark 'y' is above the first measure, and a fermata 'z' is above the second measure. The left hand accompaniment includes some triplet markings '4 3' and '4 3' in the bass clef. A breath mark 'y' is below the first measure.

Exs. 11 a/e: Liederkreis Op. 98, 6, Maigesang Op. 52,4, prelude, Liederkreis Op. 98, 1, Fourth Symphony op. 60. II, Liederkreis Op. 98, 6

Exs. 12r/12 Mozart Piano Sonata K- 333, II

Musical score for Exs. 12r/12 Mozart Piano Sonata K- 333, II. The score is in 3/4 time with a key signature of two flats (B-flat and E-flat). It consists of two staves: a treble staff and a bass staff. The treble staff contains a melodic line with a dashed line above it labeled 'N' (Nebeneinander). The bass staff contains a bass line with chords labeled I, II⁶, V, I, and II. The dynamic marking 'cf.' is present in the third measure.

Andante cantabile

Musical score for **Andante cantabile**. The score is in 3/4 time with a key signature of two flats (B-flat and E-flat). It consists of two staves: a treble staff and a bass staff. The treble staff contains a melodic line with a dashed line above it labeled 'N' (Nebeneinander). The bass staff contains a bass line with chords labeled I, II⁶, V, I, and II. The dynamic marking 'cf.' is present in the third measure.

Exs. 13 alg: *Liederkreis* Op. 98. 1, 2, 3, 4, 5, 6, Coda

I

II

III

IV

V

Exs. 13 ar/fr/gr: reductions

The image displays six staves of musical notation, each with specific annotations and fingerings:

- Staff 1 (VI):** Labeled 'VI' at the start. It begins at measure 26. The first measure contains a triplet of eighth notes. The rest of the staff features a melodic line with various articulations. Annotations include 'q' (quarter note), '2' (finger), '1a' (finger), 'p' (piano), and '2' (finger).
- Staff 2:** Labeled '31' at the start. It begins with 'piano intr.'. The staff contains a melodic line with articulations. Annotations include '1' (finger), '4' (finger), '3' (finger), '1a' (finger), and 'p' (piano).
- Staff 3 (Coda):** Labeled 'Coda' at the start. It begins with a whole note. The staff contains a melodic line with articulations. Annotations include '1' (finger), '3 (1a)' (finger), and '1' (finger).
- Staff 4 (I):** Labeled 'I' at the start. It begins with a whole note. The staff contains a melodic line with articulations. Annotations include '1' (finger), '5' (finger), '1a' (finger), '2' (finger), '3' (finger), and '5' (finger).
- Staff 5 (VI):** Labeled 'VI' at the start. It begins with a whole note. The staff contains a melodic line with articulations. Annotations include '1a' (finger), '3' (finger), '1a' (finger), 'p' (piano), 'p' (piano), 'p' (piano), and 'p' (piano).
- Staff 6 (Coda):** Labeled 'Coda' at the start. It begins with a whole note. The staff contains a melodic line with articulations. Annotations include '1' (finger), '5' (finger), and '3/1a' (finger).

Chapter 6

Ex. 1

Langsam und zart Warum?

The musical score is written for piano and voice. It is in 2/4 time and marked "Langsam und zart". The key signature has three flats (B-flat major or D-flat minor). The score is divided into six systems, each with a vocal line on top and a piano accompaniment on the bottom. The piano part features complex chordal textures, often with arpeggiated figures and sustained chords. The vocal line is melodic and expressive, with various ornaments and dynamics. Performance markings include "rit." (ritardando), "p" (piano), and "A" (accents). The score includes measure numbers 7, 14, 21, 29, and 36.

Ex. 2a

Ex. 2a is a musical score in 2/4 time, featuring a key signature of three flats (B-flat, E-flat, A-flat). The score is written for piano and consists of two staves: a treble staff and a bass staff. The treble staff contains a melodic line with a slur over the first two measures and a fermata over the final two notes. The bass staff provides harmonic support with chords and single notes, including a prominent bass line in the final measure.

Ex. 2b

Ex. 2b is a musical score in 2/4 time, featuring a key signature of three flats (B-flat, E-flat, A-flat). The score is written for piano and consists of two staves: a treble staff and a bass staff. The treble staff contains a melodic line with a slur over the first two measures and a fermata over the final two notes. The bass staff provides harmonic support with chords and single notes, including a prominent bass line in the final measure.

Ex. 2c

Ex. 2c is a musical score in 2/4 time, featuring a key signature of three flats (B-flat, E-flat, A-flat). The score is written for piano and consists of two staves: a treble staff and a bass staff. The treble staff contains a melodic line with a slur over the first two measures and a fermata over the final two notes. The bass staff provides harmonic support with chords and single notes, including a prominent bass line in the final measure. The score includes dynamic markings such as accents (>) and hairpins (< and >) in the bass staff.

Ex. 3a

Grillen

Mit Humor

Chord symbols: (VI), V, (V'), I/IV, V, V, I

Ex. 3b

(Mit Humor)

Ex. 4

or:

Ex. 5

39 **Mit Humor**

The musical score for Ex. 5 begins at measure 39. It is written for piano and consists of two staves: a treble clef staff for the right hand and a bass clef staff for the left hand. The key signature has two flats (B-flat and E-flat), and the time signature is 3/4. The tempo/mood is indicated as "Mit Humor". The right hand part features a melodic line with a long slur spanning measures 39 through 42. The left hand part provides a harmonic accompaniment with chords and single notes. The score concludes with a double bar line and a repeat sign.

Chapter 7

Exs. 1, 1 a/c: Haydn, Symphony no. 94

Three staves of musical notation in 2/4 time. The first staff has arrows pointing to a 'C' and a 'G7' chord. The second and third staves continue the melodic line.

Ex. 2 Mozart, *Eine kleine Nachtmusik*

Single staff of musical notation in 3/4 time with fingerings 1, 2, 3 and 1, 2, 3. Arrows point to 'G' and 'D7' chords.

Exs. 3, 3 a/c: Tchaikovsky, Swan Lake

Four staves of musical notation in 3/4 time. Fingerings 1, 2, 3, 4 and 1, 2 are shown. Accents (^) are placed over notes. Arrows point to 'G' and 'D7' chords.

Exs. 4, 4 a/c: Kálmán, Csardasfürstin

$\hat{1}$ $\hat{2}$ $\hat{3}$ $\hat{2}$ $\hat{1}$
 I V I
 $\hat{1}$ $\hat{5}$ $\hat{4}$ $\hat{3}$
 I V I

Ex. 5, Cuckoo theme

C G⁷ C

Exs. 5a/b: Icecream tune and variant

$\rightarrow 6$
 1 2 3
 C G⁷ C

$\rightarrow 4$
 1 2 3
 C G⁷ C

Ex. 6 Riff 1 – Landslaget (EMI) *Tala om vart du skall resa*

Exs. 7 a/f Tonal patterns

Ex. 8 Possible continuations

Musical notation for Ex. 8. The notation is on a single staff in treble clef with a common time signature (C). The first measure contains the notes G4, A4, B4, and C5. The second measure contains the notes C5, B4, A4, and G4. The third measure contains the notes G4, A4, B4, and C5. The fourth measure contains the notes C5, B4, A4, and G4. The fifth measure contains the notes G4, A4, B4, and C5. The sixth measure contains the notes C5, B4, A4, and G4. The seventh measure contains the notes G4, A4, B4, and C5. The eighth measure contains the notes C5, B4, A4, and G4. The notation is labeled with 'C' below the second measure and 'a or F' below the eighth measure.

Exs. 9 a/k First-phrase alternatives

Eight musical staves showing first-phrase alternatives for Ex. 9. Each staff is in treble clef with a common time signature (C). The first measure of each staff contains the notes G4, A4, B4, and C5. The second measure contains the notes C5, B4, A4, and G4. The third measure contains the notes G4, A4, B4, and C5. The fourth measure contains the notes C5, B4, A4, and G4. The fifth measure contains the notes G4, A4, B4, and C5. The sixth measure contains the notes C5, B4, A4, and G4. The seventh measure contains the notes G4, A4, B4, and C5. The eighth measure contains the notes C5, B4, A4, and G4.



Exs. 10 a/h Melodic doubles



Ex. 11 a/d Harmony and melodic identity



Ex. 12 Riff 1 – Landslaget (EMI) *Tala om vart du skall resa*

5

C a C a

C F C G⁷ C

Ex. 13 Riff 2 – Drängarna (Regatta) *Om du vill bli min fru*

5

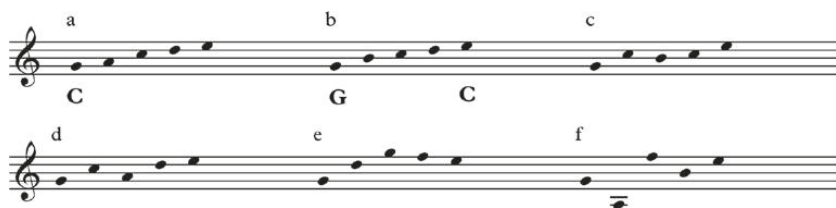
C F* C F*

C F G^{7*} C

Exs. 14 a/c Some equi-probable 11-note melodies



Exs. 15 a/f Some equiprobable 5-note melodies



Ex. 16a Oxdansen

Musical notation for Ex. 16a Oxdansen. It consists of a single staff in treble clef with a common time signature. The melody is written in eighth and quarter notes. Chords are indicated below the staff: C, G, and C. There are annotations 'Ox' above the first measure and 'y' below the first measure.

Ex. 16b Refrain 2

Musical notation for Ex. 16b Refrain 2. It consists of two staves in treble clef with a common time signature. The melody is written in eighth and quarter notes. Chords are indicated below the staff: C, F, C, F, C, F, C, G7, C. There are annotations 'Ox' above the first measure, '*' above the second measure, 'x' below the second measure, '5' above the third measure, and 'z' below the fourth measure.

Ex. 16c Riff 2

Musical notation for Ex. 16c Riff 2. It consists of two staves in treble clef with a common time signature. The melody is written in eighth and quarter notes. Chords are indicated below the staff: C, F, C, F, C. There are annotations 'Ox' above the first measure, 'x' below the first measure, 'y' below the second measure, '5' above the second measure, '*' above the third measure, 'z' below the fourth measure, and '!' above the fifth measure.

Ex. 16d Verse 2

Musical notation for Ex. 16d Verse 2. It consists of three staves in treble clef with a common time signature. The melody is written in eighth and quarter notes. Chords are indicated below the staff: C, G, C, G, C, G, C, F, C, G, C, G, C. There are annotations 'p' above the first measure, '(q)' above the second measure, '9' above the third measure, '17' above the fourth measure, 'OhS' above the fifth measure, 'p' above the sixth measure, and '!' above the seventh measure.

Ex. 16e Oh Susanna

Musical notation for Ex. 16e Oh Susanna. It consists of three staves in treble clef with a common time signature. The melody is written in eighth and quarter notes. Chords are indicated below the staff: C, D7, G, C, G7, C, C, D7, G, C, G7, C, F, C, G, C, G7, C. There are annotations 'p' above the first measure, 'q' above the second measure, 'y' below the first measure, '9' above the third measure, '17' above the fourth measure, and 'OhS' above the fifth measure.

Ex. 17a Riff 1

Ex. 17a Riff 1 consists of two staves of music in C major. The first staff contains four measures of music. The first measure has a C chord. The second measure has an 'a' (fingered 5) and a C chord. The third measure has a C chord. The fourth measure has an 'a' (fingered 5) and a C chord. The second staff contains five measures of music. The first measure has a C chord. The second measure has an 'F' chord. The third measure has a C chord. The fourth measure has a G7 chord. The fifth measure has a C chord. A '5' is written above the first measure of the second staff.

Ex. 17b Refrain 1

Ex. 17b Refrain 1 consists of two staves of music in C major. The first staff contains six measures of music. The first measure has a C chord. The second measure has an 'F' chord. The third measure has a C chord. The fourth measure has an 'F' chord. The fifth measure has a G chord. The sixth measure has a C chord. The second staff contains six measures of music. The first measure has an 'F' chord. The second measure has a C chord. The third measure has an 'a' (fingered 5). The fourth measure has an 'F' chord. The fifth measure has a G chord. The sixth measure has a C chord. A '5' is written above the first measure of the second staff.

Ex. 17c Verse 1

Ex. 17c Verse 1 consists of two staves of music in C major. The first staff contains nine measures of music. The first measure has a C chord. The second measure has an 'a' (fingered 9). The third measure has a C chord. The fourth measure has an 'a' (fingered 9). The fifth measure has a C chord. The sixth measure has an 'F' chord. The seventh measure has a C chord. The eighth measure has a G7 chord. The ninth measure has a C chord. The second staff contains nine measures of music. The first measure has an 'a' (fingered 9). The second measure has a C chord. The third measure has an 'a' (fingered 9). The fourth measure has a C chord. The fifth measure has an 'F' chord. The sixth measure has a C chord. The seventh measure has a G7 chord. The eighth measure has a C chord. A '9' is written above the first measure of the second staff.

Exs. 18 a/i Mistakable riffs



Ex. 19 Mistakable jingles



Ex. 20 Old MacDonald



Chapter 8

Ex. 1

Allegretto

The musical score is written for piano in 3/4 time. It begins with a treble clef and a key signature of two flats (B-flat and E-flat). The tempo is marked 'Allegretto'. The score is divided into two systems. The first system contains measures 11 through 19. The second system contains measures 20 through 29. The music features a variety of dynamics, including piano (*p*), mezzo-forte (*f*), fortissimo (*ff*), pianissimo (*pp*), and mezzo-piano (*mp*). There are also markings for *q* and *fp*. Performance markings include 's' (sustained), 'ys' (y-staccato), 'z' (zaccato), and 'xc' (x-crescendo). Measure 29 includes a triplet of eighth notes.

2

37

xc

ys

ys

fp

pp

xm

q

cresc.

46

ys

xc

p

f

p

pp

58

z

s

xm

f

f

q

ff

68

z

z

p

fp

pp

Ex. 2

10

Musical score for Ex. 2, measures 10-13. The piece is in 3/4 time with a key signature of three flats. The first measure (10) features a forte (*f*) dynamic. The second measure (11) has a piano (*p*) dynamic. The third measure (12) is also piano (*p*). The fourth measure (13) continues the piano (*p*) dynamic. The score includes a grand staff with treble and bass clefs, with various chordal textures and melodic lines.

Ex. 3

45

Musical score for Ex. 3, measures 45-48. The piece is in 3/4 time with a key signature of three flats. The first measure (45) has a piano (*p*) dynamic. The second measure (46) is piano (*p*). The third measure (47) is forte (*f*). The fourth measure (48) is forte (*f*). The score includes a grand staff with treble and bass clefs, with various chordal textures and melodic lines.

Ex. 4

65

Musical score for Ex. 4, measures 65-70. The piece is in 3/4 time with a key signature of four sharps. The first measure (65) has a fortissimo (*ff*) dynamic. The second measure (66) is fortissimo (*ff*). The third measure (67) is fortissimo (*ff*). The fourth measure (68) is piano (*p*). The fifth measure (69) is piano (*p*). The sixth measure (70) is piano (*p*). The score includes a grand staff with treble and bass clefs, with various chordal textures and melodic lines.

Ex. 5

10

Musical score for Ex. 5, measures 10-13. The piece is in 3/4 time with a key signature of three flats. The first measure (10) has a forte (*f*) dynamic. The second measure (11) is forte (*f*). The third measure (12) is piano (*p*). The fourth measure (13) is piano (*p*). The score includes a grand staff with treble and bass clefs, with various chordal textures and melodic lines.

Exs. 6 a/j Reharmonizations of the seminal phrase

Example 6a: A piano score in 3/4 time, key of B-flat major. The right hand plays a series of chords: B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), and B-flat major (F4, A4, Bb4). The left hand plays a bass line: Bb2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter).

Example 6b: A piano score in 3/4 time, key of B-flat major. The right hand plays a series of chords: B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), and B-flat major (F4, A4, Bb4). The left hand plays a bass line: Bb2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter).

Allegretto

Example 6c: A piano score in 3/4 time, key of B-flat major. The right hand plays a series of chords: B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), and B-flat major (F4, A4, Bb4). The left hand plays a bass line: Bb2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter). A dynamic marking *p* is present in the first measure of the right hand.

Example 6d: A piano score in 3/4 time, key of B-flat major. The right hand plays a series of chords: B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), and B-flat major (F4, A4, Bb4). The left hand plays a bass line: Bb2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter).

Example 6e: A piano score in 3/4 time, key of B-flat major. The right hand plays a series of chords: B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), B-flat major (F4, A4, Bb4), and B-flat major (F4, A4, Bb4). The left hand plays a bass line: Bb2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter), F2 (quarter), G2 (quarter).

Exs. 6 a/j: Continued

The first system of musical notation consists of a grand staff with a treble clef and a bass clef. The key signature has three flats (B-flat, E-flat, A-flat), and the time signature is 3/4. The music begins with a whole chord in the treble clef. The bass clef part features a sequence of notes: a half note, a quarter note, a quarter note, and a half note, with a slur over the last two notes.

The second system continues the musical notation. The treble clef part has a whole chord followed by a half note and a quarter note. The bass clef part continues with a half note, a quarter note, and a half note, with a slur over the last two notes.

The third system of musical notation shows the continuation of the piece. The treble clef part includes a whole chord, a half note, and a quarter note. The bass clef part continues with a half note, a quarter note, and a half note, with a slur over the last two notes.

The fourth system of musical notation continues the piece. The treble clef part has a whole chord, a half note, and a quarter note. The bass clef part continues with a half note, a quarter note, and a half note, with a slur over the last two notes.

The fifth and final system of musical notation concludes the piece. The treble clef part begins with a piano (*p*) dynamic marking, followed by a whole chord, a half note, and a quarter note. The bass clef part continues with a half note, a quarter note, and a half note, with a slur over the last two notes.

Ex. 7

Ex. 8

Ex. 9 Harmonic synopsis

mm. 1-2 6c 6h 6i

mm. 17-18

substitution/transformation

mm. 62-68

mutation replacement

redefinition

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