BECKETT AND MEDIA

EDITED BY

BALAZS RAPCSAK, MARK NIXON AND PHILIPP SCHWEIGHAUSER



Beckett and media



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Edited by Balazs Rapcsak, Mark Nixon and Philipp Schweighauser

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Introduction

Balazs Rapcsak and Mark Nixon

Given the never-ending debates about the definition of the concept in media studies, it may seem peculiar that in Beckett studies the term 'media' has acquired a relatively stable meaning. When Linda Ben-Zvi published her insightful essay 'Samuel Beckett's Media Plays' in 1985, it consolidated an understanding of the term that has dominated discussions ever since. On the one hand, this understanding promises to be abundantly clear: 'plays written for a medium other than the stage; seven for radio, five for television, and one for film' (22). On the other hand, we should also note how a sharp contrast is drawn between these different technologies and the institution of theatre or, for that matter, literature, tacitly excluding the latter from the domain of media. At the same time, the phrasing harbours an unsettling - but for us all the more interesting - contradiction, since it implicitly defines 'the stage' as a medium as well. One could of course argue that these slight inconsistencies, which ripple through the pages of the essay, are well within the scope of the word's everyday meaning, were we not called upon to commit ourselves to a categorisation of Beckett's work on this very basis.

If we follow this prevalent usage typified by Ben-Zvi's essay, we subscribe to a notion of media borrowed from communication studies. It refers to those twentieth-century technologies which function as channels of mass communication carrying 'content' to an audience, and which gave rise to more or less clearly distinguishable art forms (film, radio play, television play). Useful as this notion was in the early reception of Beckett's work, this volume argues that the time is ripe for a reconsideration. If the volume thus aims to challenge the consensus, it does so not in order to replace the established notion (in fact, the second section is devoted in its entirety to radio, film and television), but to critically reflect on the use of the term, thus both expanding its field of application and specifying its meaning in particular contexts.

In many ways, Beckett criticism has followed the author's own desire to keep genres 'distinct', as he told his American editor Barney Rosset in 1957,

in an attempt to avoid cross-medial transpositions (Beckett, 2014, 63-4). The same reluctance to allowing adaptations is evident in a letter that Beckett wrote to his American director Alan Schneider (14 September 1974). in which he confessed to having a 'bee in [his] bonnet about mixing media' (Beckett, 1998, 320). It is noteworthy that scholars have similarly focused their studies on individual media in which Beckett mainly worked: film, television, radio and - in the broader sense of the word - theatre. There have thus been numerous studies of Beckett's work within these media, especially in terms of his theatrical output. As such there have also been dedicated studies of Beckett's TV plays, such as monographs by Graley Herren (Samuel Beckett's Plays on Film and Television; 2007) or Jonathan Bignell (Beckett on Screen: The Television Plays; 2009), and a growing number of essays. Beckett's work in film and his relationship with cinema has similarly spawned a variety of approaches, including Anthony Paraskeva's Samuel Beckett and Cinema (2017). Beckett's radio plays have also increasingly become the object of scholarly attention, with books such as Samuel Beckett and BBC Radio: A Reassessment (edited by David Addyman, Matthew Feldman and Erik Tonning; 2017) revealing Beckett's work and interest in this medium. In Germany, however, several publications have focused on Beckett as a media artist more generally, as Michael Lommel's Samuel Beckett: Synästhesie als Medienspiel (2006) or the essay collection Samuel Beckett und die Medien (2008), edited by Peter Seibert, testify. And in 2011, Gaby Hartel and Michael Glasmeier collected translations of older publications and original essays in The Eye of Prey: Essays zu Samuel Becketts Film- und Fernseharbeiten. These scholarly approaches have been complemented by various testimonies and essays written by practitioners, who have given valuable insight into Beckett's media practices.

In the last decade, scholarly attention has increasingly turned to an examination of Beckett as a multimedial or intermedial artist. A pioneering study in this field is Clas Zilliacus's Beckett and Broadcasting: A Study of the Works of Samuel Beckett for and in Radio and Television, published as early as 1976 but not expanded upon for several decades. However, recent work, such as the special issue of Samuel Beckett Today / Aujourd'hui entitled 'Beckett and Intermediality / Beckett, artiste intérmedial' (2020), has examined the way that Beckett, despite his earlier protestations, increasingly encouraged and actively pursued an intermedial practice in the last two decades of his creative career. Contemporary criticism also focuses on the way Beckett's works have been interpreted and staged in adaptations, intermedial productions and virtual environments, as outlined for example in Nicholas Johnson and Jonathan Heron's Experimental Beckett: Contemporary Performance Practices (2020). In short, 'the intermedial dialogue happening both within Beckett's own practice and within the creative

work it has inspired' has become a dominant topic within current research (McTighe, 2020, xx).

What these recent inquiries into intermediality indicate, among other things, is that the stability of the term 'medium' in Beckett studies is deceptive: and what is more, that this may be in congruence with, if not the result of, a similar dynamic in Beckett's own work. As Jonathan Bignell points out in his contribution to this volume, 'the fact that Beckett's work seems explicitly interested in the specificities of a medium's identity might in fact be a lure that leads instead towards the volatilisation of the notion of medium itself'. We are thus invited to investigate more closely how media function in and in relation to Beckett's work, and the purpose of this volume is to rise to that challenge. The appeal to media theory, however, is not motivated by the desire to arrive at a clarification of the term that would apply across the board to Beckett's work. This is not only due to the complexity of Beckett's output, but also to the fact that the field of media studies is characterised by a high degree of internal division, a multiplicity of research traditions, thematic foci and methodologies, which we have strived to reflect in our line-up of contributors.

Indeed, even a cursory glance at a haphazard medley of prominent early theorists of media, never mind the proliferation of more recent debates, will give us a sense of how hopeless it would be to attempt a general definition of the concept. Roads (for Marshall McLuhan), waiting rooms (for Vilém Flusser) or love (for Niklas Luhmann) – these and many more far-flung entities have qualified for such a designation. While proposing a re-examination of what could be considered a reductive understanding of the term in Beckett studies, this volume is wary of a completely laissez-faire attitude, careful not to contribute to an emptying out of the concept, which has become a much-discussed fear in recent years. On the contrary, our contributors seek to bring the concept into sharper focus – in distinctly Beckettian contexts.

Our focus is on media of perception, communication, representation and data processing: those actions, operations, technical artefacts and institutions that enable interaction across distances of time and space, shaping both contents and participants. But within this broad framework, each chapter explores a unique issue from a distinctive disciplinary vantage point. What these analyses have in common is a willingness to take a step back and peek behind the surface effects of representation, to scrutinise the infrastructural foundations and material processes that undergird them. They all share the conviction that we need to transcend the fixation on the discursive aspects of culture. This commitment is in step with a larger trend within Beckett studies, exemplified by Steven Connor's affirmative restatement of Alain Badiou's plea for a shift in paradigm: 'in urging that we follow Beckett in moving beyond *The Unnamable*, Badiou is also urging a move beyond

the kind of language-centred post-structuralist criticism that finds in *The Unnamable* its most complete statement of principle' (Connor, 2010, xxii).

The wide-ranging approaches featured in this volume converge in an emerging fascination with the following question: in what ways is Beckett's work mediated? This question has as many facets as there are reasons for its increasing urgency. To begin with, there is the famously self-reflexive Beckettian aesthetic, fundamentally concerned with the artificiality and materiality of representation. This may be well known when it comes to Beckett's dealings with language, but it is equally true of the 'media plays', which require persistent 'attention to the conventions of signification in the medium, redressing its more usual tendency towards cultural 'oblivion' (Bignell), and 'foreground[ing] the virtuality of what appears on the screen' (Maude). But the contributions also prompt us to recognise that Beckett's questioning of the conditions of representation goes further than these long-noted medium-specific formal concerns. As Julian Murphet argues in Chapter 9 on Quad, for example, the TV play can be seen as 'as an allegory of the underlying technical matrix of its production'. Beckett, therefore, deserves our media-analytical attention because he was one of those artists who 'grasped that the truth of their work in the twentieth century lay not (or not only) in the elaborate semiology of their articulated sign-systems, but in the underlying processes that would convey those systems from A to B, in the material infrastructure of information itself' (Murphet).

But if Beckett's works are metamedial in the sense that they thematise their own formation, continually foregrounding, interrogating and negotiating their own conditions of emergence, then one question that needs to be addressed is whether this kind of self-observation has its specific limits. One of the few widely agreed-on principles among scholars of media is the claim that media enable perception only at the expense of hiding themselves from perception. To what extent, then, can the functioning of a medium be analysed and displayed in the very same medium? Wolfgang Ernst takes up this issue, contending that the plays themselves 'can only reveal the phenomenological effects induced by technologies', and we need scholarly analyses 'immersed in the technical artefactuality' to understand them not as 'symptoms of an aesthetic discourse' but as 'instantiation[s] of the technological unconscious in culture'. In what is also a spirited debate between two vigorous attempts to define media, Armin Schäfer challenges this view, describing how, through techniques of exhaustion. Beckett may have succeeded in inventing ways of 'lay[ing] bare the dispositif that is inherent in a particular medium'.

In addition to these questions which, as it were, arise from within Beckett's work, there is also a growing understanding among scholars of the general importance of the media-historical contexts in which cultural products are created, interpreted and continue to be made available. In the case of Beckett,

knowledge about these contexts is becoming more and more critical as our distance from his work grows and digital culture increasingly becomes our home. As the chapters by Ernst, Murphet, Kittler and Rapcsak indicate, reconstructing the by-now obsolete techno-historical circumstances of Beckett's literary, theatrical and televisual output may in fact be indispensable to understanding their poetics, and could provide vital insights for those interested in performing or adapting these works. Bignell, Johnson and Van Hulle tackle the problem from the opposite angle, inquiring into digitisation and the exceedingly practical, and at the same time theoretical, questions it raises for both practitioners and scholars today.

Concerning the challenges posed by growing media-historical distance, there is an interesting dialogue happening between the chapters by Ernst and Johnson, reframing the familiar debate around the ongoing conflict between strict control – whether exerted by Beckett or the Estate – and the freedom to experiment that many practitioners hanker for. According to Ernst, plays like *Krapp's Last Tape* ought to be treated as media art whose logic and effects are dependent on the specific technologies employed, and therefore performers should take an interest in 'the preservation of original reel-to-reel tape machines from previous performances of the drama for contemporary enactment', while adaptations should be guided by the media aesthetic present in the 'techno-cultural subconscious' of the originals. Johnson, however, encourages adaptations across different media, seeing them as a means through which 'the experimental heritage of Beckett's own work is reinvigorated, and the work is opened to a new generation accessing Beckett through new media'.

Similarly, there is a vibrant discussion going on across many of the chapters reflecting the unique theoretical alignments and methodologies of their authors. This, however, is not to be thought of as an inconsistency of the volume but as an attempt to provide a *tour d'horizon* of scholarly engagement with media in Beckett and Beckett in media today, demonstrating the multiplicity of productive approaches to this complex set of issues. At the same time, the volume does not shy away from the provocative or, at times, even the polemic. The chapters could be arranged on a continuum from the close reading of Beckett's texts to a historical analysis of their technological conditions. The latter end of the spectrum is represented by Ernst and Murphet, whose chapters show what can be gained by 'resist[ing] all the thematic lures' (Murphet) in Beckett and adopting 'a different method of analysis' (Ernst), one that is diametrically opposed to hermeneutic interpretation, analysing instead what is sometimes described as the 'technological a priori' of cultural manifestations. As Murphet provocatively asserts, 'it would be perfectly accurate to state that not humanists but engineers are the true bearers of cultural understanding today, as they have been for the last 100 years'.

While other chapters, especially those by Bignell, Johnson, Kittler, Rapcsak and Harries, endeavour to show the possibility – and perhaps even necessity – of combining a close reading of Beckett's literary, theatrical and filmic texts with an inquiry into their embeddedness in, and engagement with, historically specific technologies of mediation, these two chapters draw a sharp line between signs and signals, between literary representation and electronic media, between interpretation and data processing, and ultimately, between literary criticism and media studies – juxtapositions whose seductiveness and continuing influence doubtless owe much to the work of figures like Marshall McLuhan and, especially, Friedrich Kittler.

Kittler was the key figure in the development of what has come to be known as 'new German media theory', often prefixed with the phrase 'so-called', indicating that the label really only has descriptive value outside German-speaking academia, and that in reality we are dealing with several different schools of thought (Horn, 2007; Winthrop-Young, Iurascu and Parikka, 2013). German media theory became consolidated as an academic discipline from the mid-1980s onwards, achieving international renown in the 2000s. The types of scholarship practised under its aegis are rich and diverse. The two most prominent varieties, however, are represented in this volume by Ernst and Schäfer. While Ernst is a leading exponent of 'media archaeology', Schäfer is an eminent literary scholar more closely associated with the school that developed the notion of 'cultural techniques'.

This book thus brings together a variety of specialists, familiar to those in Beckett studies, who have focused on the nexus between Beckett and media, while providing a platform for scholars working in media studies who have demonstrated a strong interest in his work. But in addition to the diversity of voices and perspectives, the volume is also designed to include in its discussion a wide range of Beckett's works, both in terms of genres and time span. The historical periods explored range from the midnineteenth century to our present. The chapters follow the evolution of media technologies, starting before Beckett's lifetime. As Wolf Kittler shows in the opening chapter, 'Beckett's Watt returns, as it were, to the origins of modern signalling systems', reimagining the moment in which there 'emerges the first glimmer of a primordial telecommunication system'. While the novel is written from the horizon of 'a world of universal connectivity', its 'long meditations on stimuli and signals [...] are a search for lost time, a time in which signals were just being invented and in which the absolute solitude of an Odysseus on his raft was still possible'. The final chapter by Van Hulle, in turn, envisages future possibilities for examining Beckett's oeuvre using computational tools.

The genres considered are indicated in the part titles. These groupings, however, do not simply follow the analytical separation of genres, which,

as mentioned earlier, was for a long time common in Beckett criticism. The conversation across the parts is almost as intense as that within them. Part I, as a whole, argues that Beckett's literary and theatrical work is just as relevant for media theory (and vice versa) as his radio and screen work. The chapters gathered here collectively testify that if the term 'media play', as we have seen, is conventionally reserved in Beckett studies for those works that Beckett wrote for the technological media of radio, film and television, it reflects a categorisation that runs the risk of committing itself to an all too rigid and unreflecting definition of 'medium', precluding productive perspectives on works by Beckett that belong to other genres. These chapters make a case for a hospitable attitude towards alternative approaches to questions of mediation in Beckett. To be sure, the first step in this direction is to resist the urge for a premature definition of 'medium'. avoiding its reduction to either means of artistic production or technologies of broadcasting and cinema. In fact, media technologies are present in Beckett's work across genres and art forms. And, if we understand media as technical artefacts or operations dependent upon material actualisation, they can be staged as objects or processes in the diegetic world of literary and theatrical representations too.

Wolf Kittler (Chapter 1) offers a reading of Watt that connects the novel to Beckett's critique of Proust's memoire involontaire as a Pavlovian conditioned reflex, seeing it as an exploration of the radical alternative of total freedom. Meticulously analysing Watt's varied attempts to bring together Mr Knott's leftover food with a dog, he shows how these experiments recreate the early history of signals from optical telegraphy to railway and traffic signals up to wireless telegraphy. Along the way, Kittler probes the ethical dimensions of what it means for sentient beings to be controlled by signalling systems. Armin Schäfer (Chapter 2) investigates the nexus between the exhaustion of alternatives and the invention of unforeseen possibilities in Beckett, drawing on Gilles Deleuze's essay 'L'Épuisé' and insights from the history of physiology and psychiatry. This chapter reframes Beckett's muchdiscussed aesthetic of impoverishment in media-theoretical terms. Cautioning against their reduction to specific apparatuses, which are 'constantly evolving and changing', Schäfer argues for an understanding of media as 'means to render something visible and audible that would otherwise be beyond perception', which Beckett achieves by exhausting the possibilities of the medium, 'stripping it down to its inherent dispositif'. In what will probably strike scholars of literature and theatre as the most unorthodox approach featured in this volume, Wolfgang Ernst (Chapter 3) demonstrates how his brand of media archaeology can enrich discussions of Beckett's work. Focusing on the tape recorder in Krapp's Last Tape, and especially on the cognitive and affective irritations produced by the electro-acoustic manipulation of time,

this chapter examines the question of what constitutes genuine media theatre and what methodologies are suitable for its analysis, if textual interpretation and the traditional toolkit of the humanities in general fall short in the face of signal-processing technologies, Balazs Rapcsak (Chapter 4) discusses Beckett's lifelong search for ways of 'switching off' the medium, with its tendency to separate what it connects, and attaining silence. Exploring Beckett's artistic experimentation with symbolic logic, Boolean algebra, alternating currents, electric switches and incandescent light bulbs, he links these related developments to the early history of digital technology to inquire into Beckett's engagement with the connections between literary representation and electronic data processing. This chapter suggests that the lesser-known stage play Fragment de théâtre II offers a unique site to observe these issues and their intertwinement with the questions of bird speech and the divine language, testifying to Beckett's continuing quest for the other of signification. Closing Part I and at the same time providing a transition to Part II, Martin Harries (Chapter 5) makes a plea for an integrated history of media, contending that Beckett's commitment to the proscenium arch can only be understood when recognising the changed situation of theatre in an era in which the pictorial frame, which lay at the heart of the proscenium's subjectifying power, 'had migrated to the ubiquitous media of film and television'. Through a Brechtian refunctioning of the proscenium stage, Harries argues, Beckett developed theatrical strategies to scrutinise the ideological effects of mass media.

The second section homes in on Beckett's 'media works' in the conventional sense, which is not to say that the readings themselves are conventional. Still concerned with the relationship between theatre and broadcast media, Pim Verhulst (Chapter 6), drawing on Anna McMullan's work, shows how Beckett's encounter with radio changed his ideas about drama in general, and embodiment in particular, in his later work for the stage. Re-examining this transformation through the notions of remediation and intermediality, Verhulst's analysis chimes nicely with Harries's critique of a media history pursued 'as a matter of discrete technologies', providing further support for a comparative discussion of different genres and media.

The subsequent chapters by Philipp Schweighauser and Ulrika Maude serve as a balance to Julian Murphet's more radical approach presented afterwards. Probing the affective and social dimensions of Beckett's screen works, they demonstrate the possibilities of formal or thematic interpretation, highlighting some of the many ways in which it can make these works speak to our current cultural situation. Schweighauser (Chapter 7) unpacks the significance of the fact that Beckett named the key aesthetic device in *Film* 'angle of immunity'. Combining a medical-historical contextualisation of the film with Jacques Derrida's and Roberto Esposito's reflections on community,

immunity and autoimmunity, he argues that 'in Film, Beckett explores the deleterious consequences of a vision of life that the immunological revolution of his time brought into being'. Maude (Chapter 8), in turn, discusses four of Beckett's television plays (Ghost Trio, . . . but the clouds . . ., Nacht und Träume and Eh Joe), foregrounding the tension between their 'evacuated subjectivity and abstracted form' and their powerful affective undertones. She concludes that, while constantly interrogating the capabilities of televisual representation, these plays are able to 'both provoke and dismantle affect', challenging viewers to question their notions about empathy in art.

Iulian Murphet (Chapter 9) makes a powerful case for the need to extend the methodological repertoire of the humanities to include the analysis of signal-processing technologies in addition to the interpretation of signs. In arguing this point, he shows that at the heart of Beckett's Ouad is the technical issue of colour compatibility between monochrome and colour TV sets. In Murphet's reading, the play turns out to be 'mimetic not of any human or subjective dimension, but of' what Beckett called 'TV technicalities', the posthumanist domain of electromagnetic transmission between machines. Finally, Jonathan Bignell (Chapter 10) compares Walter Asmus's 1986 TV version of Was Wo, shot for television sets using cathode ray tubes and broadcast in 625-line video, with his reworking of the play in HD digital format in 2013, reflecting on the role of texture and the aesthetics of black in Beckett's television dramas. Complementing his analysis with a look at the screen plays Beckett made in the 1960s and 1970s, Bignell highlights the importance of changing technologies in the production and reception of these works, and shows how they probe the representational capabilities of TV as a medium, challenging the conventions associated with it.

If it is indeed true, as the chapters in their engagement with Beckett's work repeatedly demonstrate, that media of perception and knowledge production inevitably inscribe themselves into what they help to process or generate, then that applies to this volume too. It features academic prose as a medium of reflection, presenting concepts and arguments in written form, which determines its organisation, scope and limits. But we want to acknowledge and highlight the fact that there are alternative media of knowledge production, which occupy an increasingly prominent place in the study of Beckett's work too. The final part of the volume is dedicated to the discussion of these alternative forms of scholarly engagement, drawing on the experiences of two eminent practitioners.

The first chapter reports on experimental performances understood as practice-as-research, while the second chapter explores and envisions new possibilities of investigating Beckett's work that have emerged in the framework of the digital humanities. Sketching the production history of *Play*, Nicholas Johnson (Chapter 11) shows that, first, Beckett himself was

'immensely flexible in his approach to this play's form', and that, second, Play seems to inherently invite adaptations, requiring performers to inquire into the nature of their target medium. After discussing early adaptions to analogue film and radio and a second wave of digital experiments in the 1990, Johnson gives us a first-hand account of his own recent experimentation with Play in the form of a live webcast from a robotic camera (Intermedial Play, 2017), virtual reality (Virtual Play, 2017–19) and augmented reality (Augmented Play, 2018-19). Pointing out that Beckett's works have not yet been published in a critical edition, Dirk Van Hulle (Chapter 12) proposes a pioneering digital complete works edition of Beckett that would allow us to see how this 'oeuvre effectively works as an oeuvre (rather than as a set of separate texts)'. His argument is built around the insight that editorial concepts are conditioned by the media in which they are practised; print media and digital tools alike prescribe certain ways of conceiving how an author's works relate to one another, determining the scope of discoveries interpreters can make. Incorporating material such as Beckett's drafts, notes, marginalia and proofs, and providing the tools necessary for various forms of macroanalysis, this project would open up a new realm of interpretative possibilities.

As a whole, this volume on media in Beckett and Beckett in media aims to make the term's inherent fuzziness, or its protean evasiveness, productive by inviting contributors to develop their own notions at the intersections of their disciplinary foci and their analyses of Beckett's artistic practice. Thus, instead of positing a fixed and narrowly defined media concept at the outset, the chapters analyse the rich variety of technical objects, semiotic arrangements, communication processes and forms of data processing that Beckett's work so uniquely engages with, as well as those that – in historically changing configurations – determine the continuing performance, the audience reception and the scholarly study of this work. The purpose of this bottom–up approach is to allow Beckett's work to provide incisive but unpredictable answers to our questions concerning mediation. Our hope is that in staging a dialogue between Beckett studies and media studies, the discussion presented in this volume will open up fresh perspectives in both fields.

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I

Literature and theatre

In search of times gone by: Stimuli, signals and wireless telegraphy in Beckett's novel Watt

Wolf Kittler

'Habit is the ballast that chains the dog to his vomit', Beckett writes in his essay on Proust, published in 1931 (1965, 19). Each element of this metaphor, even the vomit, is a quote from Ivan Pavlov's studies on the digestive glands of dogs. Only their combination is Beckett's invention. The parameters of a typical experiment conducted at the Imperial Institute for Experimental Psychology in St Petersburg under Pavlov's direction are described in the following paragraph:

We come now to consider the precise conditions under which new conditioned reflexes or new connections of nervous paths are established. The fundamental requisite is that any external stimulus which is to become the signal in a conditioned reflex must overlap in point of time with the action of an unconditioned stimulus. In the experiment which I chose as my example the unconditioned stimulus was food. Now if the intake of food by the animal takes place simultaneously with the action of a neutral stimulus which has been hitherto in no way related to food, the neutral stimulus readily acquires the property of eliciting the same reaction in the animal as would food itself. This was the case with the dog employed in our experiment with the metronome. On several occasions this animal had been stimulated by the sound of the metronome and immediately presented with food -i.e. a stimulus which was neutral of itself had been superimposed upon the action of the inborn alimentary reflex. We observed that, after several repetitions of the combined stimulation, the sounds from the metronome had acquired the property of stimulating salivary secretion and of evoking the motor reactions characteristic of the alimentary reflex. (Pavlov, 1927, 26)

During the experiments, the dogs were chained to a scaffold.¹ In one of them they were repeatedly injected with morphine, which, as Pavlov explains, produces 'nausea with profuse secretion of saliva, followed by vomiting, and then profound sleep' (Pavlov, 1927, 35). And in the end, Pavlov could formulate a simple law: 'It is obvious that the different kinds of habits based

on training, education and discipline of any sort are nothing but a long chain of conditioned reflexes' (395).

In Beckett's reading, 'the action of involuntary memory', which, in Proust's novel À la recherche du temps perdu, 'is stimulated by the negligence or agony of Habit', is as 'persistent and monotonous' (Beckett, 1965, 35–9) as the repetitive pattern of Pavlov's experiments on conditioned reflexes.

About two decades later, in his novel *Watt*,² Beckett returns to the problem of memory and habit, but under a different name and under different conditions. What was called habit is now a set of rigid rules, and the food to which the dog is chained is not his vomit, but a certain Mr Knott's leftover food, which does, however, have the consistency of vomit, as we will see. Among the title character's duties in Mr Knott's service are the following tasks. Every Saturday, he must prepare and cook a sufficient quantity of food 'to carry Mr Knott through the week'. This dish is to be 'served to Mr Knott, at twelve o'clock noon sharp and at seven p.m. exactly all year round' (Beckett, 1970, 88). Watt's instructions are 'to give what Mr Knott left of this dish, on the days that he did not eat it all, to the dog' (91). And that dog's attendance is, finally, 'required, not at any odd hour of the day or night that it might fancy to drop in, no, but between certain definite limiting hours, and these were, eight o'clock p.m. and ten o'clock p.m.' (92).

While it may be true, as the first sentence of the whole passage states, that 'Mr Knott's meals gave very little trouble' (87), the disposal of his leftovers turns out to be a nightmare of complications for two reasons. First, there is 'no dog in the house, that is to say, no house-dog, to which the food could be given, on the days that Mr Knott did not require it' (91). Second, it is impossible to predict whether there will be leftover food on any given day, and if any, how much. Confronted with the randomness, or shall we, in reference to one of Beckett's earliest works, call it the έλευθερία,³ the absolute freedom of Mr Knott's eating 'habits', the dog has no chance of ever forming a habit regarding the consumption of the former's leftover food. Thus, instead of asking how a dog would respond to a series of identical stimuli, Beckett invents a scenario that comes remarkably close to the thought experiments which telecommunication engineers were conducting between the 1920s and 1940s, the time when Beckett started his book on Proust and finished his novel Watt. In a paper on 'The Transmission of Information', published in 1928, the radio engineer Ralph Hartley suggested that in order 'to establish a measure of information in terms of purely physical quantities', it was 'desirable [...] to eliminate the psychological factors involved', and he continued as follows:

To illustrate how this may be done consider a hand-operated submarine telegraph cable system in which an oscillographic recorder traces the received messages

on a photosensitive tape. Suppose the sending operator has at his disposal three positions of a sending key which correspond to applied voltages of the two polarities and to no applied voltage. In making a selection he decides to direct attention to one of the three voltage conditions or symbols by throwing the key to the position corresponding to that symbol. The disturbance transmitted over the cable is then the result of a series of conscious selections. However, a similar sequence of arbitrarily chosen symbols might have been sent by an automatic mechanism which controlled the positions of the key in accordance with the results of a series of chance operations such as a ball rolling into one of three pockets. (Hartley, 1928, 536–7)

Like Mr Knott's appetite, Hartley's ball produces a time series of absolute uncertainty, or, to phrase it in terms of Claude E. Shannon's 'A Mathematical Theory of Communication', published in 1948, a series of maximum entropy. And just like the engineers, Beckett is testing the capacity of an information channel. But instead of using a random number generator in order to get rid of 'psychological factors', he eliminates these factors by introducing the unpredictability of a human being's freedom. Instead of 'an oscillographic recorder' which 'traces the received messages on a photosensitive tape', he imagines a Paylovian dog at the other end of the channel. And the object that is to be transmitted over this channel is not a series of voltages, but a special dish which duplicates, so to speak, the randomness of Mr Knott's appetite. It consists not of a carefully chosen set of ingredients, but of a hotchpotch of heterogeneous components: all kinds of meat, beverages, medicines, preservatives, but no sweets. And instead of being divided into subsets, which, in the traditional European cuisine, are to be kept apart from each other either within the space of the table or over the course of the meal, all of these ingredients are 'well mixed together [...] and boiled for hours, until the consistence of a mess, or poss, was obtained' (Beckett, 1970, 87). It is a recipe for culinary entropy, or, to phrase it more concretely, for a dish that has the consistency of vomit.

In Beckett's novel, this dish is one of three variations on the theme of food. There is, first, the 'consecrated wafer', at the beginning of the text, which, if eaten by a rat, opens a can of worms for Thomist theologians (Beckett, 1970, 28–9). At the other end is the occasional 'plumb young rat', which Watt and his friend, the narrator, after having first fed it with all kinds of 'tidbits', end up feeding, 'after its repast', 'to its mother, or its father, or its brother, or its sister, or to some less fortunate relative' (155–6). In each of these two scenarios, an animal breaks one of the fundamental dietary laws of Western European culture. One, only humans are allowed to eat a consecrated wafer. And two, thou shalt not eat thy own kind and kin. But if the Creed of Chalcedon was right in stating that Christ 'must be acknowledged [...] in two natures' that 'came together in one Person

and one hypostasis' (Denzinger, 2012, 109),⁶ then rats and humans are not so different from each other as one might like to think. Rats eating their own relatives simply replicate what humans do when they celebrate the Eucharist, and humans celebrating the Eucharist are doing what rats tend to do.

Dogs, on the other hand, for whom Watt 'had no love [...], greatly preferring rats' (115), stand for another dietary law that regulates the relation between humans and domestic animals. It is not about the restrictions on the use of food, but about its preparation: only animal feed can be indiscriminately mixed and mashed. And since this is exactly what happens to Mr Knott's food, it is only consequent that it ends up being served to the dog. And then, the following question arises:

By what means then were the dog and the food to be brought together, on those days on which, Mr Knott having left all or part of his food for the day, all or part of the food was available for the dog? (93)

Watt's answers to this question range between two extremes: a dog that would never find it 'worth its while' (94) to call regularly on Mr Knott's house because a random series of leftover food cannot trigger a conditioned reflex, and the prediction that 'very likely very soon a real live famished dog as large as life was coming night after night as regular as clockwork' (100), which Beckett, in a storyteller's sleight of hand, finally, fulfils. Between these extremes, that is, in the span between a probability of zero and one that the dog and the food will be brought together, Watt considers a series of intermediate solutions, each of which is characterised by an increase in complexity and hence countered by an increasing number of objections, and all of which are, finally, replaced by Mr Knott's own, radically different solution to the problem.

Solution number one: Find an 'exceptional hungry or starving dog [...] that for reasons best known to itself would have considered it worth its while to call at the house, in the manner required' (94). Two objections: 1) 'Chances of finding such a dog's existing were small'; 2) The likelihood of finding it, 'if it did exist, were slight' (94).

Solution number two: Select an 'ill-nourished local dog [...] to which with the consent of its proprietor all or part of Mr Knott's food might have been brought, by one of Mr Knott's men' (75). Three objections: 1) Might this not be, for Mr Knott's men, too challenging a task?; 2) Was there 'any guarantee of the dog's being in, when the man arrived?' (75); 3) Was there any guarantee that the dog would be hungry at the exact moment of the man's arrival?

Solution number three: employ a messenger 'to call at the house every evening at say eight fifteen o'clock in the evening on which food was available for the dog to take that food to the dog, to any dog, and to stand over that

dog until it had eaten the food, and if it could not or would not finish the food to take what remained of the food to another dog', etc. etc. (95). Four objections: 1) Was there 'any guarantee that the messenger would indeed give the food to the dog'? (95); 2) What 'would happen if the messenger [...] failed to call on the house on an evening when food was available for the dog?' (96); 3) Would the messenger be able to bring the pot back in time; 4) 'But was a dog the same thing as the dog?' (96).

Solution number four: 'A man possessed of a famished dog might have been sought out, whose business brought him, accompanied by his dog, past Mr Knott's house every evening of the year, between the hours of eight and ten.' In this case, the situation could be signalled to the passing man by means of alternating lights – red, 'or perhaps better green', to indicate the presence, and violet, 'or perhaps better no light at all', to indicate the absence of food for the dog (96). Five objections: 1) Does such a man exist?;

- 2) Can he be found?; 3) Might he not confuse the different signals?;
- 4) Might not Knott's servant make mistakes when setting up these signals?;
- 5) Might this not be, for Mr Knott's men, too challenging a task?

The long and meticulous descriptions of the various solutions to 'the problem of how to bring the dog and the food together' (93), amount to a history of telecommunication media in nuce. At first, Watt assumes that a dog which has found food at Mr Knott's doorstep more than one time would acquire the habit of returning to that place again and again. Yet, since the rate at which Mr Knott's leftovers become available is too irregular to trigger a conditioned reflex, Watt considers another solution. Instead of expecting the dog to come looking for the food, one of Mr Knott's men is to seek out the dog and provide it with the food. Yet, since this may be too much of a burden for Mr Knott's men, Watt thinks of introducing a third party, a messenger who mediates between the food and the dog. While there is no doubt that this arrangement already meets the criteria of a telecommunication system, albeit a primitive one, it is important to note that rather than transferring information, this messenger would transport food, that is, a real object, or, in the terminology of economics, freight. And because it is uncertain what might happen to the food in this case, Watt finally decides to use signals instead of a messenger. As if building this system up from scratch, he envisions not one, but several possible options:

A man possessed of a famished dog might have been sought out, whose business brought him, accompanied by his dog, past Mr Knott's house every evening of the year, between the hours of eight and ten. Then on those evenings, on which food was available for the dog, in Mr Knott's window, or some other conspicuous window, a red light would be set, or perhaps better a green, and on all other evenings a violet light, or perhaps better no light at all, and then the man (and no doubt after a little time the dog too) would lift his eyes

to the window as he passed, and seeing a red light, or a green light, would hasten to the housedoor and stand over his dog until his dog had eaten all the food that Mr Knott had left, but seeing a violet light, or no light at all, would not hasten to the door, with his dog, but continue on his way, down the road, with his dog, as though nothing had happened. (Beckett, 1970, 96–7)

Both the man and the dog lift their eyes to the window where the light is displayed, but the dog takes a little longer because, for the animal, this light is neither a signal nor a symbol, but a stimulus that triggers a conditioned reflex only after having been repeatedly combined with the inborn alimentary reflex. The man, on the other hand, understands it immediately because, for him, the meaning of the light is defined arbitrarily, which implies that, instead of having a necessary or natural relation to its referent, the colour of this signal could be anything, red, green, violet, or no light at all. By considering all of these four options for a simple binary decision, and, thereby, rejecting the by now well-established convention of traffic signals, in which red means 'stop', and green means 'go', Beckett's Watt returns, as it were, to the origins of modern signalling systems, to a time in which the question of which colour should stand for which command was still undecided.

As Ernst Kapp notes in his *Elements of a Philosophy of Technology*, 'the semaphore telegraph is now in service to the railway' ([1877] 2018, 237). At around the time when the different versions of this early telecommunication medium were replaced by electrical systems, railway companies adopted the semaphore principle of optical telegraphy in order to facilitate the communication between the engine drivers and the signalmen in the stations and along the railroad tracks:

About 1841 Sir Charles Hutton Gregory designed and erected at New Cross Station on the Croydon Railway the first semaphore signal, an adaptation of the old semaphore used for telegraphy [...], developed by Messrs. Chappe, the inventors of optical telegraphy. (American Railway Engineering and Maintenance-of-Way Association, 1903, 283)

A signal of this type inspires Mr Tyler, a character in Beckett's radio play *All That Fall*, to a Shakespearean joke:

Then you have no cause for anxiety, Miss Fitt, for the twelve thirty has not yet arrived. Look. [Miss Fit *looks*.] No, Miss Fit, follow the direction of my index. [Miss Fit *looks*.] There. You see now. The signal. At the bawdy hour of nine. [In rueful afterthought.] Or three alas! [Mr Barrell stifles a guffaw.] Thank you Mr Barrell. (Beckett, 1986, 186)⁷

Yet, since semaphore signals are not visible at night, they had to be supplemented with oil lamps, which – depending on the position of the beam – would alternatively illuminate glass panels of distinctly different colours.

The question was, which colours? I quote a compendium on telegraphy and signalling techniques from 1867:

Here they used red, there they used green, there they used white light for all clear, here they used red, there green, there white for stop signals, here they employed white, there green, there red light to call for reduced speed. (Weber, 1867, 46; my translation)⁸

There was an urgent need for clear and universal standards, and thus:

In February 1841, a conference of British railway technicians taking place in Birmingham passed resolutions concerning standardised regulations regarding signalling and the meaning of the signal colours, in particular. It was generally established that 'red' should mean danger, 'green' caution, and 'white' all clear. With respect to the fact that, in moments of danger, coloured objects would not be at hand, any waved object, any waved light should mean 'stop'. These regulations were so simple and practical that they were adopted in the whole world and are still universally valid even if under the somehow changed terms that red should mean 'stop', and green 'drive slowly', so that the Birmingham conference has been fundamental for all of our signalling today. (Kecke, 1893, 878; my translation)⁹

Because white light tends to outshine coloured signals, and because a signal appears white when one of its coloured glass plates is broken, its use was abolished altogether:

When the block telegraph system was introduced in England, according to which a section of the tracks is either occupied and trains are not allowed to enter, or the section is all clear and trains can continue at full speed, the signal 'caution' was eliminated (879).¹⁰

The requirements, which the British Board of Trade issued in 1892, ratified the elimination of white signals in a laconic clause: 'On the new lines worked independently, the front signal lights to be green for all right, and red for danger; the back lights (visible only when the signals are at danger) to be white' (Thomas Summerson & Sons, Ltd, 1904, 38). ¹¹ From railway systems, signals moved into traffic-jammed cities. About a decade before Nikolaus Otto's construction of an internal combustion engine, ¹² the railway engineer John Peake Knight installed the first traffic light in London to regulate the circulation of horse-drawn carriages:

By 12 December 1868, and with the support of the Metropolitan Police, the first parts of Knight's experimental semaphore signal had been erected at the intersection of Bridge Street and Parliament Street opposite Palace Yard of the newly rebuilt houses of parliament, Westminster. Constructed by the firm of Saxby and Farmer, who were responsible for the signals on the London, Brighton, and South Coast Railway, the semaphore consisted of a pillar fitted with lights and arms on three sides indicating two positions: 'Caution' and

'Stop'. The semaphore was operated by a constable who pulled a handlebar, which brought the arms (and lights at night) into either position, providing, at the constable's discretion, a new way of negotiating the flows off Westminster Bridge and those along Whitehall and Parliament Street going east or west. Although relatively successful in managing traffic, the semaphore was removed in January 1869 after a series of explosions caused by a leak in one of the gas mains supplying the pillar. (López Galviz, 2013)

After Edison's incandescent light bulbs had eliminated such risks, and after the necessary infrastructure of electrical grids had been constructed, traffic signals had a comeback in the early decades of the twentieth century. A US patent for a 'Municipal Traffic-Control System', filed by James B. Hoge on 22 September 1913, but only granted on 1 January 1918, proposes, among several other signalling techniques, 'a method of arranging lamps of different colors adapted to be displayed in sets, each set comprising one lamp of a distinct color for each intersecting street'. 13 'The signal' of this system 'may be of any of the well-known types of electrically controlled signals in use in railway signaling systems'. ¹⁴ And it is equipped with two circuit closers, one for 'pedal operation', and another one 'for convenient manual operation¹⁵ Only two years later, on 12 January 1915, William Ghiglieri filed a patent application for a 'Traffic-Signal', which, instead of being operated by foot or hand, would be 'working through a definite cycle automatically'. 16 Granted on 1 May 1917, the 'invention [...] consists of a rectangular shell [...] in which are placed the displays [...], these displays being arranged in pairs, the upper signals [...] being preferably green, and the lower signals [...] being preferably red'. 17

Beckett, who was still a child when these patents were issued, belonged to a generation of people who witnessed the spread of traffic signals, as we know them today, all over the world in their lifetime. But the title character of his novel *Watt* goes even further back. Unlike the traffic lights invented during Beckett's early years, the light Watt ends up lighting for Art, Con, and the dogs Kate and Cis is not powered by electricity. It is a 'standard oillamp' (Beckett, 1970, 47, 115) of the type used in railway signalling systems from the mid-nineteenth well into the first decades of the twentieth century (Derr, 1897, 35–7). And even the idea of using alternating lights is, finally, abandoned. If a single light, so Watt's conclusion, were to represent the presence of the food, then 'no light at all' would suffice to indicate its absence. The question of the signal's colour would be solved, any redundancy would be eliminated, the system would be stripped down to its most basic level, and the amount of information it would convey, measured in binary digits, would drop from one to zero:

But the light would still serve as a conventional sign for the man, and – after having been combined with the food often enough – as a stimulus for his dog.

Compared to Watt's reflections on the problem of how to bring the dog and the food together the 'solution that seemed to have prevailed' (Beckett, 1970, 98), according to Watt's investigations and conjectures, is even more convoluted. It involves not just one, but a whole kennel of dogs, and not just one, but a whole extended family of guardians 'attached firmly for good' to Mr Knott's house 'by a handsome small initial lump sum', 'a liberal annual pension', 'occasional seasonal gifts' and 'well-timed affectionate words' (99). The purpose of this institution is to guarantee a continuous stream of guardians and their dogs who and which, over generations, will call every evening at Mr Knott's house to take care of the food left over from his meals. While this is, without doubt, the most efficient and perfect solution of the problem, it is also the most brutal, if not to say totalitarian one. It is based on the fact that a whole 'impoverished family' (100) is 'attached firmly for good and all in block, their children and their children's children, to Mr Knott's service' (99), and that the dog is exposed to a treatment that is nothing less than torture. Seldom 'left off the chain' to prevent them from ruining their appetite somewhere else, and forced to either remain famished or to eat 'a pot of food so nourishing, and so copious, that only a thoroughly famished dog could get it down', the 'dogs employed to eat Mr Knott's occasional remains were not long-lived, as a rule' (112). If the brutality of Pavlov's experiments consists in the application of such painful stimuli as 'acid' or 'very powerful electric shocks' to the dog's skin (Pavlov, 1927, 252, 344), then Beckett's novel shows that the rigorous rituals of a deadening routine, on which such experiments are based, constitute another, and equally monstrous, form of cruelty.

What forces the dog to come 'night after night as regular as clockwork to Mr Knott's backdoor' (100), is neither a habit nor a conditioned reflex, but the arbitrary command that the leftovers of Mr Knott's food be given 'to the dog', and the elaborate coercive system of guardians and chains that had to be established in order to fulfil it. Thus, it is not the dog which, as Descartes had claimed for animals in general, operates 'according to the disposition of [its] organs', like 'a clock' (Descartes, 1985, 141),¹⁹ but a human's tyrannical command that turns animals into 'many kinds of automatons, or moving machines' (139) – killing them along the way. From Descartes to Pavlov, and even in the novel À la recherche du temps perdu, 'the Proustian Discours de la méthode', 'the erratic machinery of habit and memory' (Beckett, 1965, 39) is not a natural given, but an effect of powerful human will. What Pavlov's experiments reveal is not the nature of the dog, but the result of its domestication, the trace of its having been

subjected to the laws of a human house (*domus*) and the commands of its master (*dominus*).

While the rigorously structured organisation, by means of which the dog is, as it were, chained to the remains of Mr Knott's food, does not include a telecommunication system, a rudimentary form of signalling crops up within its context, nonetheless. It is a result of 'Watt's refusal to be present when the dog ate the food, and of the measures he was obliged to take, as a consequence' (Beckett, 1970, 115). As he puts the food 'outside the door, on the doorstep, in the dog's dish', he lights 'a light in the passageway window, so that the doorstep would not be in darkness, even on the darkest night' (114). Although not intended to serve this function, very dim, only visible from a short distance, and only displayed for 'three quarters of the year', because it is not needed 'in the height of summer' (114–15), this light indicates the presence of the food to the twins Art and Con, the guardians of the dog. A simple light, only meant to illuminate Mr Knott's back door, turns into a signal for the man, and, again, after having been repeated often enough, into a stimulus for the dog. Out of Watt's withdrawal from the scene, and his decision to put a light in the passageway window instead, emerges the first glimmer of a primordial telecommunication system.

Regarding the 'general technique' (Pavlov, 1927, 19) of his experiments, Pavlov explains:

It was evident that the experimental conditions had to be simplified, and that this simplification must consist in eliminating as far as possible any stimuli outside our control which might fall upon the animal, admitting only such stimuli as could be entirely controlled by the experimenter. [...] To get over all these disturbing factors a special laboratory was built at the Institute of Experimental Medicine in Petrograd, the funds being provided by a keen and public-spirited Moscow business man. The primary task was the protection of the dogs from uncontrolled extraneous stimuli, and this was effected by surrounding the building with an isolating trench and employing other special structural devices. Inside the building all the research rooms (four to each floor) were isolated from one another by a cross-shaped corridor; the top and ground floors, where these rooms were situated, were separated by an intermediate floor. Each research room was carefully partitioned by the use of sound-proof materials into two compartments one for the animal, the other for the experimenter. For stimulating the animal, and for registering the corresponding reflex response, electrical methods or pneumatic transmission were used. By means of these arrangements it was possible to get something of that stability of environmental conditions so essential to the carrying out of a successful experiment. (Pavlov, 1927, 19-21)

And describing the wide range of stimuli to which the dogs were exposed within this environment Pavlov writes: 'Various conditioned alimentary

reflexes were established in the dog, namely, to tactile stimuli, visual stimuli, and different auditory stimuli (sound of a buzzer, metronome, a noise, and numerous pure tones)' (148–9). Other stimuli used in Pavlov's institute include a 'whistle' (77), 'electric lamps' (79) and 'the loud buzzing of an electric bell' (27, 34), which, in the English translation, is also called 'a buzzer' (27).²⁰ By being subjected to these stimuli, which are explicitly defined as 'signals' (23; emphasis in original), the dogs were literally hooked up to a telecommunication channel.

Compared to this level of technical sophistication and variation Watt's experiments are extremely primitive. The dog is only exposed to visual, not to auditory stimuli, and these signals are not powered by electricity, but by an old-fashioned oil lamp. Yet, the electric bell that is so blatantly absent from Watt's long meditations on the problem of establishing a firm and secure connection between the dog and Mr Knott's leftover food, returns, as if it had been repressed for too long, in the immediate aftermath of these meditations: 'Sometimes in the night Mr Knott pressed a bell that sounded in Erskine's room, and then Erskine got up and went down' (Beckett, 1970, 120). By shifting the focus from the dog to Mr Knott's servant Erskine, Beckett seems to replicate the argument that is formulated in the title of the last one of Pavlov's lectures on Conditioned Reflexes, 'The experimental results obtained with animals in their application to man' (1927, 395–411). But the bell whose location and purpose Watt is trying to determine is more appropriate for the stimulation of a dog than for the purpose of communicating with a man:

There was the telephone, to be sure, in a passage. But what sounded in Erskine's room, in the night, was not a telephone, Watt was sure of that, but a bell, a simple bell, a simple little probably white electric bell, of the kind that one presses until it sounds ting! and then lets spring back, to the position of silence.²¹ (Beckett, 1970, 121)

According to this precise description, the bell in Erskine's room is neither a 'trembling or vibrating bell' (Allsop, 1889, 30–1) nor a 'polarized bell' (Shepardson, 1917, 318) of the type common in early telephones, but a 'single tone bell' (Allsop, 1889, 32–3), an old-fashioned device that only produces a short 'ting!', not the buzzing sound reported in Pavlov's lectures. And Watt's relation to this bell is not that of a Pavlovian experimenter who uses electrical methods or pneumatic transmission for stimulating the animal as well as for registering the corresponding reflex response, but rather that of such an experimenter who is cut off from these transmission channels and barred from entering the space of the objects he is trying to study. It is as if he were locked into one of the isolated research rooms of Pavlov's institute, unable to communicate with the objects of his investigations while,

at the same time, being forced to witness the activities of one of his colleagues and not being able to make sense of them. All he knows is that, at the sound of the bell, Erskine gets up and goes down (Beckett, 1970, 120). Left with nothing but an auditory stimulus Watt can only speculate who is pressing the button of the bell. And since there are only two candidates, there are only two possibilities: either Mr Knott is calling Erskine, or Erskine is activating the bell himself, and if so, then he might be doing it in order to trick Watt into believing that his getting up at the sound of the bell is not a conditioned reflex, not a habit, but an act of his free will. It is as if Erskine were simulating the workings of a telecommunication system by sending signals down to 'the kitchen chimney' (119) for Watt to interpret. There is no way of knowing what the case might be, and when Watt, finally, gets into Erskine's room, he does not find a solution to the riddle, but a new enigma in its stead:

There was a bell in Erskine's room, but it was broken.

The only other object of note in Erskine's room was a picture, hanging on the wall, from a nail. A circle, obviously described by a compass, and broken at its lowest point, occupied the middle foreground, of this picture. Was it receding? Watt had that impression. In the eastern background appeared a point, or dot. The circumference was black. The point was blue, but blue! The rest was white. (Beckett, 1970, 128)

At the beginning of a long mediation on the relation between these two geometric objects²² Watt wonders 'if they would eventually pause and converse, and perhaps even mingle, or keep steadfast on their ways, like ships in the night, prior to the invention of wireless telegraphy. Who knows, they might even collide' (129). In 1865, James Clerk Maxwell predicted the existence of electromagnetic waves that travel through space at the speed of light (Maxwell, 1865). In 1888, Heinrich Hertz proved their existence (Hertz, 1888). And on 27 March 1899, Guglielmo Marconi transmitted the first wireless message across the English Channel, about seven years before Beckett was born. And Beckett was in his early teens when the first radio programmes were broadcast. He grew up and lived in a world in which signals could travel not only through and around the atmosphere of our tiny planet earth, but through 'boundless space' and 'endless time' (Beckett, 1970, 129), a world of universal connectivity. And thus, the long meditations on stimuli and signals in his novel Watt are a search for lost time, a time in which signals were just being invented and in which the absolute solitude of an Odvsseus on his raft was still possible, a time in which radio, the medium that Beckett would soon use so efficiently to broadcast the soliloquies of his lonely characters, had not vet been invented.

Notes

- 1 This is shown in the photograph on the page between pp. 33 and 34 (fig. 4). The picture, which bears the caption 'The animal's section of the double chamber', shows a dog chained to a scaffold not only by its neck in the front, but also by its hindquarters in the back.
- 2 According to a note in the first of six notebooks containing the manuscript, 'Watt was written in France during the war 1940–45 and published in 1953 by the Olympia Press' (qtd. in Ackerley, 2006, 321).
- 3 The split stage that serves to isolate Victor Krap from the rest of his family in this drama (Beckett, 1995) recurs in *Watt*, in the successive allocation of a specific floor to each one of the characters in Mr Knott's house.
- 4 Beckett finished his novel *Watt* three years before Shannon's essay was published. And there is no reason to assume, and certainly no evidence, that he knew of Hartley's paper. That there are nonetheless remarkable parallels between Beckett's work and the theories developed by telecommunication engineers in the first half of the twentieth century is due to the fact that their reflections are at least partially based on the same sources. Beckett had read Henri Poincaré's book La valeur de la science, which traces the history of statistical mechanics from Sadi Carnot to James Clerk Maxwell and Ludwig Boltzmann, but places particular emphasis on the work of Josiah Willard Gibbs, without, however, mentioning the term 'entropy'. What Beckett learned from Poincaré is the term 'démon de Maxwell' (Poincaré, 183-4; Beckett, 1983, 56). For Beckett's relation to statistical mechanics and its application to information theory, see Salisbury (2010). Shannon never quotes Gibbs, but there is no doubt that his concept of entropy is influenced by his friend Norbert Wiener's book Cybernetics, or Control and Communication in the Animal and the Machine, whose second chapter 'On Groups and Statistical Mechanics' (45-59) contains a long discussion of Henri Lebesgue's and Gibbs's work, and of the latter's concept of entropy in particular (56). Shannon's essay and Wiener's book appeared in the same year, 1948, but it is safe to assume that they knew of each other's work before their publication.
- 5 'ἐν δύο φύσεσιν.'
- 6 'είς ἕν πρόσοπων καὶ μίαν ὑπόστασιν.'
- 7 According to Dirk Van Hulle, 'the bawdy hour of nine' is 'a reference to the classic example of sexual innuendo from Shakespeare's *Romeo and Juliet*, when Mercutio points out to the 'nurse' that 'the bawdy hand of the dial is now upon the prick [of noon]' (Shakespeare [Romeo and Juliet, II, iv, 114–5]). [...] Unlike Shakespeare's 'bawdy hand' the signal Mr Tyler's index points at is merely half-erect, not on the way up, but on the way down, like 'all that fall' which is how Beckett explained the sexual innuendo to Jacoba van Velde when she was working on the Dutch translation' (Van Hulle, 2010). For the reference to Jacoba van Velde, see Van Hulle (2009, 12).
- 8 'Hier galt rothes, dort grünes, dort weisses Licht für das Ordnunsgzeichen, hier wurde roth, dort grün, dort weiss für Haltesignale verwendet, hier bediente man

- sich des weissen, dort des grünen, dort des rothen Lichtes um "Langsamfahren" zu rufen'.
- 9 'Im Februar 1841 fand zu Birmingham eine Versammlung englischer Eisenbahntechniker statt, welche über einheitliche Bestimmungen in Bezug auf das Signalwesen und namentlich auch über die Bedeutung der Signalfarben Beschlüsse faßte. Es wurde allgemein bestimmt, daß roth "Gefahr", grün "Achtung", "Vorsicht" und weiß "Ordnung" bedeuten solle. Mit Rücksicht darauf, daß im Augenblicke der Gefahr farbige Gegenstände nicht immer zur Hand seien, solle jeder geschwungene Gegenstand, jedes geschwungene Licht "Halt" bedeuten. Diese Bestimmungen waren so einfach und praktisch, daß sie in der ganzen Welt angenommen wurden und, wenn auch unter den etwas veränderten Begriffen, daß roth "Halt" und, [sic] grün "Langsamfahren" bedeuten solle, noch allgemein Gültigkeit haben, und so ist diese Versammlung zu Birmingham grundlegend gewesen für unser ganzes heutiges Signalwesen'.
- 10 'Als daher in England das Blocksystem eingeführt wurde, bei welchem ein Bahnabschnitt entweder besetzt und die Einfahrt in denselben verboten ist, oder bei freier Bahn die Fahrt mit unverminderter Geschwindigkeit fortgesetzt werden kann, kam das Signal "Vorsicht" in Fortfall'.
- 11 For the date, see Wilson, n.d.
- 12 Patentschrift No. 352: Gasmotor, 4. August 1877.
- 13 US Patent 1,251,666, pp. 1, lines 111–2, and pp. 2, lines 1–3.
- 14 Ibid., pp. 2, lines 18–21.
- 15 Ibid., pp. 5, lines 97–101.
- 16 US Patent 1,224,632, pp. 1, lines 52–3.
- 17 Ibid., pp. 2, lines 29–35.
- 18 Chapter IV ('The Signal Lamps') still gives detailed instructions on 'some of the points that should be observed in the care' of such an oil lamp, and only briefly mentions the improvements associated with 'electric light'. And a paper by L. C. Porter and F. C. Stallknecht on 'The Electric Lighting of Railroad Signals', given on 11 March 1920, before the New York section of the Illuminating Engineering Society, describes an adapter, by means of which the filament of an electric light bulb can be placed 'at the exact focal point of the lens [...] in any standard oil lamp' (1920, 239). See also Russell and Hudson (2019, 105).
- 19 'C'est aussi une chose fort remarquable', Descartes writes, 'que bien qu'il y ait plusieurs animaux qui tesmoignent plus d'industrie que nous en quelques unes de leurs actions, on voit toutefois que les mesmes n'en tesmoignent point du tout en beaucoup d'autres: De façon que ce qu'ils font mieux que nous, ne prouve pas qu'ils ont de l'esprit, car a ce conte ils en auroient plus qu'aucun de nous, & feroient mieux en toute autre chose; Mais plustost qu'ils n'en ont point, & que c'est la Nature qui agist en eux selon la disposition de leurs organes: Ainsi qu'on voit qu'un horologe, qui n'est composé que de rouës & de ressors, peut conter les heures, & mesurer le tems, plus iustement que nous avec toute nostre prudence' (Descartes, 1637, 59).
- 20 Summarising his findings regarding Pavlov's use of an electric bell, Roger K. Thomas observes that 'Pavlov's use of a bell as CS [i.e. Conditioned Stimulus] was

- reported in English-language journals as early as 1906, and the bell's effectiveness as a CS was reported widely in well-known English-language publications in the 1920s' (Thomas, 1997, 118).
- 21 The telephone, which is mentioned here for the second time, seems to fulfil the exact opposite of the function that is usually ascribed to telecommunication media. It indicates the absence rather than the existence of a connection to the outside world: 'The telephone seldom rang, and when it did it was about some indifferent matter touching the plumbing, or the roof, or the food supplies, that Erskine could deal with, or even Watt, without troubling their master. Mr Knott saw nobody, heard from nobody, as far as Watt could see' (Beckett, 1970, 69).
- 22 For Beckett's attempts to determine this relationship by means of a truth table, see Ackerley (2006, 324–5). And for a discussion of references to the distinction between ground and figure in gestalt psychology, see Salisbury (2010, 356–8).

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Beckett's exhausted media

Armin Schäfer

The concept of media in Beckett has to be defined as neither a form of representation nor as a technical apparatus, nor as a symbolic system but, rather, as a means to render something visible and audible that would otherwise be beyond perception or the scope of attention. If we begin to inquire into what Beckett has to say to media studies about the vexed question of how the concept of media can be defined, the issue of exhaustion will arise. Exhaustion is to human subjects what Beckett's works are to media. From the perspective of psychophysiology and psychiatry, exhaustion is a dangerous state that will lead to apathy, self-destruction and, finally, the death of the subject. From the perspective opened up by philosopher Gilles Deleuze in his essay on Beckett's plays for television, 'L'Épuisé', exhaustion is located on the threshold between the breakdown of the subject and the invention of an unforeseen possibility (Deleuze, 1992, 57–106; 1995, 3–28; 1998, 152–74).

Deleuze uses the term exhaustion for two different states. Exhaustion indicates a psychophysiological state but is also 'an abstract concept' (Clément, 2006, 134) which designates a sense of an ending because everything that is or seems possible has been acted out or has been under consideration. There is a dialectics between the state of exhaustion and what remains possible. Exhaustion seems to be a condition for the invention of new possibilities, or as Deleuze puts it: 'One can exhaust the joys, the movements, and the acrobatics of the life of mind only if the body remains immobile, curled up, seated, somber, itself exhausted' (1998 169). The more exhausted someone is, however, the more unlikely it is that a new possibility will emerge, but the emergence of a new possibility requires the exhaustion of the given situation.

The 'combinatorial' (Deleuze, 1998, 145) seems to be an analytical tool or even the key to understanding exhaustion because whatever has happened, happens and will happen is always already determined by the very conditions

which shape the situation: 'Must one be exhausted to give oneself over to the combinatorial, or is it the combinatorial that exhausts us, that leads to exhaustion'? (154). The combinatorial explains on a higher or more abstract level than performance itself what kind of logic, programme, or formula could be found behind the phenomenon of exhaustion. If Deleuze seems to understand 'health as a horizon of creation' (Clément, 2006, 134), it is doubtful, however, whether literary innovations will happen under conditions that will bring destruction and death. The threat that psychophysiological exhaustion poses, however, often seems to be overlooked or disclaimed. People are exhausted because they are living and working under conditions they cannot bear and have not voluntarily chosen. The situations in which Beckett's dramatis personae are living can be understood, as Adorno did, as mere survival: 'Beckett's characters behave in precisely the primitive, behavioristic manner appropriate to the state of affairs after the catastrophe, after it has mutilated them so that they cannot react any differently; flies twitching after the fly swatter has half-squashed them' (Adorno, 1991, 251). It is for that reason necessary to frame the issue of exhaustion in political terms and to be aware, precisely, as are Beckett and Deleuze, that people have been tortured and murdered by, for example, forced labour and malnutrition, which exhaust them and will, eventually, bring death (McNaughton, 2018, 120; Morin, 2017, 156-7; Knowlson and Knowlson, 2006, 86). The crucial question then is what drives people beyond the threshold of tiredness and into a state of exhaustion.

Although Deleuze deals with Beckett's media works, especially the TV plays, he neither considers any medium in particular nor does he use media-specific terms in his essay. Rather, he uses the notion of 'image' in order to tackle the basic problem of a simplified media theory which draws a sharp distinction between technical apparatus and content or, in more traditional terms, between form and content (Uhlmann, 2006). Nevertheless, the concept of media seems to be helpful for understanding Deleuze's claim. One can, of course, define the medium as a device for representation, as technical apparatus, as a system of symbols or as an interplay between representation, symbols and apparatus. Beckett, however, has subtracted from theatre, radio, film, or television whatever is not absolutely necessary for the functioning of his plays and media works. The effect of this subtraction is that the plays are stripped bare to their dispositifs and realise unforeseen possibilities.¹

1

In the nineteenth century, physiologists, psychologists and psychiatrists started to discuss the concepts of fatigue and exhaustion. The Italian physiologist Angelo Mosso was the first to investigate fatigue systematically in the 1860s

by recording the performance of experimental subjects (Rabinbach, 1992, 133–42). He demonstrated that one of the most specific characteristics of an individual's life is the way he or she gets tired. It is inevitable that humans get tired, but everyone gets tired in an individual way. Mosso also showed that fatigue alters the personality once a certain threshold is transgressed: 'Extreme fatigue, whether intellectual or muscular, produces a change in our temper, causing us to become more irritable; it seems to consume our noblest qualities – those which distinguish the brain of the civilized from that of savage man. When we are fatigued we can no longer govern ourselves, and our passions attain to such violence that we can no longer master them by reason' (1904, 238).

Mosso's investigations awakened the interest of German psychiatrist Emil Kraepelin, who endorsed a new direction in psychiatry that favoured physiological and biological explanations and relied on experiments. Kraepelin's experiments dealt with measuring reaction time and brain performance under the influence of drugs, memory tests and the recording of all kinds of human movements. In the experiments, he collected reliable data as a basis for further quantification. He posited that the pathology of mental illness, although often caused by brain dysfunctions, had to be observed by studying human movements, thus avoiding the problem that it was impossible to observe the human brain directly. Mosso's experiments were the basis for the correlation of physiological and psychological states that Kraepelin and his assistant William Halse Rivers undertook. Kraepelin and Rivers began to experiment on fatigue and its consequences. They discovered that fatigue was unavoidable and that it protected an organism against exhaustion: 'No doubt, fatigue begins at the same time as the action itself. To avoid the occurrence of fatigue would mean to renounce work itself. Yet, even without any work, we could not avoid getting tired' (Rivers and Kraepelin, 1896, 669). Whatever you are doing or not doing, you will get tired, for it is not work alone that is tiresome, but idleness too. 'For the brain', Kraepelin and Rivers continue,

inaction does not mean complete rest. To be awake and to perform a simple process suffices to evoke the state of inability to perform at all, which can only be cured by sleeping and eating. The pause while working causes, although to a lesser degree than work itself, a slow but progressive reduction in our intellectual performance which cannot be compensated for by simple relaxation. (670)

The first sign of fatigue is, Kraepelin determined, an increasing number of mistakes in the performance of the experimental subject. It is possible to counteract fatigue to a certain degree by resting, eating, drinking and sleeping on the one hand, and by regular training and the effort of will on the other hand. But the signs given by the body should by no means be disregarded. Insofar as it eventually leads to sleep, fatigue is a means for

the body to protect itself against exhaustion. Normally, the body is capable of governing itself, but the self-protection of the working body can be suspended through affective arousal. The effort of will can compensate for fatigue to some extent. Although will can thus make one ignore the signs of fatigue, it is not considered dangerous, since the will remains within the framework of reasonable behaviour; it is passion that drives one's work level over the threshold and leads to exhaustion and self-harm.

Physicians provided different explanations of the psychophysiological processes of fatigue and exhaustion. They saw fatigue as resulting from the consumption of a substance or as a self-intoxication by the products of metabolism. Exhaustion, in turn, was defined as the destruction of the foundations of psychic processes due to excessive consumption or insufficient recreation. Notwithstanding the different explanations given by the scientists, they all agreed about the danger that results from exhaustion. Exhaustion causes a permanent reduction in the ability to work. Psychiatrists warned that increasing fatigue was the first step to the self-destruction of the nervous system through its own activity. Exhaustion causes an increasing number of mistakes and distortions until the self-regulation of the body and mind breaks down. At that moment, control over one's activities is lost. Therefore, the exhausted person is in a dangerous state which psychiatrists compared to mental illnesses, especially to psychosis. The consequences of exhaustion are, in the wording of the psychiatrists, a dissociation of personality, a loss of personality and an abolition of the self; they diagnose 'Erschöpfungsdelirien' (Kraepelin, 1899, 28) as well as 'Erschöpfungsirresein' (Kraepelin, 1920, 55–6), that is, mental delirium or insanity caused by exhaustion.

2

Since the 1960s, exhaustion has been a recurrent theme in Beckett studies (Kenner, 1961, 33–4; 1962, 53–4). Beckett feigns situations with a definite number of elements and exhausts 'by system every possible relation between them' (1961, 34). For example, Watt walks like this:

Watt's way of advancing due east, for example, was to turn his bust as far as possible towards the north and at the same time to fling out his right leg as far as possible towards the south, and then to turn his bust as far as possible towards the south and at the same time to fling out his left leg as far as possible towards the north, and then again to turn his bust as far as possible towards the north and to fling out his right leg as far as possible towards the south, and then again to turn his bust as far as possible towards the south and to fling out his left leg as far as possible towards the north, and so on, over and over again, many many times, until he reached his destination, and could sit

down. So, standing first on one leg, and then on the other, he moved forward, a headlong tardigrade, in a straight line. The knees, on these occasions, did not bend. They could have, but they did not. No knees could better bend than Watt's, when they chose, there was nothing the matter with Watt's knees, as may appear. But when out walking they did not bend, for some obscure reason. (Beckett, 2009, 23–4)

The originality of this passage is not to be found in the enumeration of possible movements which the stiff leg can perform. As Beckett was well aware, 'exhaustive enumeration' was a strategy already used, for example, in 'vaudeville' (Beckett, 1999, 92). The feedback enumeration exerts on the issue of exhaustion, however, alters the quality of both the movement and its description. Beckett strips the body technique of walking of its self-evidence and describes it like a mechanically executed programme. Although a person is walking, he does not seem to be walking by himself. The movement seems, rather, to be driven by some unknown mechanism that operates on the subject.

Watt's way of walking provokes an analysis which makes explicit what kind of programme or formula is executed in his movements. The walk is exhaustive since it encompasses all directions in space while, nevertheless, moving in a straight line. The gait without bending the knees draws our attention to a technique of the body that seems to be programmed in one way or another. In 1934, in a lecture given at the Société de Psychologie Française and published in the following year, French ethnographer and sociologist Marcel Mauss defined his concept of 'techniques of the body' as follows: 'By this expression I mean the ways in which from society to society men know how to use their bodies' (Mauss, 2006, 78). For Mauss, the idea that the human body is a natural body was not evident to begin with. The historical change in swimming styles and the popularisation of the crawl in Europe disturbed the common understanding of the body as a natural body, behaving in a natural way and performing movements naturally. Techniques of the body such as walking or swimming or making love are not natural at all, although they are difficult to change. There are, for example, only acquired ways of walking, not a single natural one. That is why it is necessary for people to have a pattern for mimesis when they learn to walk. They do not know what they are doing when they are walking; rather, they imitate examples given to them.

Beckett describes a gait without bending the knees. This is not only a gait that is artificial in that it reduces the options for movement but it also reduces the mathematical complexity of the movements. The activity of walking becomes a highly artificial technique of the body which can be described on the level of the programme informing the performance. Its exhaustive description in Beckett epitomises the problematic of the combinatorial: the

leg that cannot bend reduces the infinite possibilities of moving that the healthy can ignore because they subsume them under the successful result to a number of possibilities which, in contrast, can be exhausted.

Watt's way of walking differs from the clichés of how this technique of the body should be performed. According to Henri Bergson, the 'deflection of life toward the mechanical' (Bergson, 1911, 34) or the living body that becomes rigid like a machine produces a comic effect (41-2). Notwithstanding that comic effect, the concept of walking that informs this way of walking, and discovers how the mechanism inside Watt's performance works, is very serious. In 1934, Kurt Goldstein published *The Organism: A* Holistic Approach to Biology Derived from Pathological Data in Man. He criticises the standard theory of reflex, which reduces the reflex to a simple mechanical reaction. Instead of reflexology and behaviourism, Goldstein favours a gestalt-theoretical approach to the organism. He describes the performance of any human activity as a figure-ground-formation and argues that 'the reflex phenomenon is not only modified by the state of the rest of the organism, as has been generally accepted, but that the reaction, from the very start, depends on the condition of a field far beyond the reflex arc' (Goldstein, 1995, 176). In the body, every reaction is a gestalt reaction of the whole organism in the form of a figure-ground configuration. Goldstein's most important argument is about human walking and the bending of knees. The gestalt theorists, as is well known, have pointed out that there is an exchange of figure and ground in ambiguous drawings and paintings. Depending on the attitude of the viewer, one or the other part of the configuration becomes the foreground, and accordingly two entirely different figures can arise alternately. This figure-ground relationship explains the appearance of instability as such but not the appearance of directly antagonistic performances, for example in walking. Therefore, Goldstein shows that the exchange between figure and ground can be compared to the alternation of flexor and extension movements. 'Let us assume', he argues,

that at first the stimulus produces a flexion of the ipsilateral leg, because the situation favors this. To this movement there also belongs, under certain circumstances, an extensor movement of the other leg as a functional near effect. This figure, however, is unstable. A reversal takes place; the ground that is formed in the ipsilateral leg, through the extensor, and in the opposite leg through the flexor, now becomes figure. (126)

Walking involves a twofold figure-ground exchange. On the one hand, there is the antagonistic movement of flexor und extensor movements. On the other hand, there is the complete walk as a figure that appears against the ground of the body. Eventually, Goldstein draws a distinction

between adequate performances and drill results. The natural background-figure structure is altered by an artificial shunting off of the drill result of the rest of the organism. Or, more precisely, in drill results, the rest of the organism remains in a constant state, thus representing a uniform background against which the same figure always stands out, while in a normal performance the activity belongs to a state of the whole organism. The good activity is characterised by the fact that in it, the performances are executed in the promptest, most correct manner, and with the best self-assurance. Although there is a great variety of good gestalts, the good gestalt is always given by the internal organisation of the body. The better a personality is centred and integrated, the more definite and stable is the gestalt.

The handicap of the first-person narrator in Molloy, who has a stiff leg, only allows for bodily postures that avoid sitting. This situation is not about fatigue and weariness but about exhaustion. Molloy's standard positions are lying down or standing upright, often leaning on a wall, or resting on his bicycle: 'my feet on the ground, my arms on the handle-bars, my head on my arms, and I waited until I felt better' (Beckett, 1994a, 17). When interrogated by the police, his handicap brings disturbances, because he is unable to sit in the common standard position. He was 'told to sit down', but eventually obtained 'permission, if not to lie down on a bench, at least to remain standing, propped against the wall' (23). While Mollov's 'way of resting' seems to be regarded as 'a violation' of 'public order, public decency' (20), people are relishing 'the hour of rest', 'using it to hatch their plans, their heads in their hands' (21). On the one hand, there are positions indicating a pause in daily life which will allow people to recreate and contemplate their situation in order to continue their activities. The position of the head in the hand encodes a harmonious integration of the subject in one and the same social, political, and divine order: 'The boatman rested his elbow on his knee, his head on his hand' (27). On the other hand, there is Molloy's body leaning against the wall, unable to sink down and squat on the ground: 'But for the moment I was content to lean against the wall, my feet far from the wall, on the verge of slipping' (61). These different bodily postures are encoding fatigue and exhaustion. While the tired will move and sit or lie down in order to recreate and, later, continue their activities, the exhausted will freeze in their position, but continue whatever they have been doing.

The consequences of exhaustion are a dissociation or loss of the personality and an abolition of the self. Exhausted subjects are only a mechanically driven bundle of functions. They are in danger of serious damage and present a risk to their environment. The symptoms of exhaustion are not apathy, withdrawal from activity and extinction of movements, but mere

action. The danger for the exhausted lies in that they continue their activity like an overheated machine performing idle motion or a person mindlessly performing repetitive stereotypical movements. While the tired person is able to resume activity in a predictable way, it is uncertain whether and how the exhausted one can ever do so. The exhausted subject will do what is still possible by performing without consideration and personal interest. Pausing or sleeping enables the tired person to take up his or her activity or to continue his or her thoughts because he or she has only suspended or deferred the activity. Therefore, lying down prepares one to fall asleep, which in turn prepares one to resume and continue the activity.

The exhausted subject is beyond any calculus of activity. He or she would do anything to continue an activity rather than stop for recreation. The tired person will rely on his or her habit and perform the body technique in the way it has been learned until the movements will be abandoned at some moment. The exhausted, in contrast, goes on. The tired person, according to Deleuze, 'has only exhausted realization, while the exhausted realizes all of the possible' (Deleuze, 1995, 3). Exhaustion is not just an amplification of tiredness, but a different condition. The tired person wants to continue his or her activity and therefore rests in order to take it up again in the habitual way. The automatism in body techniques guarantees continuation. Whoever performs in a certain way can rely on automatism and is not forced to change the habitual way of movement. The exhausted person will perform an activity even if he or she makes mistakes and loses control, or will perform the activity in an unpredictable way. At any moment, the next movement is the only aim. This performance will override his or her body's capability of self-regulation. The exhausted one cannot rely on the acquired body techniques because the self-regulation of the body has broken down. Therefore, new forms or ways of movement must be invented in order to continue. As Beckett's *Unnamable* puts it: 'That the impossible should be asked of me, good, what else could be asked of me?' (Beckett, 1994b, 340) The automatism in body techniques guarantees continuation. If new forms or ways of movement must be invented in order to continue, then the exhausted one's unpredictable way of movement is not an exceptional movement, but rather a transformation of movement itself.

According to Deleuze, exhaustion is much more than tiredness. In contrast to the preceding medical accounts that emphasise the dangers of exhaustion, he highlights an ambivalence of exhaustion that hovers between the breakdown of the subject and the invention of the unforeseen. The nexus between exhaustion and invention is difficult to grasp, notwithstanding the fundamental difference between saying that people or a situation are exhausted and the exhaustion of literary devices.

3

The ensemble of rhetorical and narrative devices that Beckett uses in order to exhaust narrative fiction comprises series of antitheses, oxymora, paradoxes and contradictions where statements are made, inferences derived, negations of inferences produced, and these negations are, in turn, negated. Enumerations replace propositions, and combinational relations define syntactic relations. The progression of the storyline immediately questions any statement, thus forestalling the emergence of stable meanings. Furthermore, Beckett amputates stories until they fade and extinguish the potential of their development and defer their plot. Episodes, series and the combinatorial replace the storyline, hindering the unfolding of plots, while the possible worlds of fiction are populated by clichés. For example, the title of Imagination Dead Imagine prompts us to imagine that imagination itself is dead. It aims at a revocation of the very act of imagination: one has to imagine what imagination is made of (Iser, 1991, 412-25). Imagination, in other words, has to focus on a threshold where imagination is fading. This paradox unfolds in Beckett's prose text, which starts as follows: 'No trace anywhere of life, you say, pah, no difficulty there, imagination not dead yet, yes, dead, good, imagination dead imagine' (Beckett, 2010, 87). There is a three-dimensionality which sometimes evokes a rotunda, sometimes a skull, although tangible spaces are only presented in a mode of vanishing. There are instructions which direct a change of directions, but as soon as they are articulated, they seem to be revoked. Imagination has its origin in a kind of movement that indicates no direction. If an imagination is not articulated in the form of a narrative, not elaborated as fiction, not shaped as story and genre, there is neither storyline nor plot but, rather, a situation of waiting.

Christopher Ricks points out that the topic of motionlessness, fading and dying in Beckett is accompanied by paradoxes in language that stem from the so-called Irish bull (Ricks, 1993, 153–203). The Oxford English Dictionary defines the Irish bull as a

self-contradictory proposition; in modern use, an expression containing a manifest contradiction in terms or involving a ludicrous inconsistency unperceived by the speaker. Now often with epithet *Irish*; but the word had been long in use before it came to be associated with Irishmen. (Qtd. in Ricks, 1993, 153)

Obviously, the *OED* ignores the energy of the Irish bull that is perceived and used by writers such as Beckett. Ricks explains that the Irish bull is no isolated phenomenon, but rather produces more and more bulls the longer one argues about a bull: 'The Irish Bull is always pregnant' (158).² The Irish bull is not a metaphor: it does not substitute semantic

units or transport a meaning from one discourse to another. Rather, it confronts semantic units that start to oscillate between semantic fields, but cannot be fixed: there is an ongoing virtual movement in the Irish bull that cannot be stopped. Or, to put it in another way: the Irish bull is a rhetorical figure that is at the same time inherently moving and standing still.

Beckett's 'German Letter of 1937' to Axel Kaun provides a model of how exhaustion is operating on the level of the lexicon. Kaun suggested that Beckett might want to translate a selection of Joachim Ringelnatz's poetry into English. Beckett substantiated his refusal with his 'Abscheu vor der Verswut Ringelnatz', that is his 'disgust with Ringelnatz's rhyming fury' (Beckett, 1984, 52; Nixon, 2011, 99). Beckett forges a neologism to express the very situation of German poet Joachim Ringelnatz (Hans Bötticher's pen name). Beckett calls Ringelnatz a 'Reimkuli' (Beckett, 1984, 519). This German neologism combines two nouns. 'Reim', which means 'rhyme' and designates that Ringelnatz has published light verse in order to earn a living, with 'Kuli', which is a homonym and has two different meanings. On the one hand, 'Kuli' is short for Kugelschreiber (a ballpoint pen), which is definitely a modern writing utensil. In 1928, the German company Rotring introduced a cheap ballpoint pen that became popular as 'Kuli'. The semantics of this utensil contrasts sharply with Feder und Tinte, that is pen and ink, 'Kuli' participates in a code of writing utensils that are definitely not designating classical poetry. Ringelnatz's light verse such as his poem 'Ein männlicher Briefmark erlebte' (Bötticher, 1912, 4), which Beckett alludes to in his letter to Kaun, are subjected to conditions that extend even to the writing utensils. Writing with a ballpoint pen allows for speeding up one's handwriting. That is where the second meaning of 'Kuli', which designates a drudge, a peon or indeed a coolie, an even more derogatory name, comes in. Ringelnatz is subjected to conditions in which a poet has to earn a living by selling his products, as he did by performing his light verse in cabarets and theatres. Obviously, Beckett does not want to restore the conditions of classical poetry written with pen and ink, but rejects the conditions that subject the poet to an accommodation to the literary marketplace where they have to sell their products. The guiding principle of Beckett's neologism can be inferred. It synthesises in an innovative way what can be called the material basis of writing and a critique of the economic condition of poetry in a linguistic molecule that can stand on its own. If a rhyme provides an acoustic resemblance or similarity between two words in order to connect their meanings, Beckett's compound confronts the meaning of the poetic device in a marketplace where poets are treated like drudges or Kulis/coolies.

4

Beckett has subtracted whatever was not necessary for the functioning of his plays and media works. Theatre requires neither mimesis nor dialogue to enable the performance of a play. The theatrical illusion does not require scenery, costumes or props. Incidentally, actors are always dressed up whether or not they are wearing clothes. One does not need a curtain to open at the start of the play and close when it is finished. Almost everything that spectators are used to expecting in a theatre can be skipped. Beckett's theatre operates with an extreme – a minimum – that is sufficient to define theatre. In December 1979, David Warrilow performed the premiere of Beckett's A Piece of Monologue (Knowlson, 1996, 811). The dispositif of the theatre comprises the stage, the speaker - 'White hair, white nightgown, white socks' (Beckett, 2006, 265) - the lighting and, as properties, a standard oil lamp and a bed. There are no movements that define the action or the performance on stage. The speaker has to stand still. He does not move. Speaking is the only activity that happens on stage. He is speaking about some activities that happened in an undefined place and time. Although 'there is nothing but a voice', it has to be questioned whether the actor on stage is 'delivering a narrative' (West, 2010, 174). A Piece of Monologue provokes distinctions between recitation and drama, seeing and hearing, first and third persons (173-9). It is doubtful whether the speaker himself or someone else is performing the action he is reporting. The action takes place only in and through language:

Loose matches in right-hand pocket. Strikes one on his buttock the way his father taught him. Takes off milk white globe and sets it down. Match goes out. Strikes a second as before. Takes off chimney. Smoke-clouded. Holds it in left hand. Match goes out. Strikes a third as before and sets it to wick. Puts back chimney. Match goes out. Puts back globe. Turns wick low. (Beckett, 2006, 266)

Beckett's monologue exhausts the possibilities of speaking about a situation that comprises the lighting of a lamp. The old man is speaking about an action that makes something visible. If one can conceive temporality through movements or through changing lighting conditions, the monologue is situated at the threshold where speaking, movement and action are fading into mere visibility. The nexus between movement and lighting conditions is incorporated in the oil lamp, which signals – in contrast to an electric light – a temporality of its own. The play presents an action that can be seen and heard, but what can be seen and heard is different from the action that is spoken about. The monologue has a temporal structure that is shaped

not so much by progression, but rather by repetitions. One could say that the play triggers the spectator's imagination, who will imagine what is spoken about. The play makes something visible that could not be seen otherwise. The theatre as a particular medium of performance conflates spectatorship and imagination, which begin to be transposed and then lapse. Obviously, one could imagine a play where an actor performs what the man is reporting, but that is beside the point. Due to the medium of theatre, the difference between the situation on stage and the reported situation is oscillating: the visible image and a virtual image that is constituted by the monologue are constantly superimposed on each other. The interplay between the detailed and repetitive description of the lighting and the situation on stage produces a virtual image or a percept that can be disconnected from the play: one imagines or sees something that is not visible on stage, but is at the threshold of visibility.

The exhaustion of a situation can proceed through the combinatorial and lay bare the dispositif that is inherent in a particular medium. The principal difficulty, however, will always be how to conceive the nexus between the exhausted subject and the exhaustion of the situation defined by a particular. Although Beckett has raised this issue concerning different media, Deleuze concludes his essay with Beckett's 'Comment dire' as an example for the exhaustion of language as a particular medium (Deleuze, 1998, 173–4).

Stirrings Still is Beckett's penultimate text, and 'Comment dire' is his ultimate one; 'The phrase "comment dire" occurs in the first sentence of the first draft of Stirrings Still: "Tout tout les temps Toujours à la même distance comme c'est comment dire?" (Van Hulle, 2011, 18). Beckett himself translated 'Comment dire' as 'what is the word':

Comment dire has the formal aspect of a poem, but it can also be read as a failed or deliberately aborted attempt to write one single sentence, a succession of variants, constantly interrupted by the words 'what is the word' whenever the author arrives at a dead end in the composition process. (18)

Dirk Van Hulle has reconstructed a completed form of the virtual sentence which would read as follows:

'folie vu tout ce ceci-ci que de vouloir croire entrevoir loin là là-bas à peine' – in Beckett's own translation: 'folly seeing all this this here for to need to seem to glimpse afaint afar away over there' – and then the attempt at finishing the sentence is abandoned. The vague spatial orientation 'loin là là-bas' contrasts sharply with the here and now of the premature ending, marked by an explicit notation of the date ('29.10.88'). (Van Hulle, 2011, 18)

Ruby Cohn gave an account of the genesis:

In July [1988] a dizzy Beckett fell in his kitchen, where he was discovered unconscious by Suzanne. Hospitalized for tests, he was thought to have had a stroke. He watched himself slowly regain speech and mobility, and by September he committed the process to a poem in French – 'Comment dire'. [...] 'Comment dire' was started in the hospital, and it was completed in the rest home where Beckett spent the last year of his life. (Cohn, 2005, 382)

The text is, according to Cohn, Beckett's attempt 'to render the particularity of overcoming verbal paralysis, and the generality of articulating the moral situation, which many recognized as their own' (383).

The title 'Comment dire' designates a turn of phrase which is used when, in a given situation, a speaker has the common, appropriate expression on the tip of his or her tongue. The disorder called motor aphasia could be defined as the disability to organise the muscular movements for producing the sounds of speech. The everyday situation where one has an expression on the tip of one's tongue and the motor aphasia share a phenomenon – one is unable to articulate an expression which is, virtually, known by the speaker. 'Comment dire' combines the expression with further hints which indicate that she or he is unable to find the right expression in a given situation. The verbal expression starts a deixis which is without content in that it is directed at the very act of aiming at something. Demonstrative pronouns take the place of the missing expression, indicating that not any object but a determined object has to be designated. There are ongoing attempts to point at the missing expression but without any success. Deixis is a linguistic device with which a subject can define its space and time. Expressions such as 'I', 'here', 'there' or 'yesterday' are related both to the speaking person and to the complete statement of which he or she is a part. Obviously, the subject who appropriates the linguistic signs has not been developed to its full.

'Comment dire' seems to reverse the linguistic theory of the subject who uses shifters as means to appropriate language. There is a subject inherent in the text in so far as the speaker is unable to appropriate language by using deixis. There is no subject indicated in the text, either by pronouns or by pointing. However, this description does not succeed in grasping the relation between the text and its concept of subjectivity. The situation that the speaker has a defined object before his eyes, but is unable to articulate what it is, is indicated not by the subject but by pointing at something, which is exactly what deixis means. The speaker is visualising something mentally but is unable to say what it is. She or he is pointing linguistically at the situation. The statements are delivered in the field of optical vision as, for example, the participle 'vu' in line 10 or the verb 'voire' in line 24 (Beckett, 2002, 112). The attempt to render more precisely what is seen leads to a challenge of the very act of seeing: 'vouloir croire entrevoire' (112). What is visualised mentally is no optical apparition at all. The speaker

is moving towards further statements by using tropes such as parallelism and assonances. One word is marked in the syntactical formation: folly. The speaker who is trying to deliver a statement is excluded from the use of language everybody seems to participate in. Folly as well as being mad still has its best definition as not being able to participate in a standard system of reference. Although the speaker fails to refer to a common system of reference given with the language, he or she is still able to designate his or her failure as folly due to the resemblances of the phenomena.

The speaker's originality lies in the effort to find alternatives to the missing expression even if it is an exhausting and fruitless effort. After all, the speaker is articulating something, though not referring to the missing expression. She or he substitutes the linguistic function of designation and reference with a pure movement that is performed by the act of articulating. As long as deixis is possible, it is much more than articulation: if the speaker successfully refers to something, the articulation threatens to stop. The extinction of the act of speaking is made visible when the poem's text has two lines of blanks followed by a last 'Comment dire'. The white sheet of paper that the text is printed on no longer functions as the background which allows for reading, but, rather, the blanks are referring both to the object that cannot be designated by the speaker and to the failure of designation. The attempts to point at the very object are incorporated in themselves because they are delivering an empty expression. The articulation which continues although it has failed becomes an unforeseen possibility of saying precisely what has to be said.

5

For Deleuze, there is neither a stable notion of media nor a concept of media that focuses exclusively on technical aspects of a medium. He seems to be aware that even the technological basis of a medium is constantly evolving and changing. There is no single entity or apparatus that constitutes 'film' or 'radio'; there are no essential technological features that define these media. Rather, there exist a multitude of films or radios. The medium is a heterogeneous domain on the levels of its apparatus, of its practice, and its forms. Therefore, a medium is not defined by its technical components but extends to techniques of the body and, more broadly, to cultural techniques.

Deleuze deals with the modes of perception and the techniques of the body in order to find out what a medium does rather than how it could be defined. He has elaborated a type of virtual image as percept, that is a perception that is extracted from a situation, but not already given in the very same situation (Deleuze and Guattari, 1994, 163–99). The notion of the percept is not limited to a particular medium but may cross the boundaries of, say, optical media such as painting, theatre, film. Although a percept is constituted in a specific medium, it can separate from its original context. If Beckett gives us representations of the exhausted subject, it is difficult to grasp the role and function of the medium in the making of the percept. In his argument, Deleuze skips the issue of media and deals directly with the percept.

One could not make a percept, however, by using the medium simply as a device for representation. From Deleuze's point of view, the medium is negligible because it neither produces the percept nor represents it. Actually, for Deleuze, the medium hinders the making of a percept because it allows the clichés to circulate. For media studies, however, the main question is how Beckett renders present a percept by exhausting the possibilities that are inherent in a medium. Beckett uses the medium of, say, the theatre in a new way by stripping it down to its inherent dispositif. According to Deleuze, the plays make visible a percept, but it will come only to the fore by exhausting the possibilities of the medium, by reducing it to its dispositif. Under the extremity of the conditions of the dispositif, one could realise a new possibility in and with the medium. Nevertheless, the dispositif does not guarantee the making of a percept. It is not enough to present the basics of a medium in order to produce a percept. It is as if a percept was in search of a subject who can incorporate and bear it.

Notes

- 1 For this chapter, I am partly reusing the argument I developed in my article 'The audiovisual field in Bruce Nauman's Videos', Osiris 28 (2013), pp. 146–61. This concerns my reconstruction of the history of research into fatigue as well as parts of my reading of Deleuze's work on the matter. A slightly different German version of the argument can be found in my 'Erschöpfte Literatur, Über das Neue bei Samuel Beckett', in Armin Schäfer and Karin Kröger (eds), Null, Nichts und Negation. Beckets Becketts No-Thing, Bielefeld: transcript, 2016, pp. 225–45.
- 2 This statement quoted by Ricks is 'Sir John Pentland Mahaffy's famous reply when asked to distinguish the Irish bull from similar freaks of language' (2001, 158).

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Micro-drama / techno-trauma: Between theatre as cultural form and true media theatre

Wolfgang Ernst

Introducing Samuel Beckett's media theatre

A media archaeological investigation of sound recordings, including the challenge of their preservation and restoration, takes its departure from the technical conditions. It does so with a focus on the epistemological implications of what becomes of sound and speech once they can be technically addressed as signals. Very soon in such an analysis of the analogue and digital hardware and software tools used for sound recording, a sono-technical world of its own unfolds, to which cultural discourse is rather peripheral. A technology-oriented ontology grants media as artefacts a knowledge sphere of their own, which is suspended (at least momentarily, for an *epoché*) from phenomenological anthropocentrism. A radical media archaeological analysis bypasses studies which read dramas that involve media like Beckett's *Krapp's Last Tape* as symptoms of an aesthetic discourse. Rather, its investigation is immersed in the technical artefactuality itself, which is literally brought on stage, revealing its implicit techno-cultural knowledge.

In Peter Weibel's media art installation *ichmasse-masseich* (1977/78), three tape recorders are positioned in front of three corresponding human figures. Each time an endless tape loop passes the inductive coils of one of the tape recorders, the sound 'me' ('ich') is articulated. While the audience intuitively relates this expression to the human figures, in fact the reverse is true: it is the magnetophonic machine which is granted the capacity to articulate an 'ego'; the 2012 re-installation for the ZKM Karlsruhe exhibition *Sound Art* actually bypassed the co-presence of human figures completely (Weibel, 1977/78). The question of what media studies can contribute to a proper understanding of dramatic intentions does not simply reduce twentieth-century theatre to functions of a technical a priori; rather, it understands such dramatisations from the point of view of the machine. For the historical approach, it takes sound philology and archival research to contextualise

Beckett's oeuvre in its contemporary media culture. A radically media archaeological reading of *Krapp's Last Tape*, Beckett's one-act drama from 1958, discovers a different micro-dramatic emergence *from within* the media sphere of magnetophony – its technological 'sonicity'.

Such a non-historicist reading of *Krapp's Last Tape* does not circle around the rigid denominator 'Beckett' and does not aim at reconstructing the idiosyncratic intentions of an individual author, but understands the play as an instantiation of the technological unconscious in culture. Different from physical objects investigated by natural sciences, even the most inhuman apparatus, such as the electronics of the tape recorder, is a cultural artefact, the result of techno-logical knowledge accumulated over centuries. The implicit knowledge and 'message' of a new technology express themselves, even involuntarily, the moment a human author makes use of its affordances.

What unfolds from the time-based techno-cultural unconscious is a fundamental techno-drama. When Krapp, after a moment of 'musing' in front of the tape recorder, tears out the tape spaghetti and throws it away, this techno-traumatic excess results from either positive or negative feedback in the coupling of human memory with machine storage (Kittler, 1991). In *Krapp's Last Tape*, the human character experiences the technically preserved voice of his former self. Already the Edison phonograph resulted in a shock within the cultural unconscious, since the 'tone' (including the voice) had previously been experienced – phonocentrically – as the most ephemeral and presence-dependent form of articulation of the individual self. All of a sudden, this very uniqueness could be technically repeated.

From the medium-specific operativity and technological *Eigenzeit* of the tape recorder stems a techno-traumatic affect. In terms of phenomenological experience, the iterability of the human voice enabled by recording media, even beyond the death of the body from which it issued, can be described as a shock. Such dramatic temporality originates from the medium itself as its real message (in McLuhan's sense), or more precisely, from the 'real' of the acoustic signal as a technological message which, in human cognition, is experienced mostly subliminally. In the case of *Krapp's Last Tape*, Krapp's disembodied vocal memory is dislocated from the symbolic regime (the traditional diary) into the voice-recording machine itself (the tape recorder), resulting in a *techno*-traumatic irritation.

There is a specific temporality to the human voice when recorded on magnetic tape. Electro-technological media inscribe the voice into cultural memory by means of signals instead of symbols. Whereas the alphabetic recording of speech loses the *hic et nunc* of the event (Peters, 2009, 35), technical voice recording preserves the presence-generating power of signal replay. The specific aesthetics of 'aura', as defined by Walter Benjamin (1969, 220–3), depends on the impression of its being present from a distance.

When sonic articulations are echoed from a recording medium, technological temp*aura*lity arises. From this perspective, the essential concerns in *Krapp's Last Tape* are the attempt to receive authentic remembrance from technical memory and the techno-trauma caused by the disembodied voice. Although non-human, the tape recorder is the second, and equally important, actor on stage. Therefore, *Krapp's Last Tape* counts as genuine media theatre. In technical terms, the co-presence of a human actor and a tape recorder is a loose coupling which constitutes a comprehensive *system* – a key concept of cybernetics, which was the dominant *episteme* of the epoch in which Beckett wrote his play.

This extends to the temporal dimension as well. Once humans are coupled to a signal storage and processing media interface, they become subjects to the temporalities of the apparatus. What happens when psychic 'latency' becomes magnet signal recording? Not only is the pairing of a human protagonist (Krapp) and a high-technology device (the tape recorder) a microsocial configuration in the sense of Actor–Network Theory or an *ensemble* in Gilbert Simondon's sense, but the close coupling of human and machine on stage asks for a more rigorous analysis of the cognitive, affective, even traumatic irritations induced in humans by the signal transducing machine.

Unlike the theatrical stage, which can only reveal the phenomenological effects induced by technologies, media theatre is not simply performed by human actors (like Krapp) enhanced by media. Rather, the real micro-drama unfolds within the circuitry such as the tape recorder and algorithmic technologies: signal transduction in analogue electronic media, and signal processing in digital media. This media-theatrical concept correlates with a different method of analysis. In contrast to the hermeneutic exegesis and ekphrasis of what has already been written by Beckett in his script, which aim to unfold its different layers of meaning, media archaeography identifies what escapes the script, assuming that the tape recorder knows more than its external author.

Krapp's Last Tape insistently unfolds the clash between the symbolic regime (language, writing, archival records) and the phono-technical real. Three kinds of agency are staged: human remembrance (Krapp), the symbolic memory order (the ledger as tape inventory) and signal storage technology (the tape recorder). The media-philological attention therefore reads Krapp's Last Tape as an operational function of the epistemic challenges and opportunities posed by electro-acoustic time axis manipulations in the 1950s and 1960s, while at the same time refusing to extend the terminology of literary genres to the analysis of magnetic voice recording. Anthropocentric discourse analyses oriented to cultural performance, however, tend to metaphorise human 'memory' in terms of specific storage technologies, describing the dramatisations of electronic recording such as Beckett's Krapp's Last

Tape simply as discursive symptoms of technical 'affordances'. Media archaeology more radically breaks out of the hermeneutic circle in favour of an analysis of the non-discursive techno-processual event itself: 'Media phenomenologists [...] analyze how phenomena in various media appear to the human cognitive apparatus, that is, to the mind and senses' (Jakobsen, 2010, 141). While in the latter mode any ekphrasis of the magnetic tape factor in *Krapp's Last Tape*, or in William Burrough's novel *The Ticket that Exploded*, tends to re-humanise the techno-trauma by integrating it into the symbolic order of an anthropocentric narrative, media archaeography externalises the technological challenge.

Archival research can be helpful in explaining the context of such an operation. In 1956 Beckett was asked to write a radio play for the BBC, resulting in the broadcast of *All That Fall* in 1957. During the production, the BBC made available to Beckett a technology that was new at that time, the tape recorder, which allowed for acoustic monitoring and sonic control by playback. In terms of author-biographical narrative, this experience with functional dramaturgy resulted in Beckett's integration of a tape recorder in the subsequent play *Krapp's Last Tape* (Fuegi, 1991, 356). But instead of philologically reconstructing the steps and influences on Beckett which successively resulted in the play, a media archaeological analysis starts from the factuality of the actual human-machine symbiosis as the core (of the) drama and replaces the author-centred hermeneutics with a techno-logical analysis: what is the techno-epistemology that conditioned the possibility of Beckett being dramatically seduced by the affordance of a tape recorder?

Once the focus is on the techno-phonic (and techno-logic) medium message of *Krapp's Last Tape*, the analysis becomes inductive in the precise sense of electromagnetic induction, which is the very technological condition of possibility (the *arché*) of the drama unfolding in *Krapp's Last Tape*. It is the question of whether Krapp's voice, once transduced into magnetic latency, is still human that prompts us to attempt to define the qualities of real media theatre.

The untimeliness of Krapp's Last Tape

It has been frequently remarked in Beckett scholarship that in 1958 the technical temporality claimed in the play was an anachronism, since the suggested forty-five years of birthday tape recording by Krapp constitute a techno-historical impossibility, predating the actual development of the AEG tape recorder by decades. Therefore, it was appropriate for Beckett to diegetically place the play sometime 'in the future' (Beckett, 1965, 9). Such time-shifting is in fact the essence of spool-based tape recording and replay.

But a different future had already arrived in 1958. To borrow a term from R. Murray Schafer, a radical 'schizophonic' rupture between the human and his or her voice occurred with the emergence of synthetic voices. While Beckett was still writing his drama *Krapp's Last Tape*, Bell Laboratories in the USA already experimented with the vo(co)der, with artificial speech synthesis. Besides, the *arché-logos* of magnetic voice recording actually dates back to 1900, when Valdemar Poulsen presented his telegraphone at the Paris World's Fair.

With Oberlin Smith's circuit diagram, magnetic recording, explicitly targeted at speech dictation in the office, and the telephone answering machine even co-originated (as an electric answer) with the Edison phonograph. At that moment, another media-epistemological gap opened up: while the phonographic groove visibly and haptically still comforts the human bias to integrate the technical recording into the familiar cultural techniques of writing (Adorno, 1984), the transduction of the acoustic voice into the subliminal electro-magnetic field does not reveal itself immediately to the human sensory apparatus any more.

Magnetic storage in latency poses a challenge to the familiar cultural concepts of memory and recall, confronting them with a radically non-human eventality of storage instead. Here, all metaphorical comparisons with Marcel Proust's À la recherche du temps perdu in literary studies fail. The communication and memory technologies employed in Beckett's various works do not simply function as 'supplements' and 'prostheses' of a reduced corporeal memory (Lommel, 2006, 81), nor do they simply represent its escalation, but emerge according to an autonomous – or more precisely, auto-poietic – techno-logic. Their circuitries and active electronics do not lend themselves to anthropological metaphors any more, especially when their signal transducing potentials are media-archaeologically recognised, instead of an attempt at cultural re-familiarisation.

The magnetisable tape originated in the 1920s, following experiments with metal dust filters for cigarette paper in early twentieth-century Dresden by Fritz Pfleumer, who actually called it 'singing paper'. Poulsen's wire-spool based telegraphone, however, had already been presented at the 1900 Paris Exposition as a telephone call recording and answering machine. Further back, in 1820 Hans Christian Ørsted did not invent but rather discovered the electromagnetic effect. This paved the way for Michael Faraday's experiments with electromagnetic induction in 1831, which ultimately led to Oberlin Smith's design of an electromagnetic recording device almost contemporary with the Edison phonograph, and Poulsen's electromagnetic telegraphone in 1898. The magnetic wire-based telephonic voice recorder was not invented for autobiographical memory but for asynchronous

communication in a delayed present. The point of transition from the present to the past is undefined. With its 'rewind' and 'fast forward' buttons as the very affordance of the reel-to-reel tape recorder, the option of time-shifting is already suggested. For circus artist Katja Nick the live magnetic recording on stage, after pressing the rewind button, served as a proof of her skill at backward speech (Nick, 1997). From a reverse perspective, this implies that Katja, when speaking backwards, was in a machine state herself. In an operative sense drama is related to the machine, in a performative sense it is related to bodies. These two relationships converge in a definition of media theatre as that which not only extends human performance with its spatial and temporal constraints to non-human tempor(e)alities but actually transcends it – as has already been expressed in Hugo Münsterberg's *The Photoplay* (1916), which contrasts the medium-specificity of cinematography with traditional theatrical presence.

Poulsen's original description of magnetic voice recording on steel wire spools deserves a close reading, since it is here that the real media-theatrical drama unfolds, already anticipating all subsequent cultural aestheticisations. The technical description is a literary genre in itself; archaeography discovers the technical essence and transforms it into verbal expression, from electromechanics or electronics into techno-lógos. When magnetising a wire with a passing electromagnet in the rhythm of the microphonically transduced alternating current of human speech, what remains on the wire is a kind of magnetic wave form, providing the ephemeral speech signal with endurance - 'eine dem Gespräch entsprechende sinusoidale Permanenz' (Poulsen, 1900, 755). The human voice is transformed into a non-human time signal or storage signal. In reverse replay, the technical system acts as a resonifier of the alternating current as known from telephony. The human mind attributes a communicative intention to vocal articulation, which is transduced into a signal apt for the storage channel, and the other way round. In the technical diagram of communication engineering, there is nothing human in the actual channel of signal transmission (Shannon and Weaver, 1949), in the essential medium event of sending / storing and receiving / replay.

The communicative relationship between Krapp as a character present on stage and his magnetophonic voice is telephonic, indeed; almost at the same time as Beckett was writing the play, a film version of Jean Cocteau's play *La voix humaine* put both human and telephone on stage (Campe, 1987). The wire recorder maintains a material (reverse) identity with telephony by wire; the very same wire serves as the channel of transmission and as a medium for suspended signal storage, while with Pfleumer's 'singing paper' the magnetic tape roll induces the scissor practice of cut-ups known from film editing.

Repetition and différance

In classical drama, presence rests upon two logocentric claims: 'that it represents human beings with the actual bodies of other human beings, and that it represents spoken words with words spoken by those actual human beings', while its 'reliance on speech rather than on 'dead' writing gives it an immediacy which the novel [...] can never match' (Connor, 1988, 126). In Krapp's Last Tape, the very iterative possibilities brought about by the tape recorder undermine the phonocentric claim. Different from symbolically coded notation, magnetic recording operates on the level of the signal event, which is always a time-signal and thus a 'temporal object' in the phenomenological sense. In fact, it is concerned with 'the acoustic materiality of the words themselves' (127) - not as 'words', but as sound which can be spectrographically captured in its elementary frequency components, which constitutes a major difference from abstract alphabetic letters. There is no fusion of the written and the spoken, but rather an unbridgeable gap between symbol and signal. The ledger that Krapp consults in order to introduce a symbolic order into the continuous loops of the spools 'forms an interesting counterpoint to the spoken voice that he hears on tape' (130). Resulting in what Schaffer once termed 'schizophonia', the tape-recorded voice, in replay, dissociates Krapp from himself. A temporeal abyss opens up in the differential iteration.

The audio-visual difference

In Beckett's drama the magnetic tape reels still maintain an indexical, analogue relation to the biophonically recorded voices of the protagonist, who rewinds them on the occasion of each birthday. While the main (human) actor gets lost in the actual loops of his audiotaped autobiographical memories, the medium-specificity of Beckett's one-act drama depends on the audio tape recorder used for his diary-like voice recording, and not – as experimented with in a recent performance – for his video image recording. In 1958, when *Krapp's Last Tape* was first published, the American Ampex company had just begun to produce an apparatus for television image recording. Analogue video is a technical extension of magnetic sound recording. Would Beckett's drama have been written differently in the subsequent age of video tape recording, replacing audio with video, as actually performed in a production of the Schloss Neuhardenberg Foundation, premiered on 1 June 2007?¹

A television adaption of *Krapp's Last Tape* employs a flashback technique for the scene with the girl in the punt, while in a London production videotape and television screens were substituted for the audiotape and the single

tape-recorder (Knowlson, 1976, 64).² From a media archaeological point of view (which is a process-oriented ontology of the internal technological event), however, what appears discontinuous for human audio-visual sensing are simply two emanations of the same technology. Video image recording was directly derived from the acoustic tape recorder; video artist Bill Viola actually defined the electronic (video/TV) image as an iconic sensation of implicitly 'sonic' one-line scanning (Viola, 1990). The Picturephone, as developed by Bell Laboratories after the Second World War, enabled both vocal and face-to-face immediacy over distance (Mills, 2012, 43). When the signal comes from a videotape, it 'tunnels' temporal distance as well – with no communicative feedback channel though.

Tape age(s): time, temperature, entropy

Krapp's Last Tape is a drama about ageing. With the constellation of a human actor versus technological agency on the stage, the drama of ageing is incorporated in two different kinds of bodies. In the play, there is a growing asymmetry between media time (the tapes which re-play Krapp's voice, invariant to temporal progression, whenever it is subjected to the magnetic recorder) and Krapp's biological existence, which is subject to ageing, that is: thermodynamic entropy.

The vacuum tube, especially in its specification as the triode, as an essential component in the electronics of the type of tape recorder which Beckett used in *Krapp's Last Tape*, once liberated electromagnetic media from the mechanical constraints of the Edison phonograph such as erasure; still, they are subject to decay over time themselves. As for digital technologies, their persistence against entropic time, their ahistoricity, is due to a different form of processing: while still working with signals (recording the physically real acoustic event), they are symbolically encoded and decoded as information in the mathematical and logical sense.

The magnetic tape is both subject and object of time-shifting. On the one hand, a voice recorded on tape does not age, resulting in a kind of temporal *ekstasis*, subverting the occidental phonocentric tradition. On the other hand, the tape itself is subject to ageing. In Beckett's drama, the tape serves as a material metaphor for a different media-induced temporality. 'Metaphor' is not to be taken metaphorically here in the rhetorical sense, but very literally as 'signal transfer'. The technical signal is in principle (*en arché*) invariant to circumstantial change. Once recorded on a material storage medium, sound is trusted to a technical latency, waiting to be brought into acoustic existence again by either electromechanical or electronic signal transduction.

While Beckett in his corporeal uniqueness has entropically dissolved (like some of the actors who performed Krapp) and only symbolically survives as a set of alphabetically coded texts (his oeuvre), a tape recorder surviving from the original stage event (1958) can actually be re-enacted. Recorded as signals on tape, a 'bodiless' voice transcends textual historicity. Such tape voices are monolithically exempted from their organic and biographical context (Becker, 1998, 171). But what if the magnetic spool itself ages? Tape ageing expresses itself physically. When restoring tape recordings, binder hydrolysis or the 'sticky-shed syndrome' can cause playback problems associated with certain tape brands (Weiss, 2017, 150), contrary to the promise of eternity expressed, for example, in the trademark of the 'Permaton' spool:

A temporary remedy for the problem is to bake the affected tape in a scientific oven at a low temperature for a few hours. Once the tape has cooled for twenty-four hours following the baking process, the tape is able to be played without shedding for about a week before it reverts back to its sticky shed condition. The treatment provides a small window of time for the tape to be safely played for digitisation. (Weiss, 2017, 150)

How to re-enact Krapp's Last Tape today

As a very literal media archaeological challenge, there 'remains' the preservation of original reel-to-reel tape machines from previous performances of the drama for contemporary enactment. This challenge is also familiar from the preservation of early media art, such as Peter Weibel's installation *ichmasse-masseich*. Its re-installation in 2012 bypassed the human figures. It still featured authentic tape recorders and a tape loop, but the 'ich' emanated as digitised sound from offstage, emerging from a computational space rather than the electromagnetic sphere.

In Simon Emmerson's musical composition *Spirit of '76* (1976), a reel tape machine is used to create an accelerating tape delay; the effect is achieved by letting one of the two reel-tape machines drag an empty tape spool around on the performance floor. While the sonic effect of such a delay mechanism can easily be re-enacted with software emulations such as a Max/MSP patch, the theatrical effect of the sliding spool gets lost.³

What really happens between the human voice and magnetophonic recording: media-theatrical research

Did Beckett care about the technical details of the tape recorder, or rather limit his poetic imagination to the resulting phenomena? Neglecting the

function of Krapp's bananas in the play, media archaeology focuses instead on the microphone and the scene of the voice-tape coupling. The human voice creates vibrant pressure on the microphone membrane, which converts the acoustic wave into an electric signal by varying the magnetic field of an iron core wrapped around by a wire coil. In the tape recorder, the electromagnet receiving this fluctuating voltage magnetises the metal oxide particles glued to a celluloid band of tape. From that moment, the metal particles in their polarisation keep the alternating voltages of the sound signal and can be converted back (after electronic amplification) into acoustic waves emanating from the loudspeaker, without being erased themselves (like ephemeral spoken language). In sharp contrast to the invasive phonographic recording, this does not make an imprint on a material (Blom, 2016, 160); in addition, the magnetic tape is 'biased' with a high-frequency signal immediately before the actual low-frequency voice recording in order to improve the signal-to-noise ratio (dynamics) – which means that there is (implicit) 'radio' in magnetophonic audio recording.

Once coupled to such a signal recording and reproducing machine, a human becomes subject to inhuman media time. A machine like the tape recorder

with superior technicality is [...] an open machine that also assumes humans as interpreters and organizers – this is what is called a 'technical ensemble'. Humans may [...] be mediators in a machine's effort to connect and in that sense become part of the machine's operations. (Blom, 2016, 26)

This is how Ina Blom paraphrases philosopher of technology Gilbert Simondon, whose *Du mode d'existence des objets techniques* was published in Paris by Aubier in 1958,⁴ the very year of *Krapp's Last Tape*. Media archaeological research, which runs parallel to historical studies in the textual record archives, needs to know the machine behaviour of the apparatus Beckett actually experimented with and used in the world premiere of the play in 1958. When Krapp is handling the apparatus, it is its very resistance which reveals its technicity in the sense of Martin Heidegger's definition of technical failure. In moments of failure, the medium changes from its 'ready-to-hand' status into the 'present-at-hand' mode (Heidegger, 1993, 69) – which is called 'carpentry' in object-oriented media analysis (Bogost, 2012, 85–111).

Listening to the tape recorder with media-archaeological ears

Micro-temporal media archaeology, with its conceptualisations of non-human media, memory, time and sound objects, can be paired with object-oriented ontology and speculative realism indeed. Both methods experience (and experiment with) the various temporal processes unfolding within technology, letting media themselves become active archaeologists of epistemic insights.

What do human ears hear when they listen to a recording of a voice on tape? Is it the voice or the magnetised particles of the tape and the impact on the sound by the channel of storage or transmission, which alters the signal in nonlinear ways? The development of recording and reproduction technologies has always been media-phenomenally oriented towards the human ear as destination. In terms of Shannon's communication diagram though, the technical communication between sender (transducer or encoder) and receiver (demodulator/decoder) is an internal technical coupling in between, in the *Eigenwelt* cut off from the human or natural environment. Different from the human ear, which only reacts to acoustics, the electronic apparatus has a sense for implicit sonicity – just as in Benjamin's world the photographic camera eye has access to an 'optical unconscious' (Benjamin, 1969, 237), and like Dziga Vertov's concept of the cinematographic *kinoki*.

The tape machine itself does not care about acoustics; it is not interested in the coupling of electrical signals to vibrating sound waves in air. It cares about what magnetic coating the polyester tape consists of, the speed of the capstan drive, Dolby and DBX filter curves, and Resistor-Capacitor time-constants – a line of thinking that subscribes to the latest developments within object-oriented philosophy. Therefore, media archaeology investigates the notion of memory and time from the point of view of the tape recorder, in an attempt to locate its machine understanding, which opens the possibility of getting closer to the actual physical operational technology itself.

The tape is covered with domains of randomly oriented magnetic fields, but when the material gets magnetised by alternating currents the domains are swung from their randomly distributed positions into analogue wave forms. While Krapp's Last Tape focuses attention on the human idiosyncrasies and failures of memory and recall, since the presence of a human actor on stage attracts the phenomenal attention of the 'audience', the real techno-drama of forgetting happens within the tape recorder itself, where the effacement of magnetic memory is the basis for the recording. The first agency which the revolving tape meets is the erasure head with its function to eliminate all – intended or accidental – previous recordings; unless they are intentionally preserved, in a different circuitry, for palimpsestuous dubbing. Its capacity to manipulate auditory content electronically centres around its three tape heads (erasure, recording and playback), each containing an electromagnet having the ability to convert an electrical signal into a magnetic force that can be stored on the passing magnetic tape and, conversely, convert the magnetic content of the tape into electrical current. In most devices the recording and playback heads are combined into one, allowing for immediate auditory monitoring. While Beckett stages the drama of remembrance, forgetting and repetition as a symbolic mechanism, actual forgetting and recording take place within the tape recorder itself, in its magnetisation and erasure operations. Only such a tight coupling between a human voice and a sonic technology constitutes real media theatre; the microdramaturgies are governed by techno-logics itself, be it analogue electronics or digital algorithms.

The media archaeological moment is the transubstantiation of the voice in its becoming signals on magnetic tape. The media-epistemic 'event' is the moment of transduction, where the pick-up inductively follows the phonographic groove; the focus of media-archaeological investigation is thus the tempor(e)ality of *operative* media. No simple translation takes place here (like in language); rather, a transubstantiation from the mechanical movement of the record player (direct impression of sound waves) into electromagnetic signal latency. Immediate (sensual) sound thereby becomes simply a function of a manifold oscillating regime (even in the 'reading' of the optical laserdisc). Technical transduction converts acoustic waves into electric voltage, preserving a transitive relation in its magnetic storage, while digital sampling and quantising radically disrupt the physical signal, dividing it into informational bits which are then decoded: reading again.

One passage in *Krapp's Last Tape* remembers: 'We lay there without moving. But under us all moved, and moved us, gently, up and down, and from side to side' (Beckett, 1965, 20). This poetic memory of Krapp on a boat with a woman, spoken and replayed as an auditory diary entry on magnetic tape, actually reflects the acoustic wave forms and the movement of the tape on spool – the way signal recording media challenge the human perception of movement and stillness, turning it upside down, transforming continuous movement into quantifiable frequencies (ever since chronophotography).

Techno-traumatic silence

The last remark in Beckett's script declares: 'KRAPP motionless staring before him. The tape runs on in silence' (Beckett, 1965, 20). This is the Bergsonian durée in its purest form, against which engineers developed the auto-stop. It coincides with a techno-dramatic silence expressed by the final remark ('End of recording') in the protocols of cockpit conversations preserved on the magnetic recording from the black box in aeroplane disasters, where one of the two components is the cockpit voice recorder (CVR) for all kinds of semantic and non-semantic speech and noise in the cabin, the other being the flight data recorder (FDR), which registers machine 'communication'. In the USA since 1966, the doubly protected CVR black box contains a

30-minute magnetic tape loop, which erases itself after each turn. Both FDR and CVR are additionally equipped with a submarine ultrasonic sender, which, after a possible crash, emits signals for sixty days to facilitate location (MacPherson, 1998).

It was Beckett himself who introduced a dramatic change into his media scenario. At the very end of the 1969 Berlin Schiller Werkstatt production of *Krapp's Last Tape* (and subsequent productions),

[i]nstead of the curtain closing on a motionless Krapp, staring in front of him with the tape running on in silence, Beckett had both the stage and the cubbyhole lights fade [...] leaving only the 'eye' of the tape-recorder illuminated. This change, 'originally an accident – heaven sent' Beckett wrote, accentuates a theme and contributes to an effect that is fundamental to this play. (Knowlson, 1976, 55)⁵

While literary scholars tend not to investigate the technical details much further, a media archaeological analysis pays full attention to them. The 'eye' is apparently the 'magic eye', the oscilloscope-like indicator of the signal dynamics. Apart from the mechanical input/output and winding knobs, this vacuum tube is the only point where the inner electronics of the machine pierces the black box, interfacing the outer and the inner world of media theatre, a metonymy of the theatre curtain itself opening and closing.

Loops, analogue and/or digital: *Krapp's Last Tape* and the *Halteproblem*

While the magnetic tape is meant for memory recording, its very spool-based time figure has an inherent 'sense of ending'. Its loop structure is characteristic of the classic reel-to-reel magnetic tape. The final director's note in Beckett's play, 'tape runs on in silence' (Beckett, 1965, 20), refers to an endlessness which has been answered by technology by introducing the auto-stop mechanism at the end of a tape on spool.

In parallel (and contrast) to *Krapp's Last Tape*, there emerged a different halting problem as a nondiscursive, computational companion to Beckett's biographical drama. Alan Turing's algorithmic finite automaton, which became the model for digital computing, is also based on the (purely theoretical) assumption of an endless storage *tape* used for intermediary notation (Turing, 1937). One of the metamathematical challenges behind such a machine model of algorithmic computation was the *Halteproblem*: to find a logical procedure which can determine, given a program and an input to the program, whether the program will eventually halt when run with that input. The mechanism of the tape recorder induces Krapp to recover his

past by temporal shifts, while allowing, thanks to its button-based forward and backward options, typewriter-like operations. These two movements fuse in the Turing machine. The 'endless' tape loop designed by Poulsen for his wire-based voice recorder was written and read by 'writing' and 'reading' magnets (Poulsen, 1900, 758, fig. 5), which prefigured the Turing machine. While Krapp got lost in magnetic tape loops, iterative procedures and fractal recursions have become the predominant chrono-tropes for computing time. To express it in pseudocode: 'else loop forever' (Anonymous).

With the digital audio tape (DAT) the magnetic tape becomes a hybrid: both analogue (spooling continuously) and digital (in its time-discrete recording of acoustic impulses representing digital samples). The use of 'audio' cassettes for data storage is not intended for human senses but for the ears of the machine; they became prominent for early home computing culture with the Datasette for the Commodore 64 computer (Bohlmann and McMurray, 2017, 20). While Beckett reduced magnetic recording to the human voice and kept the symbolic, alphanumeric regime apart in the 'ledger', the Z22 electronic computer developed by Konrad Zuse's company already used the rotating magnetic drum for data storage. Since the rotation frequency was still within what is technically defined as low-frequency band, engineers could even audify such 'algorhythms' experimentally (Myazaki, 2012), blending techno-mathematical algorithm with musical rhythm by directly connecting the magnetic drum to a loudspeaker. Behind Beckett's manifest theatrical application of electromagnetism, a different kind of media theatre emerged in the background, epistemologically bypassing the analogue time regime of the time axis manipulation of human voice by radically non-human, time-discrete data processing. 'In the future', as seen from 1958, Krapp's tape recorder will already have been outdated by the digital audio recorder.

When staged in the present age of ubiquitous computing, a reel-to-reel tape recorder appears 'antiquated' on the stage (Becker, 1998, 162). But the computer, with its computational experimentation in 'poetic' text generation by cybernetic informational aesthetics, was already contemporary with *Krapp's Last Tape*. Is there, in media archaeological terms, a technological anachronism in Beckett's drama regarding the change from analogue to digital media theatre? In the course of this change, magnetic tape loops were replaced by the algorithmic coding of the 'if/then' loop. Instead of the linear 'rewind' and 'fast forward', which depend on the materiality of the spool (Krapp's repeated outcry 'Spoool' makes him articulate the actual message of the medium of the tape recorder), these codes have nonlinear addresses – a difference comparable to the rupture that happened between classic celluloid film editing and digital video cutting on the editing software AVID.

Beckett's logocentrism? Magnetophonic voice recording versus computational speech generation

What if, instead of tape loops containing analogue voice recording as in Beckett's Krapp's Last Tape, the speech unfolds from within computing in discrete Markov chains? Max Bense experimented with such technomathematical machine articulation in his radio play Der Monolog der Terry Jo (1969). In Beckett's radio play Embers (1959), the noise of breaking waves at the sea shore figures metonymically for language itself (Becker, 1998, 124–7). In true media theatre, it matters indeed whether the material noise of the magnetic tape can be heard as its medium message, quite independently of the anthropocentric focus of attention on the theatrical voice. Bense's radio play Der Monolog der Terry Io, a contemporary experiment with stochastic analysis in cybernetic linguistics, is based on a seashore event as well. A girl, surviving a shipwreck, is found unconsciousness on the beach; in hospital, she starts to articulate an initially senseless, but then increasingly meaningful monologue retelling the trauma. In the spirit of informational aesthetics, Bense's radio play makes a non-human, bodiless voice speak: a vocoder sonifies a computer-generated text consisting of letters with random distribution, which increasingly become structured by ordering in Markov chains, forming almost semantic patterns (von Herrmann, 2009, 59-60).

Media archaeology is not just nostalgia for the electronic hardware of 'dead media' like obsolete tape recorders. It has a mathematical cutting edge as well. After Beckett, in his one-act piece, had dramatised the recursivity of language related to magnetic tape memory, he produced an equivalent to Bense's Der Monolog der Terry Jo, the short (non-)story Lessness, which can be deciphered (rather than hermeneutically 'understood') and decoded computer-philologically with mathematical methods. In 1971 the piece was adapted into a BBC radio play with human voices, somewhat reminiscent of George Perec's radio play Die Maschine, broadcast by the German Saarländischer Rundfunk in November 1968. And indeed, computational aesthetics is present in the techno-cultural subconscious of Lessness, even if not explicitly reflected by its author. In its aleatory permutation of lexical items, the compositional procedure of Lessness can be extended almost infinitely, which invites a probabilistic analysis of the text to detect if there is still a rule behind it. In the best sense of cybernetic aesthetics, an algorithm (written in FORTRAN) has been used to statistically segment the text and isolate its units. This computation took about thirty minutes on a Univac 1106 computer, and the result confirmed that the phrases in Beckett's piece are indeed distributed randomly (Coetzee, 1973). Regardless of any semantic content, the actual media-dramatic act here becomes the running time of the analysing program itself. Such technological self-expression unfolds from behind what has mostly been interpreted, in literary criticism, as a formal experiment.

Notes

- 1 With Josef Bierbichler as Krapp, under the direction of B. K. Tragelehn (Schaubühne Berlin).
- 2 The TV adaption was featured in the BBC2 programme *Thirty Minute Theatre*, broadcast on 29 November 1972, with Patrick Magee as Krapp, directed by Donald McWhinnie. The theatre production was staged in the Royal Court Theatre on 16 January 1973, under the direction of Anthony Page, with Albert Finney playing the part of Krapp.
- 3 As analysed by composer Sebastian Berweck in his dissertation 'It Worked Yesterday: On (Re-)performing Electroacoustic Music', submitted to the University of Huddersfield for the degree of Doctor of Philosophy in August 2012.
- 4 I am referring here to the second edition of Simondon's book (1989, 12–16).
- 5 Knowlson is quoting from a personal letter Beckett sent to him on 18 May 1972.

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Electrifying theatre: Beckett's media mysticism in and beyond Rough for Theatre II

Balazs Rapcsak

'I'm in the middle' (Beckett, *The Unnamable*)

'Da wir sie [die Sprache] so mit einem Male nicht ausschalten können, wollen wir wenigstens nichts versäumen, was zu ihrem Verruf beitragen mag' (Beckett, 1984, 52). These are the terms in which Beckett couches his early aesthetic programme in the 'German Letter of 1937'. The statement is followed by the description of the more often referenced procedure of boring holes in language, which is in fact put forward as a merely temporary solution: 'Selbstverständlich muss man sich vorläufig mit Wenigem begnügen. Zuerst kann es nur darauf ankommen, irgendwie eine Methode zu erfinden, um diese höhnische Haltung dem Worte gegenüber wörtlich darzustellen' (53). But the ultimate goal is clear: 'Aufhören soll es [das Spiel der Literatur]' (54).

The apparatus of *Disjecta* provides a translation of the letter by Martin Esslin, which glosses 'ausschalten' as 'eliminate' (172). Viola Westbrook, in the more recent edition of Beckett's letters, translates it as 'dismiss' (2009a, 518). Helpful as they are, both renditions misdirect the reader unversed in the German tongue: *ausschalten* means to 'switch off', primarily in the electrical sense, especially when combined with the adverbial 'all at once' (1984, 172).

Thus, the idea of dissolving language into silence by somehow switching it off was already a central image in Beckett's early reflections on his art. And the fact that its appeal remained unabated over the coming decades is most clearly demonstrated by the last published words Beckett wrote for the stage, the words that conclude *What Where*, just as the stage lighting gets turned off: 'Make sense who may. I switch off' (Beckett, 2006, 476). And so it seems that by the end of Beckett's career switching off the meaning-generating machine of signification had not merely turned out to be technically possible, but had indeed become a major device.

Here we have an early and a late example that frame a body of work whose fascination with the electric switch never seemed to wane (Albright, 2003, 120; Connor, 2014). But Beckett's exploration of the phenomenon of switching, this simple flick that embodies centuries of cultural development and may well determine the centuries to come, is perhaps nowhere as elaborate as in the stage play *Fragment de théâtre II* (translated into English as *Rough for Theatre II*), written in 1958 but only published in 1976 and not performed until 1979, where it literally takes centre stage.

ABC - A/B

In the summer of 1958, Beckett discussed his developing concept of the play with Robert Pinget, who, in 'Notre ami Samuel Beckett', gives an account of this conversation, mentioning Beckett's 'disgust at one point for the theatre, where one doesn't say what one wants to, as in novels or poems' (qtd. in Beckett, 2014, 167). Although we may raise the question of whether Pinget managed to capture Beckett's words with utmost fidelity, as if 'saying what one wants to' was ever a straightforward issue, or even necessarily an aim, in Beckett's novels, the quote nonetheless suggests that a close reading of the stage play might be in order, while establishing a direct link to the problematics of Beckett's prose fiction, especially the major novels from the preceding period, the 'trilogy'.

But while Beckett's prose writing evolved ways of working against language *in* language, *Theatre II* already marks an apparent departure from literary writing in that the fragmentation of a life's narrative (the character C's) is not simply a matter of textual composition and syntax but is realised through the material constitution of the file system itself, compiled by the other two characters (designated as A and B), which is meant to record or produce this narrative, but which – in the very act of representing the story – causes its disintegration into discrete units:

B: [Indignant.] We have been to the best sources. All weighed and weighed again, checked and verified. Not a word here [brandishing sheaf of papers] that is not cast iron. Tied together like a cathedral. [He flings down the papers on the table. They scatter on the floor.] Shit! (Beckett, 2006, 238)

In his journal, Pinget referred to C as 'the defendant' (qtd. in Beckett, 2014, 167). Accordingly, A and B, using legal vocabulary throughout, appear as defence lawyer and prosecutor; or alternatively, as angels keeping a record of C's good and bad deeds. By creating such a juridico-angelological confluence, already intimated in the very first speech, in which A calls 'our services' a 'mystery' (Beckett, 2006, 237), Beckett invokes a tradition that goes back

to Pseudo-Dionysius the Areopagite and his analogy between celestial and worldly administration, between 'the earthly and heavenly hierarchies', with which Beckett was familiar from his reading of William Ralph Inge's *Christian Mysticism* (138). According to this view, 'jurists are the earthly equivalent of heavenly angels. [...] On earth as in heaven, they [take] care of daily chores by maintaining registries and compiling files' (Vismann, 2008, 87). A and B thus recall the 'recording angel' from Laurence Sterne's *Tristram Shandy*, directly referenced in what many critics consider *Theatre II*'s companion piece, *Rough for Radio II*, though misremembered by the Animator: 'I seem to remember, there somewhere, a tear an angel comes to catch as it falls' (Beckett, 2006, 279–80). Misremembered, but in a way that is actually an accurate description of the ending of *Theatre II*, where 'A *takes out his handkerchief and raises it timidly towards* C's *face*', who just shed a tear (249).

A and B's role is thus to mediate between C and his memories, delivering - and failing to deliver - messages from his past, while mentioning a 'Post Office' (241), an unsent letter (245), even a 'dead letter' (246). (The context of the latter evokes all four senses of the word we find in the OED: the opposite of a writing's 'spiritual' meaning, a command that has lost its force, an action of no value, and an unclaimed piece of mail or one that cannot be delivered due to faulty address.) Indeed, the Greek angelos means 'messenger', originating from angareion, which denoted a courier in the ancient Persian postal network, an early relay system of message delivery. The play builds on this etymology, which already contains the germ of a media theory: 'Angels remain in a medial position; [...] they are messengers' with a 'relay function, [...] they are switchpoints' (Vismann, 2008, 88). Or, as Michel Serres argues in his book which sets out to explicate the concept of mediation on the model of angelic contact, 'communication, interference, transmissions [...] work in the same way as angels' (Serres, 1995, 43), either connecting distant worlds with each other or separating them: 'When the messenger takes on too much importance, he ends up diverting the channel of transmission to his own ends. We can thus understand the sin and the fall of angels, who are normally faithful intermediaries, by the good or bad, successful or unsuccessful functioning of their message-bearing' (99). If, as their information-theoretical definition suggests (Shannon and Weaver, 1949, 34), media are constituted in the acts of transmission bridging spatial or temporal distance, then Beckett's play appears to replace the theatrical paradigm of interpersonal dialogue with a telecommunication model.

Daniel Albright makes a similar point about *Rough for Radio II*, describing it as 'a sort of dream of a new medium in which every electronic function of broadcasting and receiving is re-imagined as action performed by human beings' (Albright, 2003, 114). Anna McMullan argues more

generally that in the radio and television plays Beckett explores the idea of 'body-circuits or body-transmitters' (McMullan, 2010, 80). Likewise, *Theatre II* presents a stage reconceived as a technical transmission system, in which the basic operation is that of making or breaking contact. Indeed, at the top of the first page of the play's manuscript dated 15 August 1958, Beckett drew a stage diagram not included in published versions. The square representing the 'walls' of the stage closely resembles a simple circuit diagram, broken by the 'window', where C is positioned, indicated by dots that could be the point where the flow of the current can be interrupted. In this set-up, A and B could even stand for the positive and negative terminals (Beckett, 1958).

In the play's communication network, the characters A and B function as a veritable relay station: they identically repeat messages from absent senders, the people from C's past providing the testimonials that provoke nothing but a 'spark' in C, the receiver. But in the process, the relay's text-transmitting postal version is gradually overwritten by its signal-transmitting electrical instantiation: 'I knew he had a spark left in him' (Beckett, 2006, 241), says A, but B 'Could never make out what he thought he was doing with that smile on his face' (245). The two different semiologies are distinctly juxtaposed: while the smile is an indexical sign that refers to something else, an inner state of mind, through a connection that requires an interpreter to define it, the spark – at least in one of the senses activated by this context – is an electrical unit without a semantic dimension.

Albright concludes his argument by stating that 'Radio, television, tape recorder – all these technologies gave Beckett clues for reconceiving the human animal as a playback device, as an entertaining conglomeration of a human being and an electronic machine' (Albright, 2003, 120). But, despite its brilliance, doesn't this analysis, perhaps more so than Beckett's aesthetic, remain too deeply indebted to nineteenth-century analogies between electrical telecommunications and the human body (Otis, 2001), prefigurements of Marshall McLuhan's portrayal of electronic media as simultaneously extensions and amputations of the senses and the nervous system? Instead of stopping at the description of human–machine entanglements, perhaps we could take a cue from David Wellbery, who makes the following pointed argument about the underlying concern of Beckett's aesthetic project: 'Es geht hier nicht um einen Menschen, sondern um die Zwänge des Sinns, seine In- und Exklusionen' (Wellbery, 1998, 34).⁴

Beckett's work has often been seen as a response to the modernist crisis of representation, as a work expressing the notion that the function of meaning is not to provide access to the world or the self but merely to produce further meaning (Wellbery, 1998, 23). Much poststructuralist thinking about Beckett has grappled with this aporia. But by paying close

attention to the technological operations staged in *Theatre II*, and to the historical development in which these technologies are embedded, we may be able to, if not supplant, at least supplement this approach, overcoming what many have come to regard as a totalising concern with language. If the play can indeed be seen to dramatise a self-perpetuating sequence of distinction-making, it does so by taking recourse to abstract formalisation, a process whose long history begins in language and ends, at least from today's perspective, in computers. On one level – and this would lead to a more conventional reading – the play can be seen as the staging of 'memory' (Beckett, 2006, 239), as the mind's internal dialogue with itself in the Platonic tradition. But we should also note that its basic premise is that two figures are caught up in the apparently interminable task of reducing textual – one could even say, literary – interpretation to a yes/no decision: should C commit suicide or not?

A major emblem of this kind of endless oscillatory movement, both in the play and in much critical thinking about technology, is the switch. The word 'switch' is mentioned twenty-three times in the short play, in which the characters keep switching on and off two lamps (emphatically described as 'reading-lamp[s]' in the stage direction [2006, 237]), to which we have to add the eight instances when the malfunctioning lamp, with its 'faulty connection', 'switches itself' on and off, inducing the characters to start contemplating the 'mysterious affair' of 'electricity' (242-3), and critics to describe the incident as a classic example of Beckettian slapstick (Connor, 2014, 72). This lamp gag may have been inspired by Gertrude Stein's Doctor Faustus Lights the Lights (1938), in which the protagonist becomes unable to control his technological invention, the electric lights, which similarly take on a life of their own. As one of the simplest digital devices, electric lamps are operated by bistable switches that control an electric circuit with only two possible states: at any one time the switch can take up only one position, which necessarily erases the previous position. At the same time, each position can only be defined in relation to the other which, however, is only there to replace it. In other words, the point of a switch is to be switched.

In the light of this we can discover the exact same structure mirrored in the decision sought but not found (life or death), in the dualisation of C's life ('Now let's have the positive elements' [Beckett, 2006, 240]), in the references to electricity and the polarity on which its movement depends, or simply in the dialogue that constitutes the play: a constant switching between A and B. In this connection it is worth noting that *Theatre II* is Beckett's only dramatic work in which the characters have diegetic names – Bertrand, Morvan, Legris (French version) / Croker (English version) – but are nevertheless referred to as A, B and C both in the stage directions and

in the speech headings. In all other plays with two or three characters named using the first letters of the alphabet, the personae are either not identified by names in the diegesis (as in Rough for Theatre I), or they explicitly represent the same voice (as in *That Time*) or self (as in *Nacht und Träume*). The fact that A and B have diegetic names only highlights their abstract rendering in the script. Thus, the letters A and B do not only name the two characters, but also stand for a different notion of the sign, the symbols of formal logic, in which individual letters replace complex statements made in natural language, facilitating the analysis of their logical content. This kind of abstraction is what enabled both the development of George Boole's algebra - in The Mathematical Analysis of Logic (1847) and in The Laws of Thought (1854) – which reduced logical propositions to the binary digits of 1 and 0, representing truth and falsehood, and its technological realisation by Claude Shannon in A Symbolic Analysis of Relay and Switching Circuits (1938), which proved that all logical operations can be automated using electrical switches or relays, laying the groundwork for the development of digital electronics.

Ever since Hugh Kenner's *The Mechanic Muse*, Boolean algebra has from time to time been evoked to help elucidate aspects of Beckett's writing. But a question less often raised is from what source, in what context, did Beckett derive his notion of it. One possible answer is Fritz Mauthner. In the third volume of his critique of language, which Beckett read thoroughly, in the chapter 'Inference' from the section 'Language and Logic', Mauthner discusses Boole (Mauthner, 1923, 443), and symbolic logic more at length. Concluding his discussion of algebraic logic, Mauthner contends that 'die Hoffnung eitel ist, mit Hilfe mathematischer Abstraktionen vom Sprachgebrauch ernsthaft über die Mängel der Sprache hinauszukommen'.⁶ And he goes on to assert even more radically that 'Wo keine Logik der Sprache ist, da hat die Algebra der Logik ihr Recht verloren' (445–6).⁷ Thus, for Mauthner formal logic and algebra are only variations on everyday language.

And this stance is what gives us reason to believe that Mauthner was at least one of Beckett's sources. In formal terms, there is a noticeable correspondence between *Theatre II* and contemporary developments in communication technology. As Shannon famously pointed out, in a technical system the 'semantic aspects of communication are irrelevant to the engineering problem' (Shannon and Weaver, 1949, 31). But his colleague Warren Weaver is quick to clarify the claim: 'this does not mean that the engineering aspects are necessarily irrelevant to the semantic aspects' (8). Correspondingly, Beckett enlists switching circuits not in order to circumvent everyday language but to exhibit the basic operations that generate meaning; or put differently, to display the data-processing capacity of language reduced to its bare bones.

In 'Les Deux Besoins', often considered the second half of Beckett's early aesthetic programme initially developed in the 'German Letter of 1937', Beckett makes a statement that gives a striking twist to this constellation:

S'il est permis en pareil cas de parler d'un principe effectif, ce n'est pas, Dieu et Poincaré merci, celui qui régit les pétitions de principe de la science et les logoi croisés de la théologie [...] Cela avance à coups de oui et de non comme un obus à détonateurs, jusqu'à ce que la vérité explose. [...]

Autrement dit, le saint sorite, *lubricum et periculorum locus*. Rien ne ressemble moins au procès créateur que ces convulsions de vermisseau enragé, propulsé en spasmes de jugement vers une pourriture d'élection. Car aux enthymemes de l'art ce sont les conclusions qui manquent et non pas les prémisses. (Beckett, 1984, 56–7)

Known for its attack on science and religion, the passage actually has a different focus. Beckett's concern here is not so much science and theology as such, but an 'effective principle' or rule that 'governs' or regulates them and which, more importantly, 'proceeds by sequences of yes and no'. What is more, these sequences are explicitly conceived as a technical process – here associated with 'obus à détonateurs', that is to say, army equipment, which, as Friedrich Kittler liked to argue, is the laboratory from where most modern media technologies emerged – a technical process that incorporates logic into itself. It is a very specific kind of logical operation at that, the 'sorites', or a string of syllogisms, a procedure characterised by sequential execution. It is this binary logic of 'yes and no' and the sequential meshing or interlocking of each successive step in a technological process that links Beckett's elaborate imagery, written in 1938, to Shannon's technical model comprising switching circuits or relays connected in series that carry out the operations of Boolean algebra in an automated fashion, published the very same year (Shannon, 1938, 717).

It may be that Beckett first encountered the concepts of the sorites and the enthymeme in T. K. Abbott's *The Elements of Logic* while a student at Trinity College Dublin. But we should note that Mauthner also mentions these two specialised terms (and only these two) when discussing chain inferences (Mauthner, 1923, 447), but, unlike Abbott, he does so while disparaging logic, very much in the spirit of 'Les Deux Besoins'. By saying that 'Wir wissen bereits, daß die hypothetischen Schlüsse nur eine andere sprachliche Form für die hier behandelten künstlichen Denkoperationen sind' (446),8 Mauthner clearly asserts that algebraic logic in the manner of Boole is of the same nature as the sorites. But he goes even further. According to Mauthner, the enthymeme and the sorites constitute a form of *discretisation*: 'die Schlüsse und Schlußketten sind auseinandergezerrte, schablonisierte, künstlich verlängerte und verdünnte Gedankensprünge. Man könnte die

Tätigkeit des Logikers dabei mit dem Photographieren von Anschütz vergleichen (neuerdings noch besser mit den Teilbildern eines Films für den Kinematographen)' (447). In other words, these logical operations are structured the same way as the discontinuous image sequences (standardised at twenty-four frames per second in 1927) that comprise film, making it a digital-analogue hybrid medium.

Thus, in Mauthner as in 'Les Deux Besoins', discretisation emerges as the basic characteristic of logic and one that it shares with the digital technology of switching circuits. But when eleven years later Shannon and Weaver published their theory of communication, they named two classic examples of a discrete system: 'written speech, telegraphy' (Shannon and Weaver, 1949, 8). As the coupling of these two examples indicates, the ABC – or literature – and the alternation of A and B belong to the same order in that they both operate with a limited set of discrete symbols/signals. Using the alternation of 'line open' and 'line closure' in circuits for the transmission of messages had been a familiar practice since the invention of the electric telegraph, which still served as an important model at the dawn of the computer age. The evolution of electric telegraphy had largely been completed by 1837, when the painter Samuel Morse patented a system of representation now known as the Morse code, essentially contriving an order of meaning for the simple difference between the dits and the dahs. 'In all probability, it was his invention of the code that led so many to credit him with inventing telegraphic communication as a general concept' (Otis, 2001, 133), a clear indication of the kind of delusional absorption in reference and meaning that Beckett's play – this like many others – never tires of parodying. Indeed, much of the play's slapstick charm arises from juxtaposing the breakdowns of linguistic communication in A and B's circular dialogues with the electric lamp, which appears to automate the 'line open' and 'line closure' on which its operation depends, repeating them in a loop. Correspondingly, Beckett's punning on the 'heirless aunt' who is taken to be 'hairless' (Beckett, 2006, 242) typifies the elementary – in this case, graphemic – differences that are the building blocks of signification.

In his seminar session on 'The Circuit', held in 1955, Jacques Lacan delves into the parallels between digital signalling and everyday language, and to illuminate his point he chooses to illustrate it with, of all things, an electric lamp:

What is a message inside a machine? Something which proceeds by opening and not opening, the way an electric lamp does, by yes or no. It's something articulated, of the same order as the fundamental oppositions of the symbolic register. (Lacan, 1991, 89)

By simply switching between its two positions, the lamp enacts the principle of difference which structures semiosis. In its material construction, the

switch represents the logic of the symbolic register: meaning is distinction-making. (Nota bene, this is exactly how formal semantics, admittedly not the only paradigm, describes meaning through componential analysis.) Thus, the opening and closing of an electric circuit embodies the fundamental operation of all signifying practices:

If there are machines which [...] do all the marvellous things which man had until then thought to be peculiar to his thinking, it is because the fairy electricity, as we say, enables us to establish circuits, circuits which open and close, which interrupt themselves or restore themselves. [...] Everything we call language can be organised around this basic element [...], that is to say concrete languages [...] with their ambiguities, their emotional content, their human meaning (Lacan, 1991, 302–5).

This will be the case, Lacan adds, once the effects of the imaginary are introduced into human discourse (306). But that does not change the fact that 'syntax exists before semantics' (305). But in Beckett's hands this separation of material substrate (the electric circuits in which syntax is realised) and semantics extends to the play itself. I have already referred to the prominent split between the level of diegesis and the script storing and transmitting it. But there is further indication of this 'rupture of the lines of communication' (Beckett, 1984, 70), notably in the following remark: 'Et dire que tout ça c'est de la fusion thermonucléaire! Toute cette féerie!' (Beckett, 1978, 52). This aside immediately follows the lamp gag, and so may also be read as an allusion to the source of electric power (and not just the star-filled sky).

The first commercial nuclear power plant in the UK, the Calder Hall reactor in Cumbria, was opened in 1956, and although it was powered by fission, the 1950s marked the beginning of a major research effort into harnessing the energy potential of nuclear fusion (still an unfulfilled possibility). The French word 'féerie', on the other hand, means not only 'magic', but also the make-believe world of a theatrical production. Thus, Beckett emphatically disconnects the real of the staging from the imaginary of the performance. (The solution Beckett found for the English translation is 'faerie' [Beckett, 2006, 244], a clear allusion to Edmund Spenser's romance and thus fiction.)

In foregrounding the material operations that allow the construction of symbolic systems, *Theatre II* represents an important juncture in Beckett's developing aesthetic and a significant move away from the devices of literature. As the switching between the two states of the lamp becomes 'automated', signification emerges as 'an order which subsists in its rigour, independently of all subjectivity' (Lacan, 1991, 304). The notion of currents travelling (and staying) inside circuits offered Beckett a model radically different from that of intersubjective or intrasubjective dialogue, the supposed commun(icat)ion

between self and self conveying an interiority. It enabled him to further abstract from the routines of everyday language, to externalise the signifying operation, moving it out of the human psyche. As a result, the stage action loses its foundation in linguistic representation and starts obeying a dramaturgy conceived in technological terms. By reimagining the stage as a switching circuit, Beckett makes a step towards the media-technological realisation of non-representational drama.

A note to practitioners

In *The Flame of a Candle*, published in 1961, Gaston Bachelard is overtaken by a wave of nostalgia:

Dreamer of words that I am, the word 'lightbulb' makes me laugh. [...] Who can say 'my electric light bulb' in the same way that he once said 'my lamp'? [...] The electric lightbulb will never provoke in us the reveries of this living lamp which made light out of oil. We have entered an age of administered light. Our only role is to flip a switch. [...] We cannot take advantage of this act to become, with legitimate pride, the subject of the verb 'to light.' [...] A little click says *yes* and *no* with the same voice. [...] With an electric switch one can play the games of *yes* and *no* endlessly. (Bachelard, 1988, 63–4)

Here Bachelard connects the notions of binary logic, electricity and loss of control with that of endlessness, all emblematised by a switch connected to a light bulb. And in *Theatre II*, too, the role of the electric lamp seems to be to 'play the games of *yes* and *no* endlessly', keeping C flickering between life and death. But Bachelard's nostalgia may be in need of an update. For the play's basic poetic device, the switching, is conceived to work on multiple levels, and in a way that makes it – like many of Beckett's media plays – vulnerable to obsolescence.

Alternating current, the form of electricity that comes from domestic power sockets, reverses the flow of electricity periodically, reaching a certain amplitude. This oscillating motion is repeated in cycles *indefinitely*. With a frequency of 50 Hz (in Europe) and at zero volt twice per cycle, AC turns the filament in the light bulb on and off a hundred times per second. The only reason we don't see the flicker is that the wire has no time to cool off (the light intensity does drop as a result). While the coiled wire in filament bulbs conducts in both directions, the driver integrated into LED bulbs converts AC into DC so that the current can only travel from the cathode to the anode, always in the same direction; LEDs have nothing in common with the poetics of Beckett's play. Since 1 September 2018, incandescent light bulbs have been practically banned from the EU, as they are inefficient:

only a fraction of the energy ends up as light, most of it is converted into heat. Hence the name incandescent, 'glowing with heat'. No wonder the self-extinguished lamp instantly prompts B to say: 'May I come to you? [*Pause*.] I need animal warmth' (Beckett, 2006, 244).

The fact that those tiny halogen bulbs with the cap types G4 and G9 are still allowed to exist on the market is cold comfort for the general disappearance of the classic incandescent lamp: how much dramatic power can be retained after having downsized the bulb, arguably a main protagonist in the play, to exactly one centimetre in diameter? Therefore, all practitioners planning to stage *Rough for Theatre II*, a play whose dramaturgy is so thoroughly permeated by both the idea and the technology of alternating current, would be well advised to stock up with supplies of any traditional filament light bulbs they can still lay their hands on.

A Beckettian ornitho-logology

In a letter sent to Pinget on 3 September 1958, Beckett describes how he is planning to conclude the play:

J'en suis au gag des lampes. Envie de le pousser jusqu'à la frénésie. Mais n'en ferai rien. Et j'ai trouvé un oiseau chanteur, dans un coin. Je ne l'avais pas vu, rapport à l'obscurité. Tout d'un coup il chante. [...] Discussion ornitho. Plumage, ramage. Etc. (Beckett, 2014, 166)¹⁰

Linda Ben-Zvi may be right in calling the discovery of the songbird a 'deus ex machina' (Ben-Zvi, 2013, 132), especially since, in a compositional sense, it does seem to bring the play to a conclusion. Having discussed with Beckett the development of the play, Pinget noted the following point in his journal: 'The drama is resolved by an accident, an unforeseen event, which sets free the defendant' (qtd. in Beckett, 2014, 167). This is indeed as good a definition of the deus ex machina as a dramatic device as any. But in what sense could the birdsong provide a resolution to the problem of interminability? As we saw, the cyclical interminability resulting from the structure of sense-making, expressed verbally in The Unnamable and realised dramaturgically in the earlier stage plays such as Waiting for Godot and Endgame, is here quasitechnologically implemented in the switching between A and B, between 'on' and 'off'. But, as Wellbery maintains, 'Es bleibt jedoch die Sehnsucht nach Erlösung, [...] die Becketts Texten ihren unverwechselbaren Ton verleiht, [...] nach einem Zustand jenseits der sich ins Unendliche fortsetzenden Reihe sinnhafter Elemente, nach dem unaussprechlichem Ende', einem Zustand jenseits des 'heillosen Entweder/Oder als der Differenzlosigkeit sinnhafter Differenzierung' (Wellbery, 1998, 34–5).¹¹

In his letter, Beckett himself contrasted the birdsong with the lamp gag. But why is the 'discussion ornitho' significant enough to be mentioned in that short note? After a 'brief burst of birdsong' is heard (Beckett, 2006, 247), the characters make three attempts to identify the bird: first as Philomel (that is, a nightingale), then as a lovebird, and finally as a finch. This series constitutes a trajectory that tells the story of replacing linguistic communication with avian singing, already implied in the mythical symbolism of Philomel, In all likelihood, Theatre II alludes to the version of the gruesome myth as reworked by Ovid in Metamorphosis, an early influence on Beckett: Tereus gets enchanted by the voice of her sister-in-law Philomel, and after raping her, cuts out her tongue to stop her from speaking about the crime. Later, to save her life, the gods turn Philomel into a nightingale. Lovebirds, on the other hand, are a type of parrot. The intertextual link created by this reference extends to many instances of the parrot discourse in Beckett's oeuvre, but most notably to *The Unnamable*, whose English translation Beckett completed earlier that year and which was published by Grove Press in September:

It all boils down to a question of words [...] It is they who dictate this torrent of balls [...] A parrot, that's what they're up against, a parrot. If they had told me what I have to say [...] But God forbid, that would be too easy, my heart wouldn't be in it, I have to puke my heart out too, [...] it's then at last I'll look as if I mean what I'm saying, it won't be just idle words. (Beckett, 2003, 338)

A closer look reveals that this is taken almost verbatim from Descartes: 'parrots can utter words as we do, and yet they cannot speak as we do: that is, they cannot show that they are thinking what they are saying' (Descartes, 1985, 140). In Discourse on the Method, Descartes defines human beings through linguistic utterances that represent them as subjects. Since the parrot's words don't represent thoughts, it's indistinguishable from a machine (141). In the parrot's speech, exactly as in electrical signalling, the connection between vehicle and reference is severed. Making the characters in Theatre II read out quotations in a markedly mechanical fashion essentially constitutes a dramatisation of the parrot discourse from The Unnamable. The staging of reading as a mechanical activity may have also been influenced by Beckett's encounter with Wittgenstein's Philosophical Investigations, which contains a thought experiment about a human 'reading machine which translate[s] marks into sounds' (\$157), 'not counting the understanding of what is read as part of "reading" (§156). (This thought experiment is also mentioned in David Pole's The Later Philosophy of Wittgenstein (1950, 22-3), which Beckett read that same year.)

However, the parrot's role in Beckett's oeuvre is not uniform but characterised by a telling paradox. In *Malone Dies* we find a second angle which marks the limit of human language from the opposite direction:

I wonder what my last words will be, written, the others do not endure, but vanish, into thin air. I shall never know. I shall not finish this inventory either, a little bird tells me so, the paraclete perhaps, psittaceously named. (Beckett, 2003, 250)

Parrot and Holy Spirit superimposed on each other through a near-homophony (parakeet/paraclete), the passage is a nod to Flaubert's *Un Coeur simple*, in which the traditional dove is replaced by a parrot as the representation of the Holy Ghost. Besides, as Brigitte Le Juez reminds us, 'Beckett was familiar with pre-eighteenth-century manifestations of parrots in art, especially the medieval tradition of Biblical illustrations in which the parrot represents the Divine Word. [...] The Beckettian parrot thus performs an important function in the creation of a dichotomy contrasting the Divine Message with the human struggle with words' (Le Juez, 2013, 212). It is in the space opened up by the two distinct roles accorded to the parrot that linguistic communication can be situated: 'The parrot's capacity to speak, which enabled it to become part of the menagerie of Descartes' philosophical animals, and the fiery tongues of the Holy Spirit are the two non-human poles framing all the theories of human language' (Siegert, 2015, 66).

In an ornamental footnote that now proves illuminating, Ben-Zvi (2013, 137) identifies the species of the birds in *Theatre II*, which A simply takes for 'finches' (Beckett, 2006, 248), as blue-faced parrotfinches, based on Beckett's description of the male's colours. While lovebirds are actually parrots, parrotfinches are, in spite of the ambiguous denomination, genuine passerines: 'Note moreover the characteristic warble, there can be no mistaking it' (248). Located at the threshold between talking birds and songbirds, the avian in *Theatre II* appears to suspend the psittacine irony of *Malone Dies*. One might wonder whether Beckett was familiar with the fact that in the occult or mystical tradition the 'language of the birds' (of songbirds, that is) was conceived as the original or Adamic language of which all fallen human languages are merely corrupted imitations.

To complement its logology, the play contains another key reference to the divine language. When, in the middle of the lamp gag, B tries to read out a particularly obscure passage from a testimonial, the following dialogue ensues:

B. - Où est le verbe?

A. - Quel verbe?

B. - Le principal!

A. - Moi je n'y suis plus du tout.

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B. – Je m'en vais chercher le verbe et laisser tomber toutes ces conneries au milieu. (Il cherche.) « Fusse ... pusse » ... tu te rends compte! ... « tinnse ... ignorasse » ... nom de Dieu!... ah ... (1978, 49)
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The religious allusions throughout the play, and especially the 'nom de Dieu' – however profanised it is – in the immediate context of the word 'verbe' activate its theological meaning: in French, 'le Verbe' also means 'the Word', the 'Verbum' of the Vulgate. And so from behind the surface operation of syntactical parsing a different notion of language shines through.

It is no coincidence that the allusion is to the Johannine Gospel, which describes the event of incarnation as a linguistic process: 'Et Verbum caro factum est'. The problem of the verbum concerns 'the mysterious unity [...] of Spirit and Word' (Gadamer, 2013, 437), where the word is 'consubstantial with thought' (438). Thus, when B sets out to 'make the middle disappear' (the first meaning of the phrase 'laisser tomber' is to 'ignore' or 'make completely disappear'), he simply conjures up the theological doctrine that the verbum is language without reference, without the intervening process of the semiosis which separates sign and meaning; in the verbum this process 'disappears in the immediacy of divine omniscience' (442), the signifier and the signified perfectly coincide. Accordingly, B searches not just for any verb, but 'le principal!': 'the divine Word is one unique word' (444), whereas 'the human word is essentially incomplete' and 'must necessarily be many words' (442).

But since the beautifully rich phrase 'laisser tomber' also means 'to utter', as in 'to let words fall from one's lips', and so the 'drivel in the middle' (Beckett, 2006, 243) is not only 'ignored' or 'made to disappear' but also spoken (as it very much is, demonstrated by the above quote), the phrase is ultimately figured into an exquisite example of the rhetorical self-cancellation Beckett took to such heights. Through its layered figuration, which introduces into the sentence precisely the kind of ambiguity that the *verbum* is free of, the sentence both describes and enacts a miniature linguistic drama which amounts to the following: the act of renouncing fallen human language is nullified by being performed as a verbal statement.

Thus suspended between the extremes of 'articulation' and 'disappearance', the 'drivel in the middle' is of course also a hint at the ultimate referent of all the discourse fragments whose piecing together is what seems to be at stake in the play: C. Or to use the diegetic name in the French original, which renders sensuous what C denotes symbolically: 'Legris' (Beckett, 1978, 42), that is to say, 'the grey one'. This (non-)colour is situated in the intermediate zone between the binaries of black and white, a colour with infinite shades that not only gives a twist to the symbolism of light and darkness that drives the dialogues, but also represents the 'dead zone' between

the two stable positions of switches, the dead zone to which no value corresponds, along which the switch travels every time but only to overcome it, ignoring and excluding it as it must if the system is to remain operative. Critics of digital technology often claim that the grey area in the middle left out by the 0s and the 1s, by high and low voltages is the domain of the analogue, of phenomena that cannot be captured and processed by binary logic. The poetic prose piece 'neither', which Beckett wrote in September 1976, not long after translating *Fragment de théâtre II* into English, seems to evoke precisely this dynamic of discreteness, describing the 'to and fro in shadow' in the 'unspeakable home' of 'that unheeded neither' 'between two lit refuges' (Beckett, 2010, 167).

Theatre II stages a search for the 'other' of signification. What the songbird's 'warble' and the *verbum* have in common is that they both lack the duality of vehicle and meaning. Since its partner has died, dissolving the binary of the couple's dialogical situation, '[a]nd he goes on singing!' (Beckett, 2006, 248), the bird's song is freed from the last residue of communicative function. Of course, this lonely song is also a kind of 'dead letter' of the avian world, not without the special poignancy of an enunciation broadcast into a gaping void bereft of all recipients. But the 'warble' is nonetheless the opposite of 'drivel': a language not failing at, but being without, mediation.

'that flame... that burns away filthy logic': deus ex machina à la Beckett

This search already appears to have acquired mystical overtones. The word 'mystery' itself occurs twice in the play in prominent positions, while the figure of C can legitimately be described, in a literal sense, as a mystical character. The root of the word 'mystery' is the Greek $\mu\nu\varepsilon\iota\nu$ meaning to keep the lips and the eyes closed. 'Mystes', a related word, denotes a person initiated into mysteries, but more specifically it refers to someone sworn to silence. C is not only voiceless, but the only Beckettian stage character that neither speaks nor shows his face to the audience. However, we are not left in the dark about his expression:

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B: And his eyes? Still goggling? A: Shut.
B: Shut!
(Beckett, 2006, 245)
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But most importantly, the play contains a clear allusion to the great medieval mystic Meister Eckhart: 'I knew he had a spark left in him' (241). Beckett had already incorporated Eckhart's notion of the 'spark' into his first novel,

Dream of Fair to middling Women, in which the mystical theologian 'Dionysius the Areopagite' and Eckhart's 'Fünkelein' are both mentioned, even if only ironically (17). In Dream the 'Fünkelein' is associated with a star in the Lyre. And in Theatre II, too, there is an astral connection, 'Sirius' (2006, 239), only it is more pronounced: the Greek Σ eipus literally translates as 'sparkling'. Beckett's source for his early novel was Inge's Christian Mysticism, extensively excerpted in his 'Dream' Notebook, including the note 'Eckhart's "Fünkelein": organ by which the personality communicates with God & knows him' (Beckett, 1999, 100). In Inge's book we can read an extended discussion of 'The curious doctrine which we find in the mystics of the Middle Ages, that there is at 'the apex of the mind' a spark which is consubstantial with the uncreated ground of the Deity' (Inge, 1899, 7). Later Inge remarks that 'what is most distinctive in Eckhart's ethics is the new importance which is given to the doctrine of immanence' (155).

This doctrine is directly related to Eckhart's notion of the medium. Pretechnological and metaphorical through and through, it is, however, not entirely unlike its modern information-theoretical counterpart; it is conceived as a channel that transmits between two distant points while necessarily generating noise: 'it is contrary to the concept of a medium that anything is silent or at rest in it' (Eckhart, 1986, 173). Thus, as his *Commentary on the Book of Wisdom* explicates, the medium is not only a bridge but also a chasm that separates what it is supposed to connect; it is a means that intervenes. The doctrine of immanence, as applied to the idea of the spark, follows from this premise: 'therefore it is necessary that the very idea of a medium be removed, given up, be silent and at rest' (173).

And if Wellbery is right in claiming that 'Becketts Sehnsucht ist der mit dem Bewußtsein des Sinns einhergehende Bezug zur unvordenklichen Indifferenz als einem Undarstellbaren, Namenlosen' (35),¹² then we can easily see why Eckhart's spark made an impression on him: this 'Divine spark [is] a pure nothing; rather nameless than named, rather unknown than know. [...] It is absolute and free from all names and all forms, [...] For in all these there is still *distinction*' (qtd. in Inge, 1899, 157; emphasis in original). Eckhart seems to offer an answer to the apparently unresolvable tension between the dynamic of discreteness sketched here, the infinite sequence of distinctions and the ideal of 'laisser tomber toutes ces conneries au milieu'.

On 11 November 1977, four and a half decades after Beckett had made his notes of Inge's work, a conversation took place between Charles Juliet and Beckett which ended as follows:

I mention the mystics: Saint John of the Cross, Meister Eckhart, Ruysbruck... and ask him if he ever rereads them, if he likes the spirit of their writings. – Yes... I like... I like their... their illogicality... their burning illogicality... that flame... that flame... that burns away filthy logic. (Juliet, 1995, 167)

But, in terms of the aesthetic possibilities of its staging, the act of 'burning away logic' does not have to be a mere metaphor any more at a time when logic had already been hypostasised in the real. At a time when logic, previously housed in ordinary language and then algebra, was already being electronically implemented, as series of switching operations, in relays, electron tubes, transistors and – since 1958, the year of Beckett's first draft – in integrated circuits. 'Burning away logic' is exactly what happens in an electronic system during a short circuit.

Beckett had already experimented with the idea in earlier works. The short circuit proved to be an important disruptive force in the novel *Murphy* (1938): "Love requited," said Neary, "is a short circuit," a ball that gave rise to a sparkling rally [...] It was the short circuit so earnestly desired by Neary, the glare of pursuit and flight extinguished' (Beckett, 2009b, 5, 21). Beckett had probably taken the idea from André Breton's 'Second Manifesto of Surrealism' (1930), in which inspiration is figured as a mechanism that 'prevents our being, for every problem posed, the plaything of one rational solution rather than some other equally rational solution, by that sort of short circuit it creates between a given idea and a respondent idea' (Breton, 1930, 161). While here the short circuit is already meant to counteract logic, it is still created between ideas. In *Murphy*, on the other hand, the short circuit is a means of 'extinguishing' a process, that is, of switching off a light ('the glare') or burning it out, reducing it to silence.

Once what happens on the theatrical stage, however, is conceived as an electric circuit, it can actually be short-circuited. Three years before Murphy was published, the philosopher Ernst Bloch asserted that in the era of electric light religious mysteries had become impossible (Bloch, 1998, 316), adding that 'Only candle flames can [...] be extinguished [...] uncannily. Whereas the failure of an electric bulb does not betray the existence of any spirit world [...] but only the existence of a short circuit' (315). And this is where we can catch a glimpse of Beckett's media mysticism as developed in *Theatre* II: Beckett reinterprets Eckhart's 'divine spark' through electrical engineering and turns it into a dramatic device that adds a second meaning to the term deus ex machina. 13 A spark in the physical sense is an electrical discharge resulting from the dielectric breakdown of an insulating material, which in turn may lead to the short-circuiting and failure of an electrical system. In Dream, Beckett describes Beethoven's music in terms remarkably reminiscent of a dielectric breakdown, as a 'punctuation of dehiscence' in which 'continuity [...] fall[s] apart, the notes fly about, a blizzard of electrons' (Beckett, 1993, 139). In Theatre II, he devises a way of short-circuiting the medium that corresponds to the information-theoretical model developed by Shannon and Weaver: 'The channel is merely the medium used to transmit the signal [...]. It may be a pair of wires' (Shannon and Weaver, 1949, 34).

Electricity turns an insulated metal wire or the 'flex' (Beckett, 2006, 242), through which it flows, into a cable, that is, a medium that transmits something (Gethmann and Sprenger, 2015, 14). As McLuhan insists, electricity is a 'pure [...] medium without a message' (2003, 19): by simply hooking up two points with each other, the electrified wire creates the structure of transmissivity. The point of a cable is that it is never only here, but also somewhere else (Gethmann and Sprenger, 2015, 18). Putting the flow of electric current on the stage thus means keeping the performance in a permanent oscillation between a 'here' and a non-representable 'elsewhere'. Little wonder (or is it a little wonder?) that the play ends with an unelectrified epilogue in which the scene is illuminated by the light of a match. In the match there is no perpetual reversal, no either/or, no endless game of 'on' and 'off', and no dead zone of the bistable switch: 'L'allumette se consume, A la laisse tomber' (Beckett, 1978, 61).

It is in the spark, in the dielectric breakdown and the short circuit, that 'electricity' becomes 'mysterious' (Beckett, 2006, 243). This process is what unites the physical and the Eckhartian definition of the 'spark' – and this is where Beckett's imagery and the technical real of electric circuits coincide. It is, in other words, one of Beckett's early technological solutions to the self-imposed task of eliminating – or better, switching off – the intervening medium.

Notes

- 1 'Since we cannot switch it [language] off all at once, at least we do not want to miss any opportunities to bring it into disrepute.' (My translation. Unless otherwise indicated, all translations in the notes are mine.)
- 2 'Of course, for the time being, one makes do with little. At first, it can only be a matter of somehow inventing a method of verbally demonstrating this scornful attitude vis-à-vis the word' (Beckett, 2009a, 519).
- 3 'Let it [the game of literature] cease altogether!' (Beckett, 2009a, 520).
- 4 'What is at stake here is not a human being, but the compulsions of sense-making, its inclusions and exclusions.'
- 5 Emilie Morin has recently put forward the intriguing suggestion that the three characters may actually have 'uncharacteristically realist referent[s]', and that naming one of them 'Bertrand' may have been inspired by 'the chief French expert in cryptography during the Second World War', Gustave Bertrand, who helped break the Enigma code (Morin, 2017, 226–7). But a different conjecture, no less applicable to the play's dramaturgy, can also be proposed. Beckett read Henri Poincaré's La Valeur de la Science (1905) and took extensive notes of it in the 'Whoroscope' Notebook in 1938. Poincaré discusses the mathematician Joseph Bertrand (simply referred to as M. Bertrand) both in La Valeur de la Science and, more at length, in La Science et l'Hypothèse, published two years

earlier. These volumes constitute the first two instalments of Poincaré's trilogy based on the same lecture series. While the notes in the 'Whoroscope' Notebook are from the second volume, there is no reason to exclude the possibility that Beckett encountered the first volume too. The book's final chapter on the history of electrodynamics contains extended discussions of Ampère's experiments with electric currents and their effects on each other, which all revolved around a circuit C (or current C) set up between a positively and a negatively charged conductor, designated as A and B, currents running between and through them throughout the chapter. Poincaré describes the forces acting on A, B and C in quite a dramatic fashion, interspersed by summaries of Helmholtz's related theories and Bertrand's polemic with Helmholtz. Reading this account, one could be inclined to believe that the real M. Bertrand might have actually uttered the words 'Mysterious affair, electricity' (Beckett, 2006, 243).

- 6 'It is vain to hope that we can actually overcome the deficiencies of language relying on mathematical abstractions of language use.'
- 7 'The algebra of logic is no longer justified once it has abandoned the logic of language.'
- 8 'We already know that the hypothetical inferences are only the linguistic equivalents of the artificial thought operations discussed here.'
- 9 'The inferences and chain syllogisms are in fact leaps of thought pulled apart, moulded into a set pattern, and artificially made longer and thinner. We could compare the logician's activity to Anschütz's photography (or, today, even more appropriately, to the individual images of the film used in the cinematograph).'
- 10 'I've got to the lamp gag. Feel like pushing it all the way to frenzy. But I'll do no such thing. And I've found a songbird, in a corner. I hadn't seen it, because of the dark. Suddenly it sings. [...] Bandying of bird-lore. Plumage, song. Etc.' (Beckett, 2014, 167).
- 11 'There remains, however, a desire for release [...] which gives Beckett's texts their unmistakable tone [...] the desire for a state beyond the infinite series of meaningful elements, for an unspeakable end', for a state beyond 'the hopeless alternation of either/or as the principle of semantic differentiation which admits no alternative'.
- 12 'Beckett's desire is the wish that accompanies all awareness of meaning, a wish for an undividedness that precedes all thought, as something non-representable, unnamable.'
- 13 In other words, Beckett simply makes use of these mystical ideas for aesthetic purposes. Perhaps his remark made about Berkeley's 'esse est percipi' in the script of Film applies here too: 'No truth value attaches to above, regarded as of merely structural and dramatic convenience' (Beckett, 2006, 323). For a classic discussion of Beckett's relation to religious mysticism, see Bryden (1998).

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Beckett, the proscenium, media

Martin Harries

In Broadway theatres I sometimes imagine that the proscenium is filled in with glass, that the stage is really a huge television screen, that the actors are not really there. (Smith, 1966, 3)

A contradiction structures discourses on perspective and, therefore, discussions of the proscenium. On the one hand, perspective and the proscenium verify the position of the viewer in the field of vision, and hence the sovereignty of the subject. The spectator's sight of events on stage, distanced, framed and controlled, confirms the subject's mastery of the spectacle. On the other hand, the perspectival image captures the subject, makes it subject. The technology of perspective, and the apparatus of the proscenium stage developed in its wake, anticipate the panoptic machine it resembles, placing the spectator in its sights: 'Visibility is a trap' (Foucault, 1979, 200). (It is possible to see this contrast as no contradiction at all, but for a moment I want to pause inside it, to occupy it as a contradiction.) That court theatres of early modern Europe oriented the machine of the proscenium and the design of the theatre so that the privileged spectatorial position belonged to the monarch is exemplary of the first approach: the sovereign claimed the best seat in the house, the seat designed for the best view of the perspectival grid of the stage framed by the proscenium.¹

The sovereign subject inherits something like this privilege of sovereignty: the proscenium frames a picture that reinforces the subject's sense of itself as sovereign, in possession of the view before it. The second strand of this discourse stresses subjection to and through images as one of the primary engines of the ideological production of persons. Sights we do not and can never possess produce us in their image: not sovereignty, but alienation; not possession, but dispossession. This contradiction can be resolved by asserting that the privilege of sovereignty is precisely the result of our having been alienated through the power of images. Our sense of ourselves as sovereign is one of the most powerful effects of the perspectival system that assures

us that we occupy a privileged position in relation to our field of vision. We tell ourselves that we own what possesses us. Our sovereignty is precisely a form of the captation we thought we had overcome by becoming subjects.

This problem of the powers and function of perspective and of the proscenium, with all its complex history, forms the background of the well-known fact that Beckett imagined his plays as designed for the proscenium stage.² However experimental, his plays were conceived inside, and not against, that long-standing feature of theatrical architecture, the proscenium arch. This is true of *Endgame* as it is of *Not I*. Indeed, Beckett's engagement with the proscenium and the structures of subjectivation and sovereignty that surround it is important to what it means to call his work experimental. Further, this theatrical experiment within the ideological apparatus of the proscenium with its complicated modalities of address to the spectator must be understood in relation to histories of media.

Beckett's work inside and against the media surround in which his plays were first staged offers an example of a technique typical of his theatrical work: the proscenium, the frame of the old medium, becomes the object of what Brecht called *Umfunktionierung*. Apparently unchanged, same as it ever was, the proscenium, in Beckett's theatre, undergoes a refunctioning, precisely as a result of Beckett's encounter with mass media that had remade culture. To summarise many accounts: the proscenium made a picture of the stage, and this picture confirmed or produced – confirmed by reproducing – the subjectivity of the well-placed spectator. Beckett used the technology of the proscenium, but his technique militates against this traditional account of the proscenium as machine of subject formation. His use of it opposes such fantasies of subject formation with experiences of subject deformation.³

Beckett's plays have largely belonged to the proscenium stage, and he wanted it this way. A fairly early case is exemplary: in 1956, in a letter now seemingly lost, Alan Schneider, who would go on to direct many important premieres of Beckett's work in the United States, apparently proposed to Beckett that *Waiting for Godot* should be performed in the round. Beckett responded:

I don't in my ignorance agree with the round and feel *Godot* needs a very closed box. But I'd give it to you with joy if I were free to do so. So all you want – all! – is the OK from MM and Rosset. (Beckett, 1998, 12)

Both the modest profession of ignorance and the confident assertion that the 'closed box' is necessary for *Godot* are typical of Beckett's early communications on the theatre and the place of his plays within it. Despite Beckett's conviction about the need for this more traditional staging, he does allow that with the permission of the producer Michael Myerberg and Beckett's US publisher, Barney Rosset, Schneider might go forward with his

plan to stage the play in the round. Despite Beckett's apparent willingness to allow Schneider to proceed with his experiment (if only he were free) this passage has been taken as evidence of Beckett's insistence that his plays belong within the frame of the proscenium arch, and for good reason. His own practice as director confirmed this belonging. Equally exemplary is an anecdote from about a decade later: when Beckett came to direct *Endgame* at the Schiller Theater in Berlin in 1967, he not only worked within a theatre with a proscenium arch but insisted on the conventions of that apparatus. Michael Haerdter's diary of Beckett's work in the theatre includes this explanation of his decision to cut certain metatheatrical moments:

The action should concentrate entirely on the inhabitants of the 'shelter'. We were startled, as Beckett explained this with a principle taken from the naturalist theatre – 'the piece should be played, as if there were a fourth wall in place of the apron'. (Haerdter, 1969, 97; my translation)⁵

Haerdter's anecdote suggests that Beckett's insistence that his plays were written for the proscenium theatre contrasts with the challenge his work posed to dramatic convention: for Haerdter, the insistence on the fourth wall is a startling concession to the naturalist tradition. And yet the proscenium stage as an apparatus continued to be essential to Beckett's conception of his theatrical work. This insistence on the proscenium as theatrical frame is not, as Haerdter may be read to suggest, a concession to an outmoded theatrical naturalism but, instead, exemplary of Beckett's recognition of the altered situation of post-war theatre in a transformed media surround. The proscenium was not, after 1945, what it had been. Beckett's deliberate uses of the apparatus of the theatre respond to the proscenium-like frame of the cinema, a resemblance stressed (for instance) by the curtains that open two otherwise very different films about theatre and performance, Marcel Carné's Children of Paradise (1945) and George Cukor's A Star is Born (1954). The theatre's proscenium had become something different in relation to what was perceived as the unprecedented subjectifying power of mass culture and of its perspectival productions. It was as though cinema had succeeded in producing the illusions, and the subjects in thrall to them, of which the post-war theatre was able only to dream. In the face of the power of the silver screen as fourth wall – the cinema's much-remarked power to include its spectators in scenarios from which they were structurally and materially excluded – Beckett rethought the proscenium and the relation between stage and audience. In the wake of cinema's consolidation as an apparatus for the production of fantasy, the play of fantasy in the theatre's old perspectival boxes was different. M, in Play, asks: 'Am I as much as ... being seen?' (Beckett, 1984, 160). You are, yes - but being seen does not confirm your sovereign subjecthood.

What the proscenium was

The architect Ludwig Catel crystallised centuries of thinking about the proscenium when, in a book published in German in 1818, he wrote:

But the action of the play seen and understood correctly can satisfy the spectator only when the place of the action is completely closed off and when a visible wall separates the actors from the spectators. The wall separating the theatre from the stage is the proscenium. The proscenium consists of a frame which encloses the performance and of a space before that of a foreground which keeps the spectators away from the place of the action so that they do not notice the illusion of the play in contrast to reality. Outside of the proscenium is the theatre proper, or the room for an audience which like the purpose and nature of our newer dramatic art watches plays comfortably from the seats and is also secure entering and leaving the building. In this auditorium the acoustical and optical laws allow the spectator to see and hear from everywhere. (Qtd. in Izenour et al., 1996, 65)

Beckett desired a 'closed box'; Catel insists the stage should be 'closed off'. For Catel, the closed stage allows for the maintenance of illusion: a theatre without a proscenium would not serve. Catel's account of the proscenium captures contradictions inherent in its function. The proscenium understood as frame should itself form a 'visible wall' between spectators and the scene: the frame is itself a wall, at once enclosing 'the place of the action' and keeping the spectators away. This closing off of the action and distancing of the audience allows for comfortable viewing, for safety in entering and departing from the theatre, and for the maintenance of the illusion of the action on stage. Catel's emphasis on the security of the spectators as they enter and leave the theatre stresses that the building is designed to assure – 'like the purpose and nature of our newer dramatic art' – the spectators' bodily and psychic comfort.

The frame, however, is not in fact a wall, but itself the illusion of a wall. This illusion of a wall is the necessary first condition for the production of the illusion of dramatic action. Catel stresses the need to keep the audience at a distance: proximity might introduce the danger that the audience will recognise the illusion as illusion, might make the audience more conscious of the difference between the reality of the space where they sit and the illusion inside the frame. The first requirement of the complete enclosure that produces illusion is that the audience belongs to a separate space: for Catel the scene is not even part of the 'theatre proper'. (Catel is perhaps thinking of the Greek root: the *theatron*, or place of viewing, is not technically the place of the thing to be viewed, of the action.) The 'place of the action', there on the other side of the divide formed by the proscenium, is not inside the theatre but strictly another location.

Catel is thinking of the phrase invoked by Beckett: the so-called fourth wall, a concept often linked to the theories of Diderot, though Diderot never uses precisely that phrase. In *Conversations on The Natural Son*, Diderot thinks about the problem from the point of view of the stage and of the actors:

In a dramatic representation, the beholder is no more to be taken into account than if he did not exist. Is there something addressed to him? The author has departed from his subject, the actor has been led away from his part. They both step down from the stage. I see them in the orchestra, and as long as the speech lasts, the action is suspended for me, and the stage remains empty. (Qtd. in Fried, 1988, 94)

Catel and Diderot share a significant term: 'action'. For Diderot as for Catel, the barrier between stage and audience makes the continuation of action possible. When they acknowledge the audience, author and actor together 'step down from the stage', descending, as it were, into the audience. Part of the impropriety of this moment may be that the author becomes visible at all, but Diderot's main complaint is that *to address* the audience suspends the action. Diderot's emphasis here falls not on the desired invisibility of the author, but on the fiction of the beholder's non-existence. It is that fiction that allows the action its continuity.

This conception of the proscenium, then, pictures it as the architectural feature that maintains two fictions. It establishes the divide between, in Catel's terms, the theatre and the stage, the place occupied by the audience and the place where the action occurs. It divides what might seem to be a single space into two: all present agree that audience and actors occupy absolutely different places even though, in fact and however complicated the spatial articulations of any given room might be, they share a single room. And this division is the condition for the second fiction: the illusion that the dramatic action is real action. The ideal of the proscenium as the unreal divide in space that produces the conditions for the reality of illusion suggests its power to do ideological work or, at least – and the distinction is important – the kinds of ideological work thinkers imagined it performed. Here it is important to stress the peculiar and necessary blindness at the heart of this project: the agreement to treat the framed but immaterial divide between stage and audience as solid and impermeable.

The proscenium, then, might seem to be an architectural materialisation of theatre as apparatus in the sense that Brecht understood it: part of the material and institutional machinery that reproduces theatre's 'social function [...], namely evening entertainment' (Brecht, 2015, 62). Roswitha Mueller succinctly describes the capaciousness of Brecht's understanding of 'apparatus': it includes 'every aspect of the means of cultural production, from the actual

technological equipment to promotion agencies, as well as the class that is in possession of the mean of production' (Mueller, 1989, 15). Brecht writes of 'musicians, writers, and critics':

As they hold the opinion that they own an apparatus that actually owns them, they defend an apparatus over which they no longer have any control – which is no longer, as they believe, a means for the producers, but has turned into a means directed against the producers, in other words against their own production. (Brecht, 2015, 62)

The question of the proscenium, in this context, is subsidiary to the larger question of control of the apparatus. If the apparatus is directed 'against the producers' – implicitly, here, against a group of producers who hope to produce a left-wing theatre – then the innovations of those producers within the theatre are relatively trivial: a change to the physical arrangement or structure of the theatre, or a text that seems to challenge the class that controls the means of production, makes no difference to the apparatus as a whole. That apparatus will assure that anything, including *The Threepenny Opera*, becomes a commodity to be delivered. This aspect of Brecht's media theory, then, is in conflict with the frequent attention, in Brecht's writing on the theatre and in scholarly accounts of that theatre, to Brecht's challenges to the arrangements of the traditional stage. Estrangement includes estrangement from the technologies of the production of illusion that produced the bourgeois theatre.

Walter Benjamin stressed that Brecht's critique of the actually existing theatres of his day involved a concentrated challenge to the divide between audience and performer. That is, Brecht's understanding of the power of the apparatus to absorb innovation did not exclude thinking about the possibilities of organising theatrical space otherwise. Benjamin focused on the orchestra pit rather than the proscenium, but it is significant that he opens his discussion of epic theatre with a hyperbolic description of the theatre's traditional divide:

The abyss which separates the actors from the audience like the dead from the living, the abyss whose silence heightens the sublime in drama, whose resonance heightens the intoxication of opera, this abyss which, of all the elements of the stage, most indelibly bears the traces of its sacral origins, has lost its function. (Benjamin, 1998, 1)

The point is not that one or another architectural feature produces this separation, that the orchestra pit or the proscenium produces this 'abyss' through the inevitable force of the architectural arrangement. They are part of the same divide. According to these arguments, the theatrical apparatus has historically produced this divide, but, as Benjamin's comparison of this separation to one between the dead and the living suggests, the separation

is as much an effect of culture as of architecture. A desire to separate actors from audience, or the dead from the living, produces an apparatus that does this effectively. The stage is a sort of cemetery separated from the audience by the orchestra pit. Adorno imagined a residue of the magical in all art despite its reliance on rationalised technique or technology; as if to form a corollary, here Benjamin attaches the 'sacral' precisely to the divisions of the traditional western theatre.

In his catalogue of the features one should consider when examining 'objective, external' theatrical space, Patrice Pavis lists three general categories: the theatrical site, the stage space and liminal space. Liminal space 'marks the separation (more or less clear, but always irremovable) between stage and auditorium, or between stage and backstage spaces' (Pavis, 2003, 151). Pavis and Benjamin alike point to the existence of a third space between stage and auditorium, between performers and audience - the orchestra pit in Benjamin, this liminal space in Pavis – which is, or has been, at once objectively part of the theatrical situation while also being somewhat elusive. The liminal space is presumably not, for instance, simply a solid line without any width to be drawn from the edge of the stage to the ceiling, a rectangular and invisible shield between stage and auditorium. And vet: how thick is the fourth wall? This is at once an unanswerable question, and a real problem: Pavis's suggestion that attending to this 'irremovable' space should be part of the analysis of performance outlines a distinct challenge. That liminal space forms a changing psychic and social boundary. If, as Benjamin claims, the orchestra pit 'has lost its function', it is also possible that this space was in fact not 'irremovable' at all. Indeed, Benjamin would insist that Brecht had moved it, had even abolished it, replacing the sacral stage and its 'magic circle' with 'a convenient public exhibition area' (Benjamin, 1998, 2).

In 1971, Dan Isaac published a survey of experimental New York theatre in 1969 under the guise of an obituary, 'The Death of the Proscenium Stage'. Isaac's thesis was that the proscenium belonged to a vanishing world, and that, while it might survive in New York inside Broadway theatres functioning more or less as museums, its era was passing. Isaac's argument synthesises several critiques of the proscenium:

The proscenium stage, with its curtain that can be quickly pulled aside to reveal everything, feeds our secret voyeuristic longings. But at the same time, the proscenium stage represents one of the dearest values of the Renaissance man: the private life, the sanctified separateness that makes of a man an *individual*. (Isaac, 1971, 238; emphasis in original)

Isaac, embracing the environmental theatre of Richard Schechner, Grotowski and other theatre artists, summarises a critique of the traditional theatre's production of perspectival space: it perversely encourages voyeurism while

also working to maintain – presumably on both sides of the curtain – the value of privacy and individuality. And yet the pleasures of voyeurism rest on an imbalance: the spectator 'feeds' on the revelation of everything on the other side of the curtain, while revealing nothing. Privacy rests on the revelation of the other, but the fiction – or contract? – of the fourth wall assures everyone that there has been no exposure.

One can see why, then, experiments in post-war drama so often included challenges to the proscenium arch: in the theatre, the critique of this 'sanctified separateness', the uniqueness of the individual in his sovereign separation, needed to adopt other arrangements of theatrical space, arrangements that did not tend always already to confirm that sanctity and that sovereignty. Schneider was right to see a connection between Beckett's work and the project of undoing the subjectivity effects in western theatre by breaking down the fourth wall, with all its institutional support for the confirmation of the comfortable bourgeois subject in its safe entrances and exits. Beckett's work gave that subject little solace, and less comfort. And vet Beckett's continuous questioning of this subjectivity, and of the apparatuses that propped it up, explains why he insisted on the proscenium. Precisely because that work for the stage is so exquisitely attentive to the long history of the theatre's role in the maintenance of those subjectivity effects, Beckett's theatre never abandoned the proscenium arch. The swerve to the theatre in the round, and to the exploded or empty spaces of other experiments, recognised the power of the proscenium arch, but left the apparatus intact. Beckett took up the apparatus of the proscenium, that old medium of subjectivity effects, at the moment when the new medium of film had perfected that architecture of subjection, leaving the theatre in the shade – or as a place to experiment with the aftermaths of its former power.

The madman's media

This account of the proscenium has deliberately skipped from Brecht to experimental theatre of the late 1960s. One response to the Brechtian critique of theatre as apparatus was to imagine other spaces for the theatre. Schneider's suggestion to Beckett that *Godot* might be staged in the round is a chapter in a larger history of imagining liberation from the ideological apparatus of the bourgeois theatre through the demolition of the proscenium. Beckett, instead, works within the conventional technology of the proscenium, as if to stress that a new architecture of the theatre alone is not sufficient to produce liberation. His dedication to the 'closed box', with its suggestion of the stage as a coffin for actors, echoes Benjamin's necropolitical understanding of the theatrical divide between stage and audience. 'Now we'll

make it all dead', Beckett once said in a rehearsal (qtd. in Illig, 1990, 26). One might link the increasing deadness of Beckett's performers to the preservation of the stage as a site of uninterrupted action in conventional accounts of the proscenium, and then place this in the context of Richard Halpern's recent discussion of the 'eclipse of action' in Beckett's dramaturgy (Halpern, 2017, 226–54).

The perseverance of the proscenium in Beckett's dramaturgy needs to be linked to the larger media surround. The particular negation of the proscenium, precisely through its use, is exemplary of Beckett's reworking of the theatre and of the media surround. In film and television, the perspectival box was, if anything, an increasingly dominant technology in the post-war period. Never had so many been subject to interpellation through the frame and its subjectivation through perspective. One might argue that there was simply a continuity between the theatre proscenium and the similar frames of film and television: one technology across platforms. Beckett's dedication to the frame of the proscenium belongs, however, in the context of negation: he adopts the proscenium because of its hegemonic force and because it cannot, in the theatre, take on that power. By working complexly with the forms of address the proscenium has promoted, Beckett performs a 'refunctioning', to use Brecht's word again, of the now historical force of that theatrical frame. A caution is in order here: in this context, Beckett's notorious embrace of failure and of aesthetic poverty describes a real imbalance. His theatre is an important site for the recognition, and defamiliarisation, of the force of cinema's interpellation of its spectators. The counterpoint to this recognition is a refusal to exaggerate theatre's power to counter this force. And yet a rigorous encounter with the proscenium is everywhere in Beckett's work for the stage.

The 1967 Berlin production of *Endgame* included an element which, directing a later production, in 1980, Beckett would cut: 'Hanging near door, its face to wall, a picture' (Beckett, 1992, 7). This faceless picture and the 'closed box' of the proscenium both provoke questions about that most familiar phrase: the stage picture. Beckett uses the proscenium to produce the illusion of the fourth wall; inside that 'closed box' is an invisible picture, 'its face to the wall'. Photographs of the Berlin production suggest that that picture had a primitive frame and that a rag hung from it: as the play begins this object would then also recall the face of Hamm, covered with a hand-kerchief. This echo would have been redoubled at the play's end. Another stage direction preceding the 'action' of *Endgame* ties these elements together: 'Brief tableau' (Beckett, 1957, 1).

The movement in English from plainspoken 'picture' to 'tableau', a French loan word which, in English, indicates a picture belonging to the stage, contrasts this reversed picture with the tableau produced by the proscenium.

Is this picture in fact a tableau? What is gained in translation? It is striking that the French text of *Fin de partie* includes 'un tableau retourné' – the picture hanging with 'its face to the wall' – but there is no 'Brief tableau'. This iteration of the French word, that is, belongs only to Beckett's English translation. (No equivalent to the 'brief tableau' appears in the German translation with its 'umgedrehtes Gemälde' on the wall, either.) In every language, the texts insist on Clov's immobility; only *Endgame* links this immobility to the moments of charged, frozen signification in the melodramatic tableau.⁸ This pattern repeats itself at the play's end, where the text of *Endgame* concludes with another 'Brief tableau', with no equivalent in *Fin de partie* or *Endspiel*.

The promise of the proscenium is that it will provide the spectator with a picture; the reversed picture on the wall undercuts such a promise. The melodramatic tableau, writes Carolyn Williams, 'establishes a moment of hieratic silence and stillness within the ongoing action of the play, a moment in which the representation is turned inside out'; such tableaux, she argues, were introverted moments of 'static, spatial composition' (Williams, 2004, 109-10). In this account, the nineteenth-century melodramatic tableau caused the audience to 'turn inward to contemplate an interpretation of its significance in relation to the suspended action' (113). The reversed painting on the wall in *Endgame* blankly literalises this turning inside out of representation; it also emblematises the inaction framed by the brief opening and closing tableaux. There is no action to interrupt. The picture on the wall, that is, might model the function of the larger frame of the proscenium here: it frames an image to which the audience does not have the access it expects. This frame does not enclose a picture. It is not – to open a can of worms - a picture of a world. The picture on the wall, the only decoration of Endgame's set, unless one counts the alarm clock that for a time hangs on the wall, is never the subject of any discussion in the play. One of Hamm's narratives does, however, include a painter. The episode deserves careful consideration:

I once knew a madman who thought the end of the world had come. He was a painter – and engraver. I had a great fondness for him. I used to go and see him, in the asylum. I'd take him by the hand and drag him to the window. Look! There! All that rising corn! And there! Look! The sails of the herring fleet! All that loveliness!

(Pause.)

He'd snatch his hand away and go back into his corner. Appalled. All he had seen was ashes.

(Pause.)

He alone had been spared.

(Pause.)

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Forgotten. (Pause.)
It appears that the case is ... was not so ... so unusual. (Beckett, 1957, 44)
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Hamm's hesitation around the question of grammatical tense points to the many strands at work in this passage. He corrects himself because there are no longer enough people for the situation to be usual or unusual: in the absence of others, no statistical norm. He corrects himself because he wants to distance himself from the resemblance between his own situation, seeming one of the few 'spared' after some unnamed disaster, and that of the madman: having once compelled a madman to go to the window in order to cheer him up, he now orders Clov to go to the two windows. As Adorno observed, 'The madman's perception coincides with that of Clov, who peers out the window on command' (Adorno, 1992, 254).

The views Clov reports more closely resemble the madman's descriptions of ashes than any scene of rural and maritime loveliness, and no one is cheered by the prospects. Hamm's correction of the tense of his observation also underlines the problem of the convergence, or the distance, between the present occupied by those on stage and the present of the spectators. His movement from present to past also points to the post-war situation of *Endgame* and to the question of the temporality of the end of the world. What madman did not think the end of a world had come? The evident parallel between the madman and Clov, however, could raise the question of whether Clov, too, misrecognises, or even simply invents, what he sees. (This possibility becomes especially vivid around the episode when Clov reports that he has spotted a boy, which Beckett would also cut in productions he directed.)¹⁰ Hamm's narrative is not only a metatheatrical reflection on the situation of Hamm, but also contains a sort of rebus of the concerns of this chapter. In brief, the passage conjures a scene of looking framed by a window as a scene of education: you think the world has ended, but if you look at this view, you will see that the world perseveres, that there is still 'All that loveliness'. The one who looks sees something very different, a landscape of ashes. This scene of an enforced looking through a frame also stresses the continuum between the window - a figure for the frame of the perspectival painting at least since Alberti's On Painting – and the proscenium arch.

The premise of the story would seem to be, simply, that Hamm is correct, the madman wrong. Part of what is unsettling about this narrative, then, is that in it Hamm appears as an agent of what Marcuse (1968) called 'affirmative culture', insisting on dragging the painter and engraver, who has been deluded by pictures of desolation, to the window to see a landscape of remarkable loveliness. The metatheatricality of this moment is multiple:

not only does the scene's reflection on the stage as picture underscore the frame of the stage, but the scenario of Hamm's encounter with the madman offers an anticipatory echo of the response of at least a part of the play's audience. The parallel with the many spectators who would respond to Endgame by insisting that things are not really so bad as all that links this episode, for instance, to the episode of Mr Shower or Cooker in Happy Days: the resisting audience drags Beckett to vet another window, and Beckett returns to his corner. Here another detail unique to Beckett's English version resonates: only in *Endgame* does Hamm repeat that the madman was 'a painter - and engraver' (Beckett, 1957, 44). The repeated dash suggests a self-correction and in its punctuated emphasis calls attention to the medial difference between painting and engraving, and also repeats the usual order of production, in which the engraving – black and white, and reproducible – follows the unique painting. At this moment located, as Thomas Dilworth and Christopher Langlois have pointed out, at the centre of texts which have just stressed the importance of being in the centre (Dilworth and Langlois, 2007, 167-8), Endgame introduces a distinction important to many reflections on media: the engraving as the original copy of copies. where the original begins to dissolve into generations of repetitions.¹¹

Here direct comparison of *Fin de partie* and *Endgame* is illuminating (*Endspiel* again follows the French text). Who was the madman?

J'ai connu un fou qui croyait que la fin du monde était arrivé. Il faisait de la peinture. (Beckett, 1981, 1:262)

I once knew a madman who thought the end of the world had come. He was a painter – and engraver. (Beckett, 1957, 44)

The French text suggests that there is a connection between the madman's belief and the paintings he would make: the implication, I think, is that the paintings he used to make were responses to, and perhaps illustrations of, the end that he thought had already arrived. The unseen painting would then be an image of the end of the world, an image that cannot be seen. Like the 'picture' of *Endgame* or the 'tableau' of *Fin de partie* on the wall at the start of the play, the madman's paintings are not images and also something much less than ekphrasis: a tantalising idea of a possible image rather than description. Further, *Fin de partie* stresses the making of paintings, not, as in *Endgame*, a profession. *Endgame*'s madman is both painter and engraver, combining two professions most often separated.

The story of the madman encapsulates the problem of representing the end of the world. It also underlines the question of the medium of such representation: the madman works across media, as Beckett would increasingly do. Indeed, the striking repetition – 'painter – and engraver' – recalls one of Beckett's descriptions of his own development as an artist:

I realised that Joyce had gone as far as one could in the direction of knowing more, [being] in control of one's material. He was always adding to it; you only have to look at his proofs to see that. I realised my own way was in impoverishment, in lack of knowledge and in taking away, in subtracting rather than in adding. (Qtd. in Knowlson, 1996, 319)

The pair of painting and engraving echoes Beckett's sense of Joyce's work as endlessly additive, and his own as an art taking away and subtraction. The view through the window that Hamm wants to supply, with its surprising exclamations in praise of the lovely landscape, supplies the negative not only of something like Joyce's knowledge and control. Inpoverishment here works also against Hamm's story of the window within the proscenium. The proscenium figures those apparatuses that supplied the affirmative world pictures against which Beckett's theatre reacted by working inside the perspectival system. In *Beckett's Thing: Painting and Theatre*, David Lloyd has described just this dynamic:

It is the gradual breakdown of that 'world picture' that can be descried across Beckett's theatre in a painstaking trajectory that is steadily informed by his engagement with painting. In part, the progress of his dramatic work involved the rupture with the dramatic image in which is preserved that dimension of the 'spectacle' that inherited, as Beckett's contemporary Guy Debord put is, 'all the *weaknesses* of the Western philosophical project which undertook to comprehend activity in terms of the categories of seeing'. (Lloyd, 2016, 17; emphasis in original)¹³

Beckett's Thing provides the most rigorous and searching account of Beckett's engagement with vision and its technologies. And yet even as his argument gestures to the mass-mediated affirmations to which Beckett's plays responded with their grave negatives, Lloyd tends to suggest that that theatre responds to the predicament of vision as such. The understanding of 'activity in terms of the categories of seeing' may have been a weakness of the 'Western philosophical project', but this understanding contributed to the massive power of spectacular apparatuses. The moment of Beckett's theatre saw – is seeing, one might even say – the massive consolidation of the world picture in Heidegger's sense. Endgame is part of Beckett's ongoing critique of the solidity of that picture.¹⁴ Its breakdown in the plays is the negative image of its power outside them.

Theatre/media

Beckett's theatre is the negative staging of the media surrounding it. This has consequences for the theory of media, and in particular for the paired histories of thinking of Beckett's theatre as specific to its medium and of

media history as a matter of discrete technologies. Here Walter Benjamin's most sweeping claim from 'The Work of Art in the Age of Its Technological Reproducibility' gains new relevance:

Just as the entire mode of existence of human collectives changes over long historical periods, so too does their mode of perception. The way in which human perception is organized – the medium in which it occurs – is conditioned not only by nature but by history. (Benjamin, 2008, 23; emphasis in original)

Tobias Wilke has convincingly argued that Benjamin's definition of medium does not align with the most familiar current ones. Not simply a 'technological medium of reproduction', the 'medium names the comprehensive force field that links human sensorium to world and that is constituted in doing so by the interplay between natural (physiological, physical) and historical (social, technological, and aesthetic) factors' (Wilke, 2010, 40). Film is an important part of that linking of sensorium to world in the 1930s, but it is not in itself, in Benjamin's sense, the medium in which the organisation of perception occurs. No single technological medium could play, or has ever played, that role. No medium, in the more current sense, can be, in Benjamin's sense, the medium. This does not mean, of course, that film was not immensely powerful: it was, Benjamin claimed, the 'most powerful agent' of the social transformations he linked to the decline of aura (Benjamin, 2008, 22). As Erwin Panofsky wrote in 'Style and Medium in the Motion Pictures', an essay which has been reprinted with a frequency that rivals that of the republication of the work of art essay and which, like that essay, dates from the mid-1930s:

The 'movies' have re-established that dynamic contact between art production and art consumption which, for reasons too complex to be considered here, is sorely attenuated, if not entirely interrupted, in many other fields of artistic endeavor. Whether we like it or not, it is the movies that mold, more than any other single force, the opinions, the taste, the language, the dress, the behavior, and even the physical appearance of a public comprising more than 60 percent of the population of the earth. If all the serious lyrical poets, composers, painters, and sculptors were forced by law to stop their activities, a rather small fraction of the general public would become aware of the fact and a still smaller fraction would seriously regret it. If the same thing were to happen with the movies the social consequences would be catastrophic. (Panofsky, 1995, 94)¹⁵

Benjamin writes of the organisation of perception, and Panofsky of the moulding of opinion, taste, language, dress, behaviour and appearance, but they agree that film plays an unequalled role in these processes.

Understanding post-war theatre, and potentially the post-war arts more generally, requires registering how pervasive a conception of film as hegemonic

in the structuring of perception and behaviour had become. Understanding this hegemony also illuminates the question of the poverty of theatre as medium, as, for that matter, it has implications for the post-war situation of any 'traditional' art. If we understand medium in Benjamin's expanded sense – as the ensemble of apparatuses that produce perception – then it becomes clear that the role of these arts in the production of perception was relatively meagre. This is neither to say that they had no role, nor that their role in the production of perception would have been, or is now, easily measurable. To say that theatre was important to mass subject formation in the decades after 1945 would be to misrecognise it, to misunderstand both what theatre aspired to do and also what it achieved. Just as uninteresting would be to dismiss theatre as not worth consideration because of this diminished power. To make the power to shape subjects the criterion of aesthetic interest would be to surrender to the hegemony that Beckett's theatre countered. Indeed, the importance of theatre in this period would be measurable (if it were measurable) in inverse proportion to its limited power to shape perception. It was precisely because theatre had so little power to shape subjects that it could so powerfully stage how subjects were shaped.

Notes

- 1 Orgel's *The Illusion of Power* (1975) remains a classic discussion. Until 1605, the 'royal seat [...] was placed directly on the stage [...] After 1605, when perspective settings were introduced and they were used *only* at court or when royalty was present the monarch became the center of the theatrical experience in another way, and the aristocratic hierarchy grew even more apparent. In a theatre employing perspective, there is only one focal point, one perfect place in the hall from which the illusion achieves its fullest effect. At court performances this is where the king sat' (1975, 10; emphasis in original). The stage history here is more complicated than my account here can fully acknowledge: Pannill Camp's *The First Frame* (2014) challenges the idea that since the Renaissance proscenium theatres have consistently relied on the perspectival model.
- 2 In 1987, Jane Alison Hale's *The Broken Window: Beckett's Dramatic Perspective* opened up the question of the place of perspective in provocative ways. However insightful in locating the importance of perspective to Beckett's work, however, Hale's conclusions about the plight of the subject are less compelling.
- 3 An exchange with David Levine during an exploratory seminar at the Radcliffe Institute for Advanced Study in August 2018 sharpened my sense of potential changes to the function of the proscenium in the theatre.
- 4 The editors of Beckett's letters provide a germane passage in a letter from Alan Schneider to Thornton Wilder: 'When I see the Brecht company or the Piccolo Teatro of Milan [...] they ignore the proscenium tho they don't destroy it. They

- "open" it up in another way, physically and psychologically; and a special kind of theatricality [...] comes flying out to the audience' (Beckett, 2011, 660).
- 5 The book in which Haerdter's essay first appeared is itself a remarkable document: with three sides that fold out on the top (a photograph of lighting instruments) and the sides (photographs of curtains), the horizontally oriented volume deliberately frames the text of *Endspiel*, with accompanying photographs of the 1967 production, as a portable proscenium stage.
- 6 This chapter is part of a larger work in progress about the response of post-war drama to mass media, especially film. For a discussion of the factors that made 1945 a break in perceptions of the force of film, see my 'Theatre After Film, or Dismediation' (Harries, 2016, 351–2).
- 7 This sentence alludes to two books to which this essay is indebted: Joel Fineman's *The Subjectivity Effect in Western Literary Tradition* (1991) and Nicholas Ridout's *Scenes from Bourgeois Life* (2020).
- 8 For the French and German texts, see Beckett's *Dramatische Dichtungen* (1981, 1:208 and 209).
- 9 For a compelling treatment of Beckett and the post-war predicament of action, see Halpern (2017).
- 10 For Beckett's cuts to Endgame, see especially his letter of 15 November 1981 to his Polish translator, quoted in Gontarski's introduction to Beckett, The Theatrical Notebooks of Samuel Beckett: Endgame (Beckett, 1992, xviii). Gontarski's text of the play in that volume reflects those cuts.
- 11 Walter Benjamin, to cite an especially germane and obvious instance, discusses the engraving in the second section of the work of art essay (Benjamin, 2008, 20).
- 12 My sense of the force of negativity in Beckett's work owes much to Julia Jarcho's chapter on Beckett in *Writing and the Modern Stage* (Jarcho, 2017, 68–106).
- 13 The internal quotation is from Debord (1983, n.p., thesis 19).
- 14 For related speculations, also with reference to Beckett, see Harries (2014).
- 15 For a thorough consideration of Panofsky's essay, as well as an account of its publication history, see Levin (1996).

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II

Screens and airwaves

Beckett's intermedial bodies: Remediating theatre through radio

Pim Verhulst

When Billie Whitelaw was rehearing Footfalls in 1976, she asked Beckett: 'Am I dead?', to which he replied cryptically: 'Let's just say you're not quite there' (Whitelaw, 1995, 143). This equivocal presence of the body in the play recalls a precedent from twenty years before, namely the character Miss Fitt in the radio play All That Fall, who tells Maddy Rooney: 'I suppose the truth is I am not there, Mrs Rooney, just not really there at all' (Beckett, 2009a, 14). Though written two decades apart, both instances refer to the Jung lecture that Beckett attended at the London Tavistock Clinic in 1935, about a girl not having been 'properly born' (Knowlson, 1996, 176). In addition to this inter/intratextual link relating to a psychological disorder, the notion of 'not being there' also connects Footfalls and All That Fall in relation to the respective media for which they were devised. When Beckett started writing for the radio, he clearly distinguished it from theatre: the one was for voices, the other for bodies. However, a convergence soon began taking place in which the body of Beckett's theatre became gradually reconceptualised under the 'disembodying' influence of the radio medium. Notwithstanding his earlier disavowal, the body is a near continuous presence in the early radio drama, though a complicated and ambiguous one at that. Starting with All That Fall, then moving on to Embers and, briefly, to the other radio plays, this chapter argues that Beckett's experience with the medium in the late 1950s and the early 1960s 'remediated' his approach to the body in his late theatre, with Footfalls, written in the mid-1970s, acting as the culmination point.

Remediation, intermediality and embodiment

Originally, Jay David Bolter and Richard Grusin coined the term 'remediation' to counteract the dominant 'modernist myth of the new' (1998, back cover),

according to which digital technologies in particular were thought to break free from older media by setting new aesthetic and cultural principles. Yet, as Bolter and Grusin have shown, using a wide selection of examples from computer games to digital photography, film, television, virtual reality and the World Wide Web, such 'new' media actually incorporate and repurpose older ones. Radio is conspicuously absent from their discussion, so there is all the more reason to foreground it here. In spite of early theorists like Rudolf Arnheim, who saw in radio the potential to create a new aesthetic experience for its reliance on sound alone, a large share of its artistic output remained heavily indebted to the conventions of theatre, while at the same time the medium was remarkably receptive to prose and poetry. As such, the 'new' medium of radio did not break free from theatre, or its sister genres, but rather assimilated them to a certain extent. This is not to say, however, that 'remediation' is a one-way process or dynamic. On the contrary, older and more established media change under the influence of new ones as well, which is what Bolter and Grusin call 'retrograde remediation' (1999, 147). In fact, as Julian Murphet - in Multimedia Modernism (2009) - and David Trotter - in Literature in the First Media Age (2013) - have argued, it is precisely this responsiveness to the cultural codes of new technologies that determines the robustness as well as the longevity of a given medium. Murphet and Trotter apply this logic to literature produced in the period of high modernism, when it was forced to establish itself as a medium under pressure from telegraphy, telephony, photography, cinema, radio broadcasting, and so on, but the same holds true – perhaps even more so – for literature of the post-war period, when authors such as Beckett became increasingly multimedial.

Whereas a term like 'remediation' operates on the generic level of media, to state for example that post-war theatre was remediated by radio (as this chapter aims to do), a more appropriate term to study the process on the level of individual authors and their work would be 'intermediality', which comes in many forms and guises. In Irina O. Rajewsky's literary definition of the term, 'the given media-product' not merely 'thematizes' or 'evokes', but more specifically 'imitates elements or structures of another, conventionally distinct medium through the use of its own media-specific means' (Rajewsky, 2005, 53). While these 'elements' need not be structural, Rajewsky's interpretation does seem to be a primarily formal one. In this sense. Werner Wolf's definition is more inclusive: 'Intermediality [...] applies in its broadest sense to any transgression of boundaries between media and thus is concerned with "heteromedial" relations between different semiotic complexes or between different parts of a semiotic complex' (Wolf, 2008, 252). Chiel Kattenbelt, working specifically in theatre and performance, importantly emphasises the innovative potential of intermediality when he describes it as encapsulating 'those co-relations between different media that result in a *redefinition* of the media that are influencing each other, which in turn leads to a *refreshed perception*' (Kattenbelt, 2008, 25; emphasis added). While in theory, at least, most definitions allow for a broad application, in practice intermedial research in literary studies is often confined to visual manifestations of artists' expression as opposed to acoustic ones, and much the same holds true for the field of Beckett studies.

A notable exception is Ulrika Maude's Beckett, Technology and the Body (2009), which devotes a chapter to 'Hearing Beckett', but Anna McMullan's monumental study, Performing Embodiment in Samuel Beckett's Drama (2010), in particular, deserves special mention here. For McMullan, 'the bodies of Beckett's late drama are intermedial', because 'Beckett uses characteristic properties of presenting or projecting the body in one medium, and uses them to refigure the possibilities and properties of another' (McMullan, 2010, 56). 'In the radiophonic medium', McMullan points out, 'the body is not defined by the visual body image, but is evoked through language, the voice, music and sound effects, and it therefore depends on the imagination of the listener to come into existence' (67-8). McMullan goes so far as to state that 'Beckett's experiences of radio undoubtedly affected his later presentation of the body in the visual media and on stage', in that 'the organic body is dispersed' (69). As such, Beckett's radio plays could be seen as 'an experimental laboratory' to explore different configurations of corporeality (77), which invites the conclusion that 'his experience with radio may have encouraged Beckett to test the boundaries of embodiment in the theatre' (107). I fully agree with this claim, but whereas McMullan dedicates separate insightful chapters to embodiment in theatre, mime, television, radio and film, the connections between these different genres and media are left for the reader to infer. To fully grasp the intermedial nature of Beckett's work, and understand how his theatre became remediated by radio, a more integrative approach is needed, which this chapter aims to provide.

All That Fall

On 27 August 1957, when Beckett heard about a planned staging of *All That Fall*, he insisted in a letter to his American publisher, Barney Rosset, that it was 'specifically a radio play, or rather radio text, for voices, not bodies'. He strictly separated it from stage drama, adding that *All That Fall*

is no more theatre than End-Game [sic] is radio and to 'act' it is to kill it. Even the reduced visual dimension it will receive from the simplest and most static of readings [...] will be destructive of whatever quality it may have and which depends on the whole thing's coming out of the dark. (Beckett, 2014, 63; emphasis in original)

In the same letter, he also expressed a mutually exclusive view on theatre and television when he declined a filmed version of *Act Without Words I*, insisting that 'this last extremity of human meat – or bones – be there, thinking and stumbling and sweating, under our noses', not at the remove of a screen. Beckett's aim, at this point, was clearly to 'keep our genres more or less distinct, or extricate them from the confusion that has them where they are', and if we could not manage that, 'we might as well go home and lie down' (Beckett, 2014, 63–4). While this comment is often construed as definitive proof that Beckett was opposed to intermediality and adaptation, it is better served by being interpreted in its historical context, made at a moment just before he started experimenting with different genres or media on an unprecedented scale, and learned a great deal from those experiences. Beckett's remark about *Act Without Words I* already shows that he associated not just radio but also television with a loss of physicality, though not quite with complete disembodiment.

One could be forgiven for wanting to stage All That Fall, since of all Beckett's radio plays it is still closest in kind to theatre. Beckett seems to admit as much when he describes his second script for the medium, Embers, to Rosset as an 'attempt to write for radio and not merely exploit its technical possibilities' (23 November 1958; 2014, 181). The body has an essential, though somewhat complicated, role in it – despite Beckett's claim to the contrary. The main character, Maddy Rooney, is anything but bodiless, famously and unflatteringly described as '[t]wo hundred pounds of unhealthy fat' (Beckett, 2009a, 23), and a 'hysterical old hag ... destroyed with sorrow and pining and gentility and churchgoing and fat and rheumatism' (5). Her weight makes her move in a slow shuffling and panting manner, so her bodily condition provides a constant source of sound throughout the radio play. As she tells the station master, Mr Barrell, Maddy herself would much prefer to lie stretched out in bed, 'wasting slowly, painlessly away, [...] till in the end you wouldn't see me under the blankets any more than a board' (12). One way of describing her would thus be as a woman trapped in a body, desiring to be pure voice, or, as Maddy herself puts it ruefully: 'oh to be in atoms, in atoms! [Frenziedly.] ATOMS!' (8) This is a good approach to the radiophonic body's fate, particalised and broadcast over the airwaves as a disembodied voice, only to be reassembled and reconstituted in the imagination of the listener. Maddy's body is not a conventional one, stably anchored in a tangible physical reality. Instead, it is constantly abstracted into different shapes, forms and fragments that are to be envisioned acoustically.

At first, Miss Fitt perceives her as 'a big pale blur' (14) – 'une espèce de grosse tache pâle' in Beckett's translation, *Tous ceux qui tombent*, which he made together with Robert Pinget (Beckett, 1957, 34). In French, Maddy

even refers to herself as 'une balle de son' (23) when Mr Slocum wants to know how he should go about hoisting her into his limousine - 'As if I were a bale, Mr Slocum' (Beckett, 2009a, 9), she answers. While the phrase is certainly an accurate and idiomatic equivalent of 'bale' (hay, wheat, grain, etc.), literally 'balle de son' sounds the same as 'ball of sound' in French. Also in that language, the pun takes on an added meaning when Jerry returns to Dan an item he supposedly lost in the train or on the platform: 'On dirait comme une petite balle. (Un temps.) Et cependant ce n'est pas une balle' (Beckett, 1957, 75). Like Dan's mysterious object, Maddy occasionally manifests herself in the acoustic storyworld of the radio play as a 'ball(e)', emitting sound, and yet she is not quite a 'ball(e)', also retaining the fragmented remnants of a physical body. This metaphorical pun puts Maddy in direct kinship with the narrator of *The Unnamable*, who refers to itself as 'a big talking ball' (Beckett, 2010, 16) - 'une grande boule parlante' in Beckett's self-translation (1953, 37) – as just one of the many forms it takes.

Maddy's complex embodiment in *All That Fall* partly stems from the fact that she is not only being perceived but also acts as a perceiver, which requires her to have some kind of material or physical manifestation other than her voice, however rudimentary. In what may be construed as an aside to the listener, she points out:

The entire scene, the hills, the plain, the racecourse with its miles and miles of white rails and three red stands, the pretty little wayside station, even you yourselves, yes, I mean it, and over all the clouding blue, I see it all, I stand here and see it all with eyes ... [*The voice breaks*.] ... through eyes ... (Beckett, 2009a, 17)

Listeners can only experience the storyworld of *All That Fall* because Maddy provides them with visual information about it. In this sense, she is the focalising entity or 'eye' of the radio play. After getting knocked over by a passing van, she even compares herself to a sticky, and now smudged or occluded, eyeball: 'a big fat jelly' flopping 'out of a bowl', 'a great big slop thick with grit and dust and flies' that needs to be 'scooped up with a shovel' (5), later to be compounded with Dan's comment that she is 'quivering like a blancmange' (21) – a wobbly kind of gelatinous dessert.

In addition to an eyeball, Maddy is also described as an ear, for which we need to turn to the French translation of the radio play again. When Dan complains that his wife does not listen to him, Maddy refutes 'No, no, I am agog, tell me all' (2009a, 26), rendered as 'Non non, je suis tout ouïe' (Beckett, 1957, 64) in French – i.e., 'I am all ears', another pun like 'balle de son'/'ball of sound'. As much as she is the focaliser of the radio play, channelling visual information, she also functions as what Bartosz Lutostański

calls an 'auricularizer' (2016, 120–1), that is, the instance responsible for perceiving and mediating acoustic information to the listener. Due to Maddy's double status as audiovisual perceiver and perceived in the medium of radio, her embodiment in *All That Fall* is variable, constantly shifting from a blur, a ball of sound and an eyeball to an ear. However fragmented she may appear at times, Maddy always maintains a rudiment of physicality and therefore does not fully epitomise Beckett's claim about radio being a medium for voices, not bodies.

The only character in *All That Fall* who does embody Beckett's take on the medium is Miss Fitt, who, as opposed to the corpulent Maddy, is described as 'just a bag of bones' in need of 'building up' (Beckett, 2009a, 15). As an ethereal character made up almost entirely of mere voice, emphasised by her high-pitched tone in the BBC recording, Miss Fitt approximates Beckett's view of radiophonic characters as voices emerging from the darkness much more closely, a status that is consolidated through her epithet 'the dark Miss Fitt' (14, 16). She explains her peculiar condition to Maddy as follows:

I see, hear, smell, and so on, I go through the usual motions, but my heart is not in it, Mrs Rooney, my heart is in none of it. Left to myself, with no one to check me, I would soon be flown ... home. (14)

This is exactly what happens to Miss Fitt in the radio play. Left to her own devices by the other characters waiting on the platform and being no longer invested in their conversation, she suddenly disappears from the soundscape, without making an audible exit. Even more so than Maddy Rooney, it is the character of Miss Fitt who challenges theatrical performance of *All That Fall*. She would need to be shown leaving the stage in some form or other, while she simply dissolves into thin air on the radio. Because Miss Fitt is a relatively minor character, this obstacle did not deter theatre practitioners from wanting to stage the radio play, as appears from the dozens of permission requests preserved in the archive of Les Éditions de Minuit at IMEC and the Grove Press Records at Syracuse University, which Beckett nearly always declined, unless it was to be a public reading. To actively counter such requests, he placed the body centre stage in his next script for the medium, exploiting the affordances of radio in such a way that theatre adaptation would be nearly impossible.

Embers

Embers revolves entirely around the question of what is real and what is not, with a character similar to Miss Fitt now having a much more vital role to play. Henry's wife, Ada, is supposedly sitting next to him on the

strand, near the water's edge, but the text as well as the recording provide conflicting information as to whether she is really there. The drafts of the radio play clearly show Beckett was struggling to convey Ada's ontological state, so that (re)writing truly becomes a means of coming to grips with the medium's particulars. In the manuscript, upon joining Henry, she says: 'I have brought the rug' (Beckett, 2022, EM, 09r). Beckett crossed out the sentence and replaced it with another one - 'Raise yourself up till I slip it my shawl under you', which is also how it appears in the published text (2009a, 39) - but the manuscript also contained a realistic background story for the shawl, which Beckett again cancelled: 'Is that the old scarf I brought back that time from Lucerne?' (Beckett, 2022, EM, 12r) Even though the item of clothing is eventually retained and Ada is apparently able to slip it under Henry's bottom, devising a real-life alibi for its provenance would have anchored it - and by extension its carrier, Ada - more firmly in the physical world of Henry. A straight-up confirmation of her presence would have been the line 'I'm glad I put on my jaegers', which Beckett deleted and immediately rephrased as 'I hope you put on vr. jaegers' (EM, 09r; 2009a, 39), thus reassigning corporeality from Ada to Henry. The passage was further altered in the second typescript with two additions; the direction 'No sound as she sits' and the comment 'Chilly enough I imagine' (ET2, 03r; 2009a, 39). Ada seating herself noiselessly, as opposed to Henry's getting up to the chafing sound of moving pebbles, and the fact that she needs to guess at the temperature, place her in a different performative space from that of her husband's.

Other genetic variants illustrate Beckett's doubt about where to situate her and how to convey this acoustically on the radio. Ada's original reactions to Addie's music and riding lessons, as imagined by Henry, were: 'You are silent today' and 'What are you thinking of?' (Beckett, 2022, ET1, 05r). Beckett cancelled them on the second typescript, trying 'Poor Addie' (ET2, 05r) instead, only to reinstate the original responses on the third typescript (ET3, 06r). Ada's different replies invite conflicting interpretations: in the first, she is with Henry on the beach, not privy to his thoughts; in the second, she is located inside his head, able to witness the scenes as they play out in Henry's imagination and sympathise with the plight of their daughter. That Beckett ultimately wished to keep such hints subtle is evident from his revision to the line spoken by Ada when Henry returns from the edge of the water to her side: 'Don't stand there looking at me staring' (ET2, 05r). When she repeats the sentence after Henry's second trip to the surf, Beckett also revised it, this time on the third typescript of the radio play: 'Don't stand there gaping. Sit down' (ET3, 07r). Regardless of whether he is staring or gaping, Henry no longer makes eye contact with Ada directly, thus further complicating her presence.

As with All That Fall, revision continues in the French translation, Cendres, where Ada literally tells Henry to stop looking at his ghosts: 'Ne reste pas là à voir tes fantômes. Assis' (Beckett, 1960, 57). While Beckett preserves the ambiguity of the sentence, in that it could refer to any figment of Henry's imagination – be it the Addie lessons or Ada herself – it hints more openly at the possibility that his wife might be a spectral apparition. As if to sharpen the polarity with her husband, Beckett modifies other sentences in the translation that emphasise Henry's corporeality, for example when the reason for his frequent walks to the water - 'Stretch my old bones' (2009a, 42) - becomes 'Remuer ma vielle viande' (1960, 57). Henry is thus associated with living flesh, his wife with death. Such revisions are completely in line with Beckett's characterisation of Ada on the third typescript of *Embers*, which contains a number of handwritten additions that were used in the BBC production but have never been included in any published text of the radio play. For example, he gave her a 'low remote expressionless voice throughout' and he also lengthened her verb forms from 'they're' to 'they are' or 'didn't' to 'did not' (Beckett, 2022, ET3, 04r, 07r). Beckett's decision to make her voice sound dull and drawn out lends a post-mortem feel to it, as if speaking from beyond the grave, whereas Henry's has a more typically conversational and vivid quality.

Eventually, most of the textual – in the published version – and acoustic evidence – in the recording – reinforce the impression that Ada is not a real person but a ghost, imagined by Henry. Still, Beckett regarded this ambiguity as essential to the radio play's experience, more so in the broadcast than on the page. As he explained in an interview with the magazine *L'Avant-Scène*: 'La parole sort du noir ... *Cendres* repose sur une ambiguité: le personnage a-t-il une hallucination ou est-il en presence de la réalité? La réalisation scénique détruirait l'ambiguïté' (qtd. in Mignon, 1964, 8). Even when his trusted director, Roger Blin, proposed a theatre adaptation of *Embers*, Beckett refused permission for the same reason: 'when you listen, you don't know if Ada exists or not, whether she only exists in the imagination of the character Henry' (qtd. in Blin, 1994, 310). Nonetheless, Blin had devised a cunning strategy to deal with this problem visually:

I think I would have had a kind of pebble beach. Cork pebbles, or something light, but all the pebbles mounted on a pivot. And at a particular moment, as Ada comes in, the pebbles would have turned, would have shown a dark underside, like a kind of shadow that spreads out and lays down beside the man. (310)

Yet despite Blin's efforts, and those of others who suggested working with screens or even in the dark, Beckett maintained adamantly that the ambiguity of radiophonic embodiment, and its blurring of boundaries between the

spectral and the physical, was impossible to achieve adequately on the stage, with any attempt at showing eventually revealing or disambiguating.

Judging from the examples of All That Fall and Embers, in his first two radio plays at least. Beckett fell back on somewhat clichéd representations of the body and the voice that historically trace back to the Victorian ghost story tradition and early-day recordings on wax cylinders or gramophone records, as well as to the first radio transmissions of the late nineteenth and early twentieth centuries (Kittler, 1999, 12-13; Sterne, 2003, 8; Sterne, 2004, 303-8). As radio, film and sound historians have shown, 'the disembodied voice has long had the potential to discomfit listeners because it foregrounds the unnatural separation of the voice from the body' (McCracken, 2002, 184) – an effect also known as 'acousmatics', that is, when the source of a sound cannot be visually determined (Chion, 1994; Schaeffer, 2017). Whereas the more suspenseful programmes thankfully capitalised on this effect, 'radio producers worked hard in the 1920s and 1930s to naturalise radio's voices through publicity that sought to embody stars in photos and personal stories', by making use of the period's thriving magazine and film culture (McCracken, 2002, 184). By the late 1950s, it had become typical for radio dramatists like Beckett - but also for Dylan Thomas in Under Milk Wood (1954), and Harold Pinter in A Slight Ache (1958) – to creatively repurpose a decades-old cliché of sound recording, and use it to create a gripping listening experience that replicated the epistemological and ontological uncertainties of modernist and postmodernist literature. Today, such disembodied and ghostly evocations on the radio are mostly confined to period or genre pieces such as The Haunting of M. R. James (BBC Radio 4, 2018), which is based on the life of a Victorian writer of ghost stories and is set in the nineteenth century. Beckett, too, gradually abandoned it towards the late 1950s and the early 1960s.

Beckett slowly but surely diminished the physicality of his radio plays, concentrating ever more on non-somatic elements such as voice and music. The culmination of this process was *Cascando*, which Clas Zilliacus has called 'a sequel to *Esquisse* [radiophonique] in the sense that it cuts all ties with the external world' and conveys 'pure, mental matter without spatial dimensions and associations' (Zilliacus, 1976, 122). It thus seems as if Beckett had succeeded in writing the body out of his radio drama completely by the early 1960s, making it a matter of voices entirely. However, as Llewellyn Brown points out, 'in the context of radio, if the body is evacuated in the sense of an imaginary existence, it persists in its enigmatic connection to the voice' (Brown, 2016, 278). Still, with *Cascando*, Beckett had gone as far as he could in his reduction of the body to a voice, thereby exhausting the affordances of the medium in this regard. While the body would never be quite expelled from his theatrical work, it would undergo a process of

radical change in the decades that followed, in which its relationship to the voice came to play a part as well.

Happy Days, Play and Eh Joe

Critics have long noted how the tape recorder in *Krapp's Last Tape* was inspired by Beckett's visits to the BBC studios in Paris and his meeting with Donald McWhinnie (Knowlson, 1996, 444). In the context of the present argument, however, more important than this intermedial crossover between theatre and radio is that *Krapp* continues Beckett's experimentation with immobilised, static or malfunctioning bodies from before in *Waiting for Godot* and *Endgame*. Like Hamm, Krapp spends most of the play seated at a dimly lit table, virtually chained to a piece of technology that has become an extension of his body and mind.

While less obviously technological at first glance, Beckett's next play, *Happy Days*, is more radical in this respect, famously interring its protagonist in the sand from the waist down in the first act, and from the neck down in the second, forcing her to face the blistering heat of the sun head-on. This position significantly limits Winnie's freedom of movement, causing her to gesture in the measured, puppet-like angles of an automaton peeping out of a music box or some similar contraption. That puppetry and mechanics were on Beckett's mind while writing the play is clear from his letter to Barbara Bray of 10 October 1960:

I put the tip of my little finger into the imbedded female solo machine, to the extent of writing a few stage directions and a scrap of dialogue [...]. Mais le coeur n'y est pas, seul le bout du petit doigt [But the heart is not in it, only the tip of my little finger]. (Beckett, 2014, 365)

It thus seems that, under the technological influence of radio, *Happy Days*, as the play unfolds, becomes less and less about the body, which disappears underground, and more and more about the voice, the source of which – Winnie's protruding head – is still discernible on stage. If the transition from a theatrical body to a more radiophonic one is to be pinpointed anywhere in Beckett's drama, then *Happy Days* perhaps best represents that moment. This is not to say that the body becomes superfluous, however. After all, theatre is a visual medium, spectacle being crucial to its experience. Accordingly, in 1968, when the BBC's Head of Drama, Martin Esslin, asked Beckett for permission to broadcast the play, his request was denied: 'To my sorrow I have to say no to <u>Happy Days</u> on radio. I won't weary you with my reasons. You know them well. I am absolutely convinced of their cogency. I have not the right to renege on my work' (Beckett, 2016, 108).

Despite Beckett's refusal, it is interesting to note his changing conception of Winnie over time. In 1962, he wrote to director George Devine: 'I don't think yellow is right for Winnie's bodice, with so much of it about'. Instead, he suggested: 'The best colour here is the one that makes her most visible and enhances her fleshiness, perhaps pink' (Beckett, 2014, 499). In 1983, commenting to Nancy Illig about a recent Italian production of the play at the Teatro Mercadante in Naples, Winnie becomes almost ethereal:

Don't much like the hat. Too solid. Winnie is birdlike. Ihr Reich ist in der Luft. If she were not held in this way she would simply float up into the blue. She is all fragility, flimsiness, delicacy. This should be suggested (discreetly) whenever possible – costume, gesture, speech. This weightlessness. In the production I directed in London I established a recurrent Haltung of the arms (e.g. when she turns to the bag) suggesting wings. She <u>poises</u> over the bag. Hat is [in] keeping. Flimsy, lacy, feathery. (Beckett, 2016, 608; emphasis in original)

As these contrasting remarks about the same character confirm, over the course of twenty years, Beckett's image of Winnie had evolved from a corpulent one similar to Maddy, who condemns the 'cursed corset' she is wearing and feels she is 'seething out of my dirty old pelt' (Beckett, 2009a, 8), to one more in line with the insubstantiality of Miss Fitt, who 'would soon be flown ... home' when not kept in check (14). It is widely known that Beckett revised his early plays in light of his later minimalist aesthetics, for example by pruning the lines or by adding formal patterns, so it could be that *Happy Days* is affected by that same revisionist tendency. But the influence of the radiophonic body on its later reconceptualisation in the theatre may also account for the shift in Winnie's stage presence, as outlined here.

Play, one of Beckett's most intermedial works for theatre, continues his exploration of dramatic embodiment. In conceptual terms, it follows almost logically from Happy Days, limiting corporeal representation to just the heads of two women and one man, who in turn appear ghostly because of the urn-like vases from which they emerge: 'Faces so lost to age and aspect as to seem almost part of the urns' (Beckett, 2009b, 53). Whereas this stage image appears to derive from the visual arts rather than radio, it does build on the aforementioned process of disembodiment. Beckett also accelerates the pace of delivery, reducing the characters from real-life beings to mechanical mouthpieces for the conveyance of speech – an effect he first tried out in the French recording of Cascando, so it is again mediated by radio technology.² As a result, the voice becomes even more foregrounded in Play than it was in Happy Days, to the detriment of the body, but the speech and the source from which it emerges are not yet dissociated. Before Beckett explored this next step on the stage, he first experimented with it in the television play

Eh Joe, which is not surprising if we keep in mind his strict separation of theatre from television in the earlier mentioned letter to Rosset.

As opposed to the theatre, which Beckett associated with corporeality, the televisual medium, like radio, immediately acquires a spectral quality as well. The voice of the woman, 'Illow, distinct, remote, little colour, absolutely steady rhythm, slightly slower than normal' (Beckett, 2009a, 114), which Beckett further described in a letter to Alan Schneider as '[a] dead voice in his [Joe's] head' that should be 'whispered' (Beckett, 2016, 22), recycles Ada's 'expressionless' and deathlike intonation from Embers, while Henry's 'listening look' – again Beckett in correspondence with Schneider (Beckett, 1998, 203) – emulates the intentness of Krapp's auditory regard. The voice in *Krapp's Last Tape* was obviously a recorded one, historically originating from Krapp but presently played back from the tape, yet the voice in Eh Joe does not have a visually discernible source, at least not at first. It gradually appears to emerge from Joe's imagination, though clearly it is not his proper voice. So, after being disembodied, it is then re-embodied by Joe in a process that turns the physical human frame into a radiophonic and magnetophonic medium, capable of both relaying as well as replaying voices from a different and remote - even deceased - source. As a result, the voice, though 'Other', is also his.

After focusing on prose in the late 1960s, except for the 'dramaticule' *Come and Go*, Beckett would continue to investigate the theatrical potential of his intermedial findings in the early 1970s, with a series of plays that is often considered to be another 'trilogy': *Not I*, *That Time* and *Footfalls*.

Not I, That Time and Footfalls

The first, *Not I*, builds on the stage images of *Happy Days* and *Play* in that it further diminishes corporeality from a trunk and severed heads to merely a mouth, but the voice and the body, however fragmented, are still conjoined, suggesting that the physical presence of a Mouth is needed for there to be a voice in the theatre. By letting Mouth persistently deny that she is the provenance of the monologue, Beckett subverts in language what to spectators must seem visually incontrovertible. The second figure present with her on stage does not seem to emanate the sound either. Instead, it assumes the radiophonic listening function of Krapp and Henry, possibly as part of Mouth's split psyche, which is suggested by the name Auditor. On the one hand, *That Time* appears to take a step back from *Not I* by reintroducing a face suspended in mid-air; on the other hand, it represents the first time that Beckett dislodges or dissociates the voice from the body in his theatre, later to be repeated in *Rockaby*. As the opening stage directions of *That*

Time make clear, 'voices A B C are his own', but instead of originating from him directly they are 'coming to him from both sides and above' (Beckett, 2009b, 99). In what is a noteworthy difference from Eh Joe, the voice belongs to the protagonist himself, not a woman assailing him with '[m]ental thuggee' (115). As a result, That Time feels slightly less disembodied than Eh Joe, although we may well read the female voice as originating in the mind of Joe, who is physically present on the screen, so Beckett is clearly trying out different, though related, constellations across various media. Another novel feature, both a televisual and a radiophonic one, is that Beckett allows the use of pre-recorded audio tracks. According to the 'Note' about the three voices that precedes the text of That Time, 'the switch from one to another must be clearly faintly perceptible', but when the 'threefold source and context prove insufficient to produce this effect it should be assisted mechanically (e.g. threefold pitch)' (97).

Perhaps the most innovative example in this regard is presented by *Footfalls*. As with *Embers* and Ada's presence, the main ambiguity of the play hinges on the question whether the woman pacing up and down the stage while talking to herself and her mother is real. Is she physically present and the mother a figment of her imagination, or is it the other way around, as suggested by John Calder, who pithily summarised Footfalls as 'a play about an old woman about to die and be forgotten and who persuades herself that her aborted daughter has grown to middle age and will live to remember her' (qtd. in Campbell, 1998, 97). Who, indeed, is the ghost in the play? If it is the invisible mother, her physicality is only manifested through her voice, which, as we have learned from Embers and Eh Joe, does not suffice to corroborate embodiment - at least not on radio and television. By disconnecting the voice from her body, Beckett picks up where he left off with Eh *Joe*, but he also goes one step further by ambiguating the mother's presence, whereas the woman in the television play was clearly dead. Amy, by contrast, is visible, but this does not guarantee her physicality. The lighting of the play, 'dim, strongest at floor level, less on body, least on head' (Beckett, 2009b, 109), obscures her bodily presence to the extent that she almost disappears or fades into the dark background – a visual representation which is not that different from the solution proposed by Blin for the staging of Embers, which Beckett found unsatisfactory at the time.

Most interesting, at least in connection to radio, is the play's use of sound. As Beckett stipulates in the stage directions, there should be a 'clearly audible rhythmic tread' (Beckett, 2009b, 109) to May's pacing. She listens to her footsteps and counts them; she 'must hear the feet, however faint they fall', because 'the motion alone is not enough' (111). The sound of her steps confirms May's existence to herself, but it is not an objective marker of corporeality for the audience, who might be privy to the imagination of the

girl or that of her mother, and hear the steps as filtered through their subjective perceptions. While making sound still functioned as a certain marker of physical presence in *Embers*, distinguishing Henry from Ada, it no longer does so unambiguously in *Footfalls* – and neither does being visible. The senses, being exposed to different forms of materiality and ephemerality that blend into each other, are no longer to be trusted, and this ambiguity is nicely reflected in the different visual representations of May/Amy in various performances: a wraith-like crone in the original 1976 Royal Court Theatre production (Billie Whitelaw), a grey-haired woman of middle age in the 2001 Gate Theatre/RTÉ version for *Beckett on Film* (Susan Fitzgerald), and a faintly spectral girl, dressed in white, for the 2015 revival of the play at the Royal Court Theatre (Lisa Dwan).

It thus seems that, twenty years after Beckett distinguished theatre from radio in terms of embodiment and vocality, he proved his younger self wrong and reneged on that division with Footfalls in the mid-1970s, a theatrical play that accumulated his past experience with technological media. Whereas he previously held spectral embodiment to be the exclusive prerogative of radio (and television), destroyed by any attempt at performance, in Footfalls we see him experimenting with it on the stage and thereby pushing the boundaries of his own theatrical preconceptions. It is perhaps the play where Beckett's rethinking of theatre through the incorporeal influence of radio comes full circle and achieves its most powerful dramatic expression - Miss Fitt, by way of Ada, having intermedially metamorphosed into Amy/ May. Though not completely disembodied, Beckett's late theatre is 'reembodied' in the process, as Anna McMullan calls it (2010, 4). From a relatively straightforward and conventional representation of physicality in the early plays, we move on from a metaphorical kind of embodiment in the radio drama, where sound and voice serve as acoustic proxies, to arrive at the 'metonymic embodiment' that McMullan identifies in the late plays (111). It is almost impossible to separate the real from the ideal, the physical from the immaterial, or as Erik Tonning observes: 'In Not I, That Time and Footfalls, a fundamentally static image became a focus of Protean redefinitions: the spectators are constantly being challenged in these plays to reconsider what it is we think we see' (Tonning, 2007, 166). Except for Breath, perhaps, which for that reason Sozita Goudouna singles out in her study of Anti-Theatricality and the Visual Arts (2018), Beckett never completely abandons the physical body on stage. As such, even 'the late plays exploit the specificity of theatre' (McMullan, 2010, 107), although that specificity is constantly interrogated in the light of other dramatic media such as radio. The result of this intermedial dynamic is Beckett's radical remediation of the theatrical body, after its being shattered and dissolved over the airwayes.

Notes

- 1 The term 'acousmatics' was first used by Pierre Schaeffer in the context of electroacoustic music or *musique concrète* (*Traité des objets musicaux*, 1966), and then further developed by Michel Chion in relation to film sound (*Le son au cinéma*, 1985).
- 2 For a more detailed study of *Play*'s indebtedness to the visual arts, in particular sculpture, see Beloborodova and Verhulst (2019); for more information on the intermedial relationship between *Cascando* and *Play*, see Beloborodova and Verhulst (2020). See also Nicholas Johnson, Chapter 11 in this volume, on the author's experimental reinterpretations of *Play*.

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Angles of immunity: Beckett's Film

Philipp Schweighauser

Though Beckett's media works do not readily lend themselves to plot synopses, one way of making sense of Film in narrative terms is to say that it tells the story of a chase. In Beckett's reworking of this classic cinematic topos, E (or Eye) is the pursuer, O (or Object) the pursued. The key conceptual device in this chase, and in Film as a whole, is that of the 'angle of immunity' (Beckett, 1972, 11), the 45-degree angle that the camera (which takes on the role of E) must not exceed lest O, who flees from perception and being, be perceived and recoil in horror. As Beckett scholars have amply discussed, Beckett uses the device of the 'angle of immunity' for a playful vet serious engagement with the idealist eighteenth-century philosopher George Berkeley's dictum that 'esse est percipi (aut percipere)', that 'to be is to be perceived (or to perceive)'. In Beckett's take on Berkeley, O is a naive, literal reader of the Irish philosopher who flees from perception in a quest for non-being only to realise the impossibility of that quest when, at the end of the film, he finds that the persistence of self-perception rules out any true escape from perceivedness. In this conceit, which the beginning of Beckett's script introduces clearly and succinctly, the angle of immunity marks the limit of O's flight from (external) perception:

Esse est percipi.

All extraneous perception suppressed, animal, human, divine, self-perception maintains in being.

Search of non-being in flight from extraneous perception breaking down in inescapability of self-perception.

No truth value attaches to above, regarded as of merely structural and dramatic convenience.

In order to be figured in this situation the protagonist is sundered into object (O) and eye (E), the former in flight, the latter in pursuit.

It will not be clear until the end of film that pursuing perceiver is not extraneous, but self.

Until end of film O is perceived by E from behind and at an angle not exceeding 45° .

Convention: O enters *percipi*=experiences anguish of perceivedness, only when this angle is exceeded



(Beckett, 1972, 11)

Beckett's irreverence toward Berkeley shows itself clearly when he declares that neither the philosopher's statement nor his own development of it possess any 'truth value'. To be sure, this does not amount to Beckett denying the value of his own enterprise. That value just does not reside in the statement's truth content but in its use for 'structural and dramatic convenience', which is no mean thing for a writer like Beckett. The philosopher serves the writer as a springboard for artistic experimentation in a medium that was new to him. Hence also the self-reflexive title of the film: *Film*. ¹

These introductory remarks may serve as a word of warning for scholars setting out to probe the philosophical import of the work. But this should not keep us from asking about the kind of conceptual work Beckett does in *Film*. After all, in his quest for an aesthetics of 'impoverishment' (Beckett, qtd. in Knowlson, 2014, 352), every single word counts (even if the fact that we are dealing with a film script gives this text a status different from Beckett's novels and plays). With this in mind, I ask why Beckett chose the concept of the 'angle of immunity' for his exploration of perception and being.

We may start by stating that 'angle of immunity' is a technical term in neither cinematography nor in film studies. Moreover, to name the threshold at which O's face remains invisible to E, Beckett could have chosen a number of terms other than 'angle of immunity', for instance 'angle of freedom', 'angle of amnesty' or 'angle of release'. Thus, Beckett's choice calls for comment.

'Immunity' belongs to a wide variety of semantic fields. There are several forms of legal immunity – diplomatic, parliamentary and ecclesiastical – that partially protect individuals from legal prosecution and, in the religious realm, also exempt church property from secular jurisdiction. In the moral sphere, the English 'immunity' refers to licence or freedom from moral restraints, while the French *immunité* means something quite different, namely invulnerability to moral corruption.² In medicine, 'immunity' refers to a body's insusceptibility or resistance to pathogens or diseases. Finally, in one nineteenth-century anthropologist's usage, 'immunity' is

the opposite of 'community', referring to 'the [Indo-Aryan] Household, considered as a corporate body, without any relation to other Households [...] a Household, either wholly or in part, not included in any commune' (Hearn, 1878, 232, 234).

What unites this social usage of the term with other usages is the most basic meaning of 'immunity' as 'exemption from'. This corresponds to the first recorded sense of the word in the *Oxford English Dictionary*: 'Exemption from a service, obligation, or duty; freedom from liability to taxation, jurisdiction, etc.; privilege granted to an individual or a corporation conferring exemption from certain taxes, burdens, or duties (in later use esp. from prosecution or arrest)' (*OED*). For an analysis of Beckett's *Film*, it is, I believe, the medical and social senses of the term that are most relevant.

As far as the medical notion of 'immunity' is concerned, we may start by noting that Film's narrative repeatedly references the issue of health. In his flight from E, O checks his pulse three times as if trying to determine whether he is still alive. In the room of eves that O retreats to in the film's final act, the pillow on the cot is soiled and the bed as a whole looks messy and shabby - a potential source of germs. When O removes the dog and cat from the room in the film's one true slapstick scene, he of course does this primarily to escape their stares. But he also seems to seek to immunise himself further from contagion by another (which is more difficult to achieve for the cat and the dog than for the parrot and the fish, who are confined to their cage and fishbowl, respectively, and which he can easily cover with his coat). The room itself may have become available to O due to a health issue. As Beckett suggests in his notes, 'This obviously cannot be O's room. It may be supposed it is his mother's room, which he has not visited for many years and is now to occupy momentarily, to look after the pets, until she comes out of hospital' (Beckett, 1972, 59). O himself is, of course, a damaged figure: old, exhausted, and with a patch over his left eye. He is, moreover, wearing a '[l]ong dark overcoat' while all the other characters, including those in the deleted street scene, are dressed in 'light summer dress' (12). We may, of course, interpret O's dress as an additional protective layer that exempts him from any external intrusions but we can also read it as an index of his body's fragility.

Health was also a significant issue in the production of *Film*. As is well known, while directing the movie in New York in the summer of 1964, Beckett suffered from blurred and clouded vision caused by cataracts in both of his eyes, which were operated upon only in the early 1970s – a fact that adds an autobiographical dimension to O's blurred vision in *Film* (Knowlson, 2014, 579; Paraskeva, 2017, 58).

Buster Keaton, who was sixty-seven years old at the time of the shooting, was worse off. In a conversation with Shannon Kelley recorded at UCLA's

Billy Wilder Theater almost fifty years after the shooting of *Film*, Keaton's friend James Karen, who plays the man in the couple that O bumps into near the beginning of the film, is still upset about Keaton's treatment on the set:³

You can see all the bricks that poor Buster had to wade through. By the way, it was, I think, July 1 we started shooting and it was about 110 degrees in the shade, and there was no shade. It was just murder for Buster who was not at the top of his health game at the time. He was, I think, 69 and he was dead a year and a half later. And he just was such a trooper. And they were curiously insensitive to actors. [...] It wasn't meanness on their part. They just simply did not know that an elderly man running on rusty nails and bricks for two days needed a chair. [...] Shooting was hell. (Kelley, 2011)

Given the prominent roles that health and disease play within *Film* and in the context of its production, Beckett's decision to label the key device of that film 'angle of immunity' makes added sense. However, before exploring the medical sense of 'immunity' further, we need to consider another sense of the term.

For understanding Film, the social sense of 'immunity' is of equal importance. Here, the anthropological definition of the term that I cite above becomes relevant. The Oxford English Dictionary marks Australian anthropologist William Edward Hearn's definition of 'immunity' as 'the household as a discrete, self-contained entity in early Indo-European society' (OED) as an obsolete, 'isolated use', indicating that it is an idiosyncratic usage (by one anthropologist) that is, moreover, no longer employed. At first sight, then, this sense of 'immunity' is of limited significance at best. Yet more recent philosophical reflections on community, immunity and autoimmunity, most notably by Jacques Derrida and Roberto Esposito. make Hearn's nineteenth-century nonce-use appear less marginal than the OED suggests (Derrida, 1998, 2003, 2005; Esposito, 2008, 2010, 2011, 2013b). Esposito shows that earliest usages of *immunitas* in ancient Rome denoted an exemption from services or duties in the juridicopolitical realm. In the Middle Ages, the semantic range of the term was expanded to cover some clergymen's as well as church property's exemption from secular law. Immunitas, then, first functioned not as a medical term but as a concept in the social realms of politics, religion, and the law.⁴

Zooming in on the relation between *communitas* and *immunitas*, Esposito notes that, on the face of it, they refer to diametrically opposed movements within social space. Highlighting the common core of both terms – Latin *munus* (debt, obligation, duty, office, function, post, gift, sacrifice, service, tribute, offering) – Esposito notes,

If the members of the *communitas* are bound by the same law, by the same duty, or gift to give (the meanings of *munus*), *immunis* is he or she who is

exempt or exonerated from these. *Immunis* is he or she who has no obligations toward the other and can therefore conserve his or her own essence intact as a subject and owner of himself or herself. (Esposito, 2013b, 39)

Esposito is a political philosopher who seeks ways out of a range of contemporary sociopolitical predicaments including right-wing identitarian movements, states' obsession with security and public health, the privatisation of water and corporate resistance to energy transition. It is with these current developments in view that he stresses the urgent need to balance out the competing claims of *communitas* and *immunitas*:

By overlaying the legal and medical semantic fields, one may well conclude that if community breaks down the barriers of individual identity, immunity is the way to rebuild them, in defensive and offensive forms, against any external element that threatens it. This applies to individuals, but also to particular communities, which also tend to be immunized against any foreign element that appears to threaten them from outside. [...] Although immunity is necessary to the preservation of our life, when driven beyond a certain threshold it forces life into a sort of cage where not only our freedom gets lost but also the very meaning of our existence – that opening of existence outside itself that takes the name of *communitas*. This is the contradiction that I have sought to bring to attention in my work: that which protects the body (the individual body, the social body, and the body politic) is at the same time that which impedes its development. It is also that which, beyond a certain threshold, is likely to destroy it. (Esposito, 2013a, 85)

Esposito's exploration of convergences between the social and the medical senses of 'immunity' has obvious relevance for Beckett's *Film*, a movie that tells the story of a damaged character obsessively seeking to immunise himself against contagion – particularly against contagion by the social. Already the initial close-up on Buster Keaton's opening and shutting eye announces the film's oscillation between openness to, and withdrawal from, the external world or, to rephrase this in Esposito's terms, the oscillation between *communitas* and *immunitas*. Yet while the eye remains open at the end of both the opening shot and the final shot (which returns us to Keaton's eye), O's trajectory is one of closure and withdrawal, suggesting that the eye we see at the beginning and ending of *Film* is E's rather than O's – though the distinction between the two of course collapses as the film ends.

To be sure, perhaps as a result of the lasting influence of early humanist and existentialist readings of Beckett,⁵ clearly also because of Beckett's own perceived longing for silence and reclusion, and most certainly owing to the abstractness of his work, social or political readings of his work are still relatively scarce.⁶ Yet if we take into consideration Beckett's script and, equally importantly, the initial street scene that was cut from *Film* due to its technical flaws but partially restored by Ross Lipman (2015), we can

supplement philosophical and psychological readings of the film with a reading that seeks to do justice to its social dimension. The street scene is the only scene in *Film* that forcefully moves beyond dyadic configurations such as those between O and E, between the couple that O runs into when hurrying alongside the wall, and the cat and dog in the room of eyes. In the restored opening scene, we see six couples strolling across a square. In his script, Beckett stresses the most obvious difference between these couples and O: while they are 'shown in some way perceiving – one another, an object, a shop window, a poster, etc., i.e., all contentedly in *percipere* and *percipi*' (Beckett, 1972, 12), O frantically seeks to avoid perceiving and being perceived. What Lipman's restoration of the deleted scene helps us understand is that O's flight from perception is also a flight from community, a flight from the community of couples strolling across the square, a flight from contagion by the social.

Lipman's restoration of the street scene invites us to reconsider O's encounter with the bespectacled couple as he runs into them while hurrying alongside the wall. For O, the encounter is unpleasant for at least two reasons: first, because he is perceived by them and, second, because his interrupted flight would give E the opportunity to move in on O, breaching the angle of immunity a second time. Of course, the main purpose of this scene is to showcase, for the first out of three occasions in the film. the 'anguish of perceivedness' (Beckett, 1972, 11) as the couple faces E and responds with horror. But if we take the street scene into account, O's encounter with the couple is also a source of anguish to him because it threatens to thwart his flight from contagion by community. Two details of the encounter corroborate such a reading. In the script, Beckett writes, 'In his blind haste O jostles an elderly couple of shabby genteel aspect, standing on sidewalk, peering together at a newspaper' (15). But in the film, they are looking at a map, not a newspaper, suggesting that they are strangers to this place. The couple is, in other words, not part of the initial community either. A monad bumps into a dyad and no new community emerges. Moreover, when the couple's expression changes to the 'agony of perceivedness' (1972, 16), they are not only looking at E. Like the old lady in the vestibule, and like O in Film's epiphanic scene, they are also looking at us, recoiling from the 'savage eyes' of the film's community of spectators.⁷

A second look at the restored street scene helps us understand what kind of community we encounter there. When we see them first, five of the six couples are moving down the street, two on the pavement (a middle-aged man pushing a wheelchair with an older man in it; a prim elderly couple) and three on the street itself (two female friends, one white, one black; an old man holding onto a walking stick with his right hand and onto the shoulder of the adolescent boy who accompanies him with his left; a woman

pushing a stroller with a boy in it as she holds on to a balloon). The sixth couple, a heterosexual pair of lovers, is approaching the street sideways, from a 90-degree angle. Again, the film diverts from the script in significant ways. At least three of these couples are not 'going unhurriedly to work' (Beckett, 1972, 12), as the script suggests. The mother and the boy are on a day out and both the old man with the walking stick and the old man in the wheelchair are beyond working age. Out of the other three couples, the voung lovers may or may not accompany each other on the way to work, the prim elderly couple seems dressed for a day out rather than labour, and the two women friends may just as well be dressed for shopping. The community in the street scene is, then, a community that is not united by a shared purpose. It is, moreover, a community in which there is social interaction (with varying degrees of intimacy and friendliness) within the couples but not between them. What we get, in other words, is an urban street scene in which individuals and, in this case, couples go about their own business. This still qualifies as a community but it is the kind of loose community characteristic of cities.

If we include the street scene in our analysis of *Film*, the social dimension of O's behaviour moves into focus, turning O into a figure that seeks to escape both perception and community – even the kind of loose urban community that affords its members a great deal of protective distance and anonymity. Here is where a psychological and a social reading converge: O's frantic search for immunity from community assumes pathological proportions. He is a figure who validates Esposito's concern that 'immunization in high doses means sacrificing every form of qualified life, for reasons of simple survival: the reduction of life to its bare biological layer, of *bios* and *zoé*' (Esposito, 2013b, 61). Now reduction is, of course, one of Beckett's core aesthetic principles, which he developed in contradistinction to Joyce. As he put it in a 1989 conversation with his biographer James Knowlson,

I realised that Joyce had gone as far as one could in the direction of knowing more, [being] in control of one's material. He was always adding to it; you only have to look at his proofs to see that. I realised that my own way was in impoverishment, in lack of knowledge and in taking away, in subtracting rather than in adding. (Beckett qtd. in Knowlson, 2014, 318)

But in many of his media works, including *Film*, reduction also means reduction of life in the sense that his characters are damaged subjects that move through impoverished spaces such as the prison-like rooms of *Eh Joe* and *Ghost Trio* or, indeed, *Film*'s dilapidated setting at the Manhattan end of Brooklyn Bridge.

In my social-immunological reading of *Film*, O is a figure for what both Derrida and Esposito label autoimmunity: the most radical manifestation

of immunity in which the quest for self-protection turns against the self itself. In immunological terms, autoimmunity is 'a destructive reaction of the immune system against one or another of the body's own constituents' (Mackay, 2001, A252). In Derrida's words, it is 'that strange behavior where a living being, in a quasi-suicidal fashion, 'itself' works to destroy its own protection, to immunize itself against its 'own' immunity' (2003, 94). For both Derrida and Esposito, autoimmunity is a figure that allows them to diagnose a range of contemporary social and political pathologies, including public health scares, xenophobic responses to mass migration, the effects of the war on terror on the US citizenry, and Western states' as well as citizens' increasing obsession with security measures that manifests itself, for instance, in extended emergency legislation. Yet while Derrida stresses that 'autoimmunity is not an absolute ill or evil' – since '[i]t enables an exposure to the other, to what and to who comes' (Derrida, 2005, 152)⁸ – Esposito more persistently emphasises the deleterious effects of autoimmunisation:

Normally the immune system is limited to a role of preservation, without turning against the body that houses it. But when this does happen, it is not provoked by an external cause but rather by the immune mechanism itself, which is intensified to an intolerable degree. A similar dynamic is also recognizable in the body politic, when the protective barriers against the outside begin to represent a greater risk than what they are intended to prevent. As we know, one of our society's greatest risks today lies in an excessive demand for protection, which in some cases tends to produce an impression of danger, whether real or imagined, for the sole purpose of setting up increasingly powerful preventive defense weapons against it. (Esposito, 2013a, 86)

While Esposito and Derrida zoom in on late twentieth and early twenty-first century pathologies, the origins of the immunitary logic they theorise about can be traced back to the decade in which Beckett made his only film. Beckett wrote the script for *Film* in April–May 1963, shot the film with Alan Schneider in New York in July 1964, and it was first screened at the Venice Film Festival on 4 September 1965. Crucially, Beckett's staging of O's movement away from community in the 1960s coincides with a key shift in immunological knowledge. This is the decade in which the immunological revolution took place, the decade in which serology-centred immunology was displaced by immunobiology. For the first half of the twentieth century, immunology was dominated by chemists who considered the antibodies circulating in the body's humours (primarily blood and lymph) the only active agents in the immune response and focused exclusively on antibody-antigen interactions.

Starting in the mid-1950s, this paradigm was forcefully challenged by biologists such as the Danish immunologist Niels Kaj Jerne and the Australian virologist Frank Macfarlane Burnet. These researchers took a more holistic

approach that emphasised the complexity of human immunity, stressed the central role in the immune response played by those cells we now know as B and T lymphocytes (or B and T cells for short), and discovered the key links between humoral and cellular immunity. This and related research provided the study of cell-mediated immunity with a firm foundation and laid the ground for immunological research today. Appropriately, the journal *Cellular Immunology* was founded in 1970.

The most influential and enduring contribution to the immunological revolution was Burnet's publication of *The Clonal Selection Theory of Acquired Immunity* in 1959. In immunologist Zoltan A. Nagy's words,

If immunologists were asked to name one single element that marks the beginning of the immunological revolution, most of us would vote for the appearance of 'The Clonal Selection Theory of Acquired Immunity' by Macfarlane Burnet in 1959. This theory provided, for the first time, a biology-based conceptual framework for the development of immune responses, and its main theses have remained valid to date, so it has rightly become the alphabet of immunological thinking, and it is now 'in the blood' of every immunologist. (Nagy, 2014, 4–5)

Burnet's clonal selection theory of acquired immunity explains how the immune system can respond to a wide variety of antigens. When a foreign substance enters the human body, it encounters a vast diversity of highly specialised B lymphocytes. Burnet proposed that specific antigens select and activate specific B cells equipped with receptors specific to these antigens. When an antigen attaches to the corresponding B cell's receptor, the B cell is activated and produces clones for the generation of antibodies. These antibodies bind to the surface of the antigens, marking them for destruction by other players in the immune system such as phagocytes (Burnet, 1959a). Burnet's theory decisively strengthened biological explanations of immunity at the expense of chemical accounts, allowing him 'to lead the charge against the old [immunochemical] regime and its outmoded paradigm' (Silverstein, 2009, 358) and turned out to provide the foundation of molecular immunology.

Drawing on Jerne's pioneering work, Burnet also formulated a theory of fetal clonal deletion, arguing that the lymphocytes occurring in the body of children and adults are those that were singled out for survival at the fetal stages because they did not respond to the body's own tissue (and therefore pose no threat to the body itself). In this account, autoimmunity is the original condition that is checked by fetal clonal deletion, which enables the body to develop immunological tolerance, that is, tolerance of the self: 'Clones with unwanted reactivity can be eliminated in the late embryonic period with the concomitant development of immune tolerance'

(Burnet, [1957] 1976, 121). ¹⁰ Both Derrida and Esposito make much of this, arguing that, in Esposito's words,

it is not autoimmunity, with all its lethal consequences, that requires explanation, but rather its absence. [...] [A]utoimmunity is what would occur under *any* circumstance in the event the tolerance mechanism fails to block it. Here we arrive at the key point of the argument: the destructive rebellion against the self is not a temporary dysfunction, but the natural impulse of every immune system. In countering all that it 'sees', it is naturally led to *first* attack its own self. (2011, 164; emphasis in original)

Only through clonal deletion and the concomitant development of immunological tolerance does the self learn to 'tolerate' itself. Paradoxically, autoimmunity is both the original condition and marks the breakdown of acquired self-tolerance.

With this in mind, we may return to Beckett's Film to note that O indeed engages in a form of autoimmunitary response when he destroys the seven photographs of himself and significant others, starting with the one that shows only his current, aged self - only to realise, as the movie ends, that the threatening agent (E) is indeed, again in autoimmunitary fashion, the self. O here engages in a twisted form of clonal deletion that, unlike Burnet's fetal clonal deletion, exemplifies not the creation of self-tolerance but its collapse. Yet it is a related facet of the immunological revolution that provides the key to the immunitary logic of Beckett's Film. No matter our scientific, let alone immunological expertise, we have gotten used to talk about the human 'immune system'. But the very notion of a human immune system only came into being with the immunological revolution, 11 which brought about an awareness that the human immune response is systemic in the sense that it involves a complex interplay of immunitary agents. One major corollary of immunologists' growing awareness of the systemic nature of the immune response was their strict distinction between self and not-self. In fact, this distinction between self and not-self is so central that immunology has until fairly recently been known as 'the science of self-nonself discrimination'. 12 Again, it was Burnet who crucially shaped immunological discourse through another seminal publication: Self and Not-self: Cellular Immunology, Book One (1969). 13 For Burnet and much of the immunobiological research that followed him, 'self-nonself discrimination' was an article of faith, one that, he professed in 1959, 'I shall always regard as crucial to all immunological theory' (Burnet, 1959b, 14). On this foundation, autoimmunity is a major conundrum since it violates precisely the self/nonself dichotomy that founds post-1950s immunology: autoimmunity marks the moment at which the self misrecognises the self as nonself, the moment at which the immune system attacks its own host.14

Beckett's Film explores precisely the moment at which the self's protection against the not-self, visualised in Film as O's frantic flight from contagion by the social - is turned back against the self itself. Produced in the midst of the immunological revolution, Film explores one subject's autoimmunitary response – a response that involves not merely flight from community and flight from the self but also a turning of the self against the self that manifests itself most prominently in O's destruction of the seven photographs – media that are, if we follow Roland Barthes, themselves 'figuration[s] of the motionless and made-up face beneath which we see the dead' (Barthes, 1982, 323) – and in O's intense horror at his final perception of the self. While in Barthes, photography registers the traumatic separation from others, in Beckett, O's tearing up of images of himself exposes a morbid rift within the self, constituting an instantiation of the death drive. O appears to fall asleep as the film ends, but death would be the most consequential resolution of this fictional subject's autoimmunitary response to itself – a resolution also suggested by the doppelgänger theme that emerges when O recognises himself in E in the film's epiphanic scene. A doppelgänger is, after all, an omen of impending death, an ominous clone.

If my immunological reading of *Film* makes sense, Beckett's setting of the movie in 1929 assumes added significance. Several studies on *Film* stress that its setting in this specific year is significant because it marks a watershed in the history of cinematography (Maude, 2014, 46–7; Lawrence, 2018, 60–1; Paraskeva, 2017, 37–9). That same year saw not only the premiere of Luis Buñuel and Salvador Dalí's pathbreaking surrealist *Un chien andalou* but also marked the almost complete displacement of silent film by talkies. Beckett references both these moments in the history of cinematography: the most notorious scene of *Un chien andalou* through its opening close-up on Buster Keaton's eye; the rise to dominance of talkies by creating a sound film whose only audible sound is a woman's 'sssh!' (Beckett, 1972, 16). Yet a close look at *Film*'s most prominent device – that of the 'angle of immunity' – suggest that the history of immunology is relevant not only to the film's production in the early 1960s but also to its historical setting in 1929.

There were two major discoveries in the life sciences in 1929: in the June 1929 issue of *The British Journal of Experimental Pathology*, Alexander Fleming published an article that reported on his finding of a powerful antibacterial substance. Fleming's discovery of penicillin would revolutionise the treatment of bacterial infections that cause a variety of diseases including gonorrhea, syphilis, tuberculosis and bacterial meningitis. It earned him a knighthood in 1944 and the 1945 Nobel Prize in Physiology or Medicine.

Also in 1929, a less famous Hungarian bacteriologist named Louis L. Dienes published a series of articles in *The Journal of Immunology* that

detailed his discovery that the injection of egg white into the tubercles (the small projections produced by tuberculosis) of tubercular animals led to the same effects as the injection of tuberculin. In both cases, the result was a delayed inflammation of the skin. Today, the phenomenon is labelled 'delayed-type hypersensitivity' (Nagy, 2014, 3–4; Swartz and Dvorak, 1974, 89–90) because it occurs only between twenty-four and forty-eight hours after injection (Cruse and Lewis, 2005, 140; Silverstein, 2009, 140). Before Dienes's findings, it was assumed that delayed-type hypersensitivity was caused only by antigens of bacterial origin. Dienes's research showed that they could also be triggered by simple proteins, which means that delayed hypersensitivity is a more general phenomenon than previous researchers had assumed – one that was not caused by specific antigens but involved as yet unexplored dimensions of human immunity.

Dienes's research did not garner much attention in the scientific community around 1929 since the vast majority of researchers followed the reigning humoralist dogma according to which 'circulating antibody would provide all essential answers to the problems of immunity and immunopathology' (Silverstein, 2009, 39). But Dienes's research helped prepare the ground for the explosion of cellular immunology and the turn to immunobiology in the 1960s. As Nagy explains, '[t]he earliest 'heretical' phenomenon' that did not fit the humoralist paradigm 'was delayed-type (or tuberculin-type) hypersensitivity' (Nagy, 2014, 44). It would take another thirty years before a range of such heretical phenomena – including, next to delayed hypersensitivity, skin-graft rejection, autoallergic diseases and immunological tolerance - began to make sense to biologists who recognised the full, systemic complexity of the human immune response. As Arthur M. Silverstein puts it, 'The study of delayed hypersensitivity only attained respectability and became an appropriate topic for immunologic symposia and books in the early 1960s, in conjunction with a shift in immunology from a chemical to a more biological approach' (Silverstein, 2009, 39). And thus, we have returned from the setting of Film in 1929 to its production in the decade of the immunological revolution.

Film is a movie that explores the destructive, autoimmunitary logic of the self/nonself dichotomy that the immunological revolution succeeded in placing at the heart of immunology as Beckett was shooting his film. A final look at Beckett's naming of his film's key device suggests that he may have indeed opened up his film to such an immunological reading. The 'angle' in 'angle of immunity' may refer to more than the 45-degree angle that the camera must not exceed. The earliest meaning of 'angle' recorded in the Oxford English Dictionary is '[a] corner of a room or other enclosed space, esp. viewed internally or as a retreating space; a recess, a nook'. Interestingly, while this definition of 'angle' may appear to stress the

benign, perhaps even cosy nature of this space ('a retreating space; a recess, a nook'), most of the quotations given share an ominous note. To give but three examples:

a1475 (*?a1430) J. Lydgate tr. G. Deguileville *Pilgrimage Life Man* (Vitell.) l. 15300 (*MED*) Lych a wolff..Shep in a folde for to strangle And to devoure hem in som Angle.

1509 Bp. J. Fisher $Wks.\ (1876)\ 171$ We be thraste downe into a very streyght angyll.

1843 H. W. Herbert *Marmaduke Wyvil* vii. 36. The..door..was placed in a dark angle of the room.

And so it is in Beckett's *Film*, where the angle of immunity that O retreats to is anything but a safe space. *Film*, then, is less the story of a chase than the story of a life driven into a corner by an excessive immunisation against both perception and community. In *Film*, Beckett explores the deleterious consequences of a vision of life that the immunological revolution of his time brought into being. As the literary scholar Johannes Türk puts it in his book *Die Immunität der Literatur*, it was in the 1960s that 'the contours of a new existential topology were emerging in immunology, one in which the human is no longer characterized by openness to the world but by selective closure and the possibility to resist participation' (Türk, 2011, 161; my translation). As a result, the human becomes what Türk calls *homo immunis* – a figure that, I have argued, Beckett's O already is.

Notes

- 1 Consider also Alice Gavin's reading of the title: 'It seems appropriate at this point to note Beckett's choice of title for his one and only foray into film that of simply *Film*: *Film* in this sense is a manifestation of the nature of film itself; or, as Critchley puts it, "Beckett is concerned with the *generic* nature of *Film*, or *Film* as giving character to the generic". Film, then, is a kind of perspective on the bare, pared-down being of the filmic medium itself' (Gavin, 2008, 80).
- 2 This corresponds to sense II.B in the *Trésor de la langue française informatisé*: 'Fait d'offrir une résistance morale à (toute atteinte)'.
- 3 Beckett's own account in an interview with Kevin Brownlow chimes with Karen's: 'One of the first things we did was to find the location driving all over New York, looking for the wall which we eventually found at the (Fulton Street) Fush [sic] Market near Brooklyn Bridge. It was a building site the wall was demolished shortly after that. The heat was terrible while I was staggering in the humidity, Keaton was galloping up and down and doing whatever we asked of him. He had great endurance, he was very tough and, yes, reliable' (Brownlow, 1995, n.p.).

- 4 See Silverstein (2009, 33) and Cohen (2017, 31–2) for good brief accounts of the etymology of 'immunity'.
- 5 Hugh Kenner's Samuel Beckett: A Critical Study (1961), Ruby Cohn's Samuel Beckett: The Comic Gamut (1962), Michael Robinson's The Long Sonata of the Dead: A Study of Samuel Beckett (1969), and Andrew K. Kennedy's Samuel Beckett (1989) are examples of widely read humanist readings of Beckett. Martin Esslin's The Theatre of the Absurd (1961) also strongly shaped Beckett's early, existentialist reception.
- 6 See Peter Boxall's 'Samuel Beckett: Towards a Political Reading' (2002) and Christopher Devenney's essay collection *Engagement and Indifference: Beckett and the Political* (2001) for political readings of Beckett's work that place it in various Irish historical and political contexts. Another, recent and notable exception to the dearth of political readings of the writer is Emilie Morin's *Beckett's Political Imagination* (2017), which sets out '[t]o reinscribe Beckett's career into its political milieu' (2), tracing the influence on Beckett's work of his association with various international political causes, from the Scottsboro Boys to the struggle against Apartheid. Note also a scattered group of major theorists and literary critics that have engaged with the political in Beckett's oeuvre, most notably Terry Eagleton, Alain Badiou and Slavoj Žižek.
- 7 This adds a third meaning to Beckett's famous labelling of the related medium of television as 'the savage eye'. Elizabeth Klaver discusses the other two meanings: 'It is unclear whether by this ambiguous remark he meant the probing camera eye that records the scene or the backlit screen of the television set that delivers the image. Both may be understood as "savage": the camera as a focused, spindling gaze, and the screen as an uncompromising glare' (Klaver, 2000, 324).
- 8 Michelle Jamieson provides a helpful paraphrase of Derrida's overall argument: 'Derrida's reading of autoimmunity suggests that the nature of the self is to be betrayed that identity is established through this founding transgression. In this sense, autoimmunity exemplifies the confounding of other-as-self as a necessary and inescapable condition of identity. From this viewpoint, the organism is as authentically and faithfully represented by its capacity for self-harm and misrecognition because this potential is what grounds identity in the first place' (Jamieson, 2017, 13).
- 9 For good accounts of the 'immunological revolution', see Szentivanyi and Friedman (1994) and the first chapter of Nagy (2014). Arthur M. Silverstein's magisterial *A History of Immunology* (2009) ends in the early 1960s, just at the beginning of the revolution.
- 10 Again in Burnet's words, 'Self-not-self recognition means simply that all those clones which would recognize (that is, produce antibody against) a self component have been eliminated in embryonic life. All the rest are retained' (Burnet, 1959a, 59).
- 11 As Ed Cohen notes, it was Niels Jerne who won 'the [1984] Nobel prize for characterizing immune response as a function of the "immune system" (Cohen, 2017, 34).

- 12 This is the subtitle of a major 1980s textbook in the field, Jan Klein's *Immunology: The Science of Self-Nonself Discrimination* (1982), which was issued with the same title in a second, revised edition in 1997. See Jamieson and Cohen for cultural critiques of this paradigm that rely on recent immunological research in Cohen's case and a forgotten immunological tradition in Jamieson's.
- 13 See Alfred I. Tauber's *The Immune Self: Theory or Metaphor?* (1997) for a superb account of Burnet's key role in establishing the self/nonself dichotomy.
- 14 Resistance to the very idea of autoimmunity can be traced back to the beginnings of immunology. First proposed in 1901, Paul Ehrlich formulated the concept of *horror autotoxicus*, which ruled out the very possibility of immunological reactions against the self: '[O]ne might be justified in speaking of a "horror autotoxicus" of the organism. These contrivances are naturally of the highest importance for the existence of the individual. During the individual's life, even under physiological though especially under pathological conditions, the absorption of all material of its own body can and must occur very frequently. The formation of tissue autotoxins would therefore constitute a danger threatening the organism more frequently and much more severely than all exogenous injuries' (Ehrlich, 1910, 82–3). See Silverstein (2009, 153–76), Jamieson (2017, 12–13), Cohen (2004, 29) and Nagy (2014, 12–13) for good accounts of the lasting influence of Ehrlich's doctrine.

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Beckett's affective telepoetics

Ulrika Maude

1

Beckett's television plays confound the spectator, not least because of their representational ambiguity, their perplexing affective qualities and the singularity of their poetics. Of the five plays Beckett wrote specifically for television, Ghost Trio, his second teleplay, written in 1975, is considered by most critics to be his finest work for the medium. Filmed by the BBC in October 1976, and by Süddeutscher Rundfunk (SDR) the following year, it opens with V, the female voice, describing the set as 'grey' in its colour or non-colour, the lighting as 'faint, omnipresent' and 'Faintly luminous', and itself as a 'faint voice'. The voice identifies the various rectangular objects visible in 'the familiar chamber' as 'a window', 'the indispensable door' and 'some kind of pallet' (Beckett, 2009a, 123, 125). F, the male figure, whom V refers to simply as 'he', is seated motionless listening to a cassette player, although it takes time and an eventual close-up for the spectator to register this, as the stage directions make clear: 'F is seated on a stool, bowed forward, face hidden, clutching with both hands a small cassette not identifiable as such at this range' (123, 126). F himself, furthermore, resembles but another rectangle, which gives him a curious status in the chamber.

The play has three acts, titled 'Pre-action', 'Action' and 'Re-action'. 'Pre-action' introduces the spectator to the highly abstracted set, which Daniel Albright has characterised as being 'closer to a Mondrian' than to modern drama (Albright, 2003, 136). Following V's introduction of the set, the spectator is presented with a full-screen close-up of one of the rectangles, which the stage directions describe as a 'close-up of floor. Smooth grey rectangle 0.70m. × 1.5m' (Beckett, 2009a, 125). During the five-second static close-up, V's voiceover announces that 'Having seen that specimen of floor you have seen it all' (125). The 'specimen of floor', in other words,

stands in for the whole floor or indeed for all floors, for floors in general, in a way that might be interpreted as an allusion to the Platonic theory of Forms: in its austere simplicity, 'specimen of floor' represents the idea of a floor, and therefore functions as a representation of the Platonic form of a floor. This is played out in what follows: a succession of further full-screen close-ups, now of the other rectangles that comprise the set.

As the spectator views the rectangles, V qualifies her earlier statement in a series of unfinished sentences - 'Knowing this, the kind of wall - '; 'The kind of floor - '; 'the kind of pallet - '; 'the kind of window'; 'The kind of door - ', as if by showing us abstract examples of architectural objects (showing us the class or type of a thing) V is teaching us to recognise particular, concrete instances of such objects (Beckett, 2009a, 125, 126). And yet, the qualifier, 'kind of', can be taken to distance the objects from what they appear to be: rather than the thing itself, we are viewing simplified or schematic representations or simulacra of actual objects. Rather than the ideal wall, floor, pallet or window, these are imperfect representations of actual objects. In this sense, the qualifier, 'kind of', can be taken to mean that the objects are not really what they appear to be, only 'kind of'. This sense of hesitation over the representational significance of the objects displayed is reinforced by the fact that the rectangles appear interchangeable - they are described in the stage directions as 'Smooth grey rectangle', '[llong narrow (0.70 m.) grev rectangle' or 'small grev rectangle', with only slight variations in the dimensions of the cassette player and pillow, while floor, wall and window ('0.70 $m.\times 1.5 m$.'), and door and pallet ('0.70 $m.\times$ 2 m.') are identical in size and in shape (125, 129, 126). The rectangles, in other words, are positively identifiable only because V names them. And yet, since they are identical or near-identical, the naming arouses a certain scepticism towards V's words. The play, in this way, suggests that the object before us is not really the object at all, but rather a shadow or shade (like the shades of grey mentioned by V) or indeed a copy of an already imperfect copy, and one that is made more poignant by the medium of television, which comprises a set of shades or shadows, produced by cathode rays emitted from a high-vacuum tube, by contrast with a theatre stage set, which, while itself a representation, nevertheless sports at least tangible, concrete objects. Neither ideal nor the thing itself, Beckett's tele-objects occupy a ghostly kind of hinterland, an undecidable ontology incorporating both thing and idea that, for Aristotle, characterises the artwork.¹

And yet I want to suggest that the verbally and visually austere opening sequence of *Ghost Trio* is not focused simply on the question of representation, Platonic or otherwise, but also raises the question of kindness. The insistent repetition of the noun 'kind' in 'kind of' brings to mind its homonym, the adjective 'kind', and V's rendering of it in adverbial form in her request – since

hers is, as she says, a 'faint voice' – to 'Kindly tune accordingly' (Beckett, 2009a, 125). What kind of kindness inhabits Beckett's television plays, we might ask. What kind of kindness do his plays encourage, demand, generate, or imply? What kind of affect is involved, and how is empathy evoked or triggered by these strangely abstracted worlds?

F, the male figure, has a curious status in the play. No longer a character, he is one of a long line of late-Beckettian 'players'. Throughout Ghost Trio, with careful attention to posture and the familiar Beckettian greatcoat as his costume, F assumes a highly abstracted form - so abstracted, indeed, that for whole stretches of the play he resembles, as I have suggested, one of its many rectangles. There is a radical dehumanisation at work in this figure, in other words, which is also at work, rather differently, in the way that F may be said to belong to Beckett's equally distinguished line of catatonics. The most famous of these can be found in his 1938 novel, Murphy, which features Mr Endon, a catatonic schizophrenic, who inhabits a padded cell, displays a 'charming suspension of gesture' and whose Greek name, endon, meaning 'within', reinforces the reader's sense of his detachment (Beckett, 2009b, 116). The novel also features the patient Clarke, who is described as having been 'for three weeks in a katatonic stupor' (121), and who has been identified by J. C. C. Mays and C. J. Ackerley as representing the Irish poet, Austin Clarke, who suffered a breakdown in 1919 and was admitted to St Patrick's Asylum.³ After witnessing Murphy in his rocking chair, Ticklepenny exclaims to him that 'you had a great look of Clarke there a minute ago' (121). Murphy has fallen under the spell of Mr Endon, but from the opening pages of the novel the reader has encountered him in a near-catatonic state, tied to his rocking chair as he is with six (rather than seven, as the narrator claims) scarves. The phrase 'catatonic stupor' appears again in the 1953 novel, Watt (Beckett, 2009c, 43), while Christine Jones has described another of Beckett's rocking-chair bound players, W in Rockaby (1980), as bearing 'a catatonic expression', 'body' and 'gaze' (Jones, 1998, 185, 186, 192), and one could argue the same about May, the protagonist of the play's companion piece, Footfalls (1975). Catatonia comes from the Greek 'kata', down from or under, and 'tonos', tone or tension, which might bring to mind Ghost Trio's other reference to low tone in V's comment, 'Mine is a faint voice. Kindly tune accordingly'; she reminds us a few lines later to 'Keep that sound down' (Beckett, 2009a, 125).

Catatonia presents in schizophrenia but it is also a symptom of a number of other psychiatric, neurological and psychological disorders. We know that Beckett came across the condition in his reading of Otto Rank's *The Trauma of Birth* (1929), where it is treated as a 'complete rejection of the outer world' and regression 'to the foetal state' (Rank, 1929, 69, 70), and he would also have encountered catatonia in his reading of Ernest Jones's

Papers on Psycho-Analysis (1923), where it is associated with dementia praecox, an early name for what is now known as schizophrenia. Catatonia is characterised by psycho-motor 'stupor' – a word, as we have seen, that Beckett himself used in the phrase 'katatonic stupor' in Murphy and in Watt (Beckett, 2009b, 121; Beckett, 2009c, 43). It is in most cases 'preceded by grief and anxiety, and in general by depressive moods and affects aimed against the patient by himself', as the German psychiatrist Karl Kahlbaum, the first to delineate the condition, writes in 1874. Kahlbaum adds that 'anguish related to unhappy love, or self-reproach resulting from secret sexual misdemeanors', commonly accompany catatonia (Kahlbaum, [1874] 1973, 33). Clinical symptoms, of which stupor is the most common, include mutism, immobility or rigidity of movement, analgesia or the inability to feel pain, automatic obedience, and repeated and formulaic gestures and actions (Moskowitz, 2004, 984-93). Catatonia is likely to originate in a fear response that in animals triggers tonic immobility or 'death feint'. It is the evolutionary expression of 'playing dead', most likely to have originated 'from ancestral encounters with carnivores whose predatory instincts were triggered by movement' but the condition is now 'inappropriately expressed in very different modern threat situations', such as anxiety, clinical depression and other overwhelming affective states, including grief. Moskovitz argues that catatonia, which presents in a number of serious psychiatric and medical conditions, 'may represent a common 'end state' response to feelings of imminent fear or doom' (984).

F, then, has all the hallmarks of catatonia. He remains immobile for exceptionally long stretches of time; when he does move or act or when he sits or stands he is repeatedly - no fewer than seven times - described in the stage directions as 'irresolute' (Beckett, 2009a, 127, 128, 129); he remains mute throughout the play; and it is unclear from the script or from the BBC and SDR productions whether V directs or commands F's actions or merely anticipates them – whether or not, in other words, his actions can be ascribed to his own agency.⁴ What we do know is that V's voice-over announces F's actions, as for instance in the opening line of the second act: 'He will now think he hears her' (127). This is followed by the direction: 'F raises head sharply, turns still crouched to door, fleeting face, tense pose' (127). This posture is held for five seconds, as the camera lingers on F. At V's line, 'Again', this action is repeated, succeeded by V's 'Now to door'. Next comes the stage direction, 'F gets up, lays cassette on stool, goes to door, listens with right ear against door, back to camera' (127). As if to foreground F's rigidity, this action is again held for the now-familiar five seconds. Automatic obedience, defined by the American Psychological Association's Dictionary of Psychology as 'excessive, uncritical or mechanical compliance with the requests, suggestions, or commands of others', is in turn represented in F's apparent compliance with V's voice-over. Formulaic gestures and actions, finally, are witnessed in the repetition of themes in the play, such as the reflex turn F makes when he thinks 'he hears her', which is repeated seven times in *Ghost Trio* (127).

The representation of F as catatonic serves at least three purposes in the play: first, it allows for a highly stylised, minimal and abstracted performance; second, it implies a radical evacuation of subjectivity – which is reinforced by the fact that we only encounter F's face in the third and final act, for this is a play in which we are granted only residual if any access to interiority. Third – and this is a point that follows from the two preceding observations - it allows Beckett to produce marionette theatre, for the rigidity and minimalism of expression in catatonia are marionette-like, and one of the symptoms of catatonia, 'waxy flexibility', in fact enables the patient's 'submission to limbs' being manipulated or 'repositioned' (Moskowitz, 2004, 987; emphasis in original). As we know, Beckett was much taken by Kleist's essay, 'On the Marionette Theatre' (1810), and at the time of directing Ghost Trio at the BBC, he referred both the actor, Ronald Pickup, and his biographer, James Knowlson, to the essay (Knowlson, 1996, 632). The book had been given to him in 1969 by the German actress Nancy Illig, whom Beckett had directed in Spiel and He Joe (Van Hulle and Nixon, 2013, 97). In marionette theatre, after all, everything relies on subtle gesture and posture, which is to say on pure form.

Beckett's working title for *Ghost Trio* was 'Tryst', as he mentions in a number of letters and as can also be evidenced in the many manuscript drafts of the play (UoR MSS 1519/1, 1519/2, 1519/3, 2832 and 2833). A tryst is a private meeting between lovers, but the word surely also evokes its French near-homonym, the adjective, *triste*, 'sad'. The play is enigmatic, for while it appears to be about grief or mourning, its evacuation of subjectivity and emotion in its minimally expressive, catatonic, mute protagonist, seems to resist or at least complicate such a reading. Furthermore, V makes it clear that her faint voice 'will not be raised, nor lowered, whatever happens' (Beckett, 2009a, 125), and as Beckett himself put it in a letter to Antoni Libera, she speaks in a 'distant, anonymous, indifferent voice' (Beckett, 2016, 464) – a voice of at times chilling detachment, such that one might well wonder how the play's affective content can be communicated.

The title of the play comes from the music to which F is listening: the eerie second movement of Beethoven's 5th Piano Trio in D major (Opus 70, No. 1), nicknamed the 'Ghost', and rumoured to have been written for a prospective but never completed opera based on Shakespeare's *Macbeth*. It is unclear from the script or from the televised BBC version of the play whether F controls the music, which materialises when he is in the listening position and stops abruptly when he diverts from it. The stage directions

for the volume of the music vary from 'Faint' (Beckett, 2009a, 125), to 'slightly louder' (126) to grow[ing] (131) without any obvious involvement from F, while the presence of the cassette player seems to contest an interpretation of the music as an aural memory or instance of F's imagination. The music, which clearly 'substitutes for the visual or vocal expression of emotion', however, simultaneously casts the affective dimension of the play into doubt, for as Ionathan Bignell has argued, its emotional charge is lessened by the play's 'constituent visual and aural components' that are here wrenched apart but that in conventional drama would tend to express the affective content 'in a unified and structured way' (Bignell, 2009, 49). The typescripts of Ghost Trio reveal that Beckett carefully divided the music into segments that were 'Heard' or 'Unheard' (Maier, 2001, 273). The extracts from Beethoven's piano trio do not appear in a linear or sequential fashion; rather, they are fragmented and re-ordered, which seems to cast further doubt over the implied solace or redemption afforded by the music (Laws, 2013, 148, 134). In this way, as Catherine Laws has argued, 'the spirit of German Romanticism' that Beckett so clearly draws on in Ghost Trio is interrogated, deconstructed, and cast under radical doubt (134).

This apparent disparity between subject matter and representational strategy - figured in the eerie voice or tone, and in the implied solace and simultaneous fragmentation of Beethoven's piano trio – is made even starker by the austere formal qualities of the play's medium; the limited, rigidly framed TV screen and its flatness; the literal shades of grey in a black-andwhite broadcast, which is made to appear 'sourceless and smooth' by the singular cinematographic technique of shooting the film in colour but printing it in black and white (Voigts-Virchow, 2000, 125); the omnipresent light, produced by the firing of a cathode tube onto a television screen; and the fact that the limited and one-dimensional sound reproduction that characterised contemporary TV broadcasts, not only reinforces the performance of V's voice but is in fact also to a degree its very source: by default flat and faint. In a carbon typescript of Ghost Trio, entitled 'Notes on Tryst', Beckett furthermore states, in the instructions for the camera, that 'Once set for shot it should not explore, simply stare' (UoR MS 1519/3, qtd. in Maude, 2009, 122). And yet, the answer to how the play's affective content is communicated seems to reside precisely in its singularity and formal precision, in its detailed foregrounding of the artifice of representation and its late-modernist, minimal, pared-down aesthetic.

The spectator senses, in F's stylised, catatonic rigidity, minimal repetitive movements, and 'bowed' posture – foregrounded in the stage directions – that the play is performing the aftermath of a calamity (Beckett, 2009a, 126–8, 130–1). This much is communicated visually and pre-objectively; we do not need the voice-over to work out that all is not well. F brings to mind

the concentration-camp figure of the *Muselmann*, the individual who is radically de-subjectified, as if dead, resigned to his own extinction. Primo Levi refers to the *Muselmänner* as 'non-men' and goes on to describe 'an emaciated man, with head dropped and shoulders curved' (Levi, 1987, 69). On this level, the play functions through somatic identification, without the need to rationalise. (Something similar applies to the music, which gives the play its final title, for while it may arouse affect, it does so by bypassing conceptual awareness.) And yet, as Derek Attridge argues, rather than being 'directly experienced as the reality they represent', the emotions that are aroused by works of literature are 'staged and controlled by the subtle arrangements of language' – in the case of *Ghost Trio*, one might add, by the play's formal qualities (Attridge, 2011, 339).

A key component in understanding how the evacuated subjectivity and abstracted form of Ghost Trio both provoke and dismantle affect, I want to argue, is V's unmissable modifier, 'kind of', which is repeated seven times in rapid succession in 'Pre-action', and the homonym 'kind', as adjective, which also appears in adverbial form in V's twice-repeated request of the spectator to 'Kindly tune accordingly'. By foregrounding its own medium and artifice, Beckett's television play - with its 'shades of the colour grey', its near-identical rectangles, and the 'faint' and 'indifferent' voice of its narrator – engenders a tension between the spectator's own pre-reflective, somatic response and the detached formalism and self-conscious aestheticism of the mise en scène (Beckett, 2009a, 125). In this sense, the refrain, 'kind of', with its suggestion of both exemplarity and artifice, alludes to the aesthetic and to its instantiation as form. While F as a gestural figure invites the spectator's empathy (itself a kind of kindness to another), and while the same pre-reflective effect can be noted in the music, the other formal qualities - such as V's flat and seemingly indifferent voice and the nearidentical rectangles it purports to identify – seem to withdraw the invitation, pointing to the inappropriateness of such a response. In Ghost Trio, therefore, the affect-inducing premise of literature or drama - the post-Romantic assumption about literature as an empathy-inducing 'kindness', on which the play unmistakably draws - seems to be undermined by V's flat and indifferent tone, by the clinically framed shots, the grey, abstracted, affectless set, and the 'staring' camera eve. In this way, Ghost Trio destabilises the spectator by both invoking and stunting empathy, drawing on dramatic convention and exposing its methods, calling on and undoing the capacity of language to represent, and thereby contributing to the complexity, power and unnerving effect or affect of the play.

By requiring us to look at a 'kind of' floor and then at a floor, at a 'kind of' window and then at a window, it is as if V is instructing us in how to see the world. By looking at an exemplary floor or window, we can then

begin to grasp what a floor or window is in the 'real' world of the TV-stage set. In a similar way, perhaps, Beckett is requiring us to look at and to see a kind of suffering, an abstracted, dehumanised kind of suffering that is simplified and reduced to its minimal components in order to instruct us in how to see suffering in the world – and in how to be kind. But perhaps more disturbingly than that, he asks us, as we look, to consider what it means to be kind and to think about the kind of kindness that we feel we are projecting when we feel empathy. In abstracting and distancing the player in *Ghost Trio*, in evacuating the figure of almost all human attributes and affects – speech, interiority, agency, individuality, emotion, a face even (until the final act) – Beckett confronts us with the limits of our own impulse towards, and assumptions about, empathy in art, and with the limits, indeed, of our kindness towards our own kind.

2

Something similar can be said about . . . but the clouds . . . , Ghost Trio's companion piece, written in 1976 and first televised in April 1977. In December 1976, Beckett wrote to the director of Süddeutscher Rundfunk, Reinhart Müller-Freienfels, that 'Though not expressly stated, the man in "... but the clouds ..." is the same as in Ghost Trio, in another (later) situation' (Beckett, 2016, 445). The title, as is well known, comes from Yeats's poem, 'The Tower' (1928), and the play carries a Yeatsian elegiac, melancholic tone in M's yearning for W, the female figure, to appear to him. And yet, embedded in M's lyrical and plaintive lines are others that bear a disturbing resemblance to stage directions. M rehearses his movements in detail: 'Shed my hat and greatcoat, assumed robe and skull, reappeared – [...] Reappeared and stood as before, only facing the other way, exhibiting the other outline [5 seconds.], finally turned and vanished - ' (Beckett, 2009a, 137). But M also keeps revising his account, and lines such as 'No, that is not right' or 'Let us now make sure we have got it right' appear to suggest, in a curious candour that seems to exceed the confines of a metadramatic context, that grief is here staged as a near-mechanical performance and that what we are witnessing is a peculiar choreography of mourning in which the object, the 'Close-up of woman's face reduced as far as possible to eyes and mouth', which appears as 'Same shot throughout', is reduced to a schematised prop (137, 138, 135). Here mourning, as Freud predicts in 'Mourning and Melancholia', has become a bad habit, a habitus whose mechanics the play exposes.

Ruby Cohn comments that the play is 'marred by overreverence', and she also complains about M's 'invariant routine and costume changes' (Cohn,

2005, 343). But these seem precisely intended to distance the spectator from the lyricism and affective excesses of Yeats's poem and to deliberately foreground the play's rehearsed and staged mechanics of affect. Furthermore, M's bowler hat, another familiar Beckettian prop, together with his curiously stylised gait, verge on the comical, bringing to mind silent film, and particularly Beckett's love of Charlie Chaplin, while the 'Light grey robe and skullcap', in turn, are reminiscent of the formal minimalism of Noh theatre (Beckett, 2009a, 135).

Further distancing us from the more lyrical or affect-laden passages, the play stages a preoccupation with numbers, such as 'a fourth case, or case nought', which appears 'in the proportion say of nine hundred and ninety-nine to one, or nine hundred and ninety-eight to two' of M begging 'in vain' for W to appear (140). These elements seem to point to the obsessive-compulsive nature of M's grief, objectifying and quantifying its outcomes, and distancing us from the pathos of Yeats's elegiac lines while foregrounding instead the more clinical mechanics of melancholia. But this desire, in fact, is also staged in 'The Tower' – a desire to distance oneself from

... the wreck of body,
Slow decay of blood,
Testy delirium
Or dull decrepitude,
Or what worse evil come –
The death of friends, or death
Of every brilliant eye
That made a catch in the breath – (ll. 184–91)

In its seeming complicity with and simultaneous detachment from Yeats's poem, the desire to undo attachments – the yearning to be done with yearning, to be done with being undone – further complicates Beckett's treatment of affect.

3

Nacht und Träume, written for Süddeutscher Rundfunk in 1982 and first broadcast in June 1983, completes the cycle of plays about 'ghosts, clouds and dreams' that foreground the ephemerality or 'ontological instability' of the television medium, as Voigts-Virchow has argued (2000, 124). The play presents the spectator with a dreamer, A, and his dreamt self, B, in the upper-right-hand corner of the television screen. The play, in other words, reproduces or doubles the dreamer's body, and in so doing, foregrounds the

virtuality of what appears on the screen. The by-now familiar adjectives, 'kind' and 'faint', appear again in the telescript, for the spectator sees B's 'left profile, faintly lit by kinder light than A's' (Beckett, 2009a, 149). B is comforted by a pair of disembodied hands, one of which 'rests gently' on B's head. The hands then 'gently' convey a cup to B's lips and 'gently' wipe his brow. Finally, R, the right hand, reappears and 'rests gently on B's right hand', followed by L, the left hand that 'rests gently on B's head' (149–50). These movements are then repeated in slow motion and in close-up of B alone.

The iconography of the play, with B's 'upturned gaze, the ministering hands, the presentation of chalice and cloth' and the use of spotlight is, as Graley Herren has remarked, religious, 'eucharistic' (Herren, 2001, 61). It evokes the work of the Italian and Dutch Old Masters Beckett so admired. The play has no dialogue. Instead, we hear the 'Last 7 bars of Schubert's Lied, Nacht und Träume' (Beckett, 2009a, 149), in a way that provokes Daniel Albright to comment on the 'slight sentimentalization of music' in the play (Albright, 2003, 148). And yet, while the music is romantic and even sentimental, Catherine Laws perceptively raises the question of its origin or source, which is, in fact, 'unplaceable' within the play (Laws, 2013, 201). The fact that the spectator (or reader) cannot locate a clear source for the hummed or sung music – since we do not witness A singing or humming – decontextualises it and disconnects the image perceived from the music heard. The effect is to undermine the sentimental and consolatory charge of the Lied, which, as in Yeats's poem in . . . but the clouds . . ., is both evoked and revoked (208).6

Strikingly, the adverb 'gently' appears five times in the play's brief, two-page script. The adjectival form, 'gentle' comes into Middle English from the Old French gentil meaning 'of noble birth, high-born' (as in 'gentleman'), but by the sixteenth century the word had come to be used for someone 'mild' or 'moderate in action or disposition' (OED). In contemporary usage, the adverb 'gently' is synonymous with 'mildly', 'tenderly' and 'kindly' - the latter, as we have seen, familiar to us from Ghost Trio (OED). In Nacht und Träume, Beckett is again interested in the kind of gentleness or kindness rendered by art. This is something that he no doubt encountered in the Old Masters whose works the play evokes as well as in the Schubert Lied that lends the play its title; and it is also staged in the Beethoven piano trio to which F listens in Ghost Trio and in Yeats's poem that gives ... but the clouds ... its title and thematic content. And yet, the pronounced formalism of all three plays, the ambiguity of the music's origin, the plays' self-conscious foregrounding of virtuality, artifice, the television medium, and representation itself, work to undercut affect, empathy and sentiment, and to call such impulses into question.

Coda

This affective ambiguity is also a feature of Beckett's first television play, *Eh Joe*, which anticipates the later plays in various ways. Beckett finished writing *Eh Joe* in May 1965, and the play was filmed both by the BBC and by Süddeutscher Rundfunk in 1966, and first broadcast by SDR on Beckett's sixtieth birthday on 13 April 1966. The BBC version, with Jack MacGowran as Joe and Siân Phillips as Voice, features Joe alone in one of Beckett's ghost chambers, listening to a disembodied female voice whose origin neither he nor the spectator can locate. Voice narrates to Joe the story of one of his former lovers, 'The green one . . . The narrow one', who makes two attempts on her life, before succeeding on the third (Beckett, 2009a, 117). These include the effort to drown herself, another to slit her wrists, and conclude with the green one taking 'tablets' and laying 'her face a few feet from the tide [...] scoop[ing] a little cup for her face in the stones' (118).⁷

The play is replete with signifiers of affect: 'the heart', 'love', 'pitying', religious 'passion' and 'los[ing] heart', not to mention the tone of what Beckett called 'venom' detectable in the female voice (2009a, 114–17).8 Eh *loe* is concerned with the protagonist's affective responses to the narrative recounted by Voice, which the camera studies through nine progressive close-ups of Joe's face. The spectator expects signs of anguish, guilt, shock, distress and incomprehension, paired with grief and remorse that would typify the conflicted affective responses of suicide survivors. Confoundingly, in the SDR version Joe's face twice sports a fleeting smile before it lingers there on the third and final closing shot of the play, and the BBC production similarly closes on Joe's disquieting smile. Throughout the play, Beckett is careful to make Joe's affective range narrowly ambiguous: the script specifies that Joe's face should remain 'Practically motionless throughout [...] impassive except in so far as it reflects mounting tension of listening' (114; emphasis in original). This ambiguity is heightened by the play's formal qualities: *Eh* loe opens with a long shot of the protagonist in the room, 'full length in frame' (113), followed by the nine progressive camera close-ups of Joe's face, which in the BBC production last just under two minutes each. The 'exaggerated movement' from long shot to close-up brings to mind 'silent cinema, pantomime and puppet theatre', while the progressive close-ups are one of television's stock techniques for representing 'psychological states' (Bignell, 2009, 21–2). The near-two-minute close-ups, however, are exceedingly long by 1960s standards, harking back to 1930s productions and contributing to the defamiliarising effect of Beckett's play (24). Furthermore, the strong shadows that are cast by the lighting of the BBC production not only bring to mind German Expressionist film, but serve further to complicate the deciphering of Joe's facial expressions (23). The BBC version of Eh Joe was

filmed in one shot, with a video camera that rendered 'less tonal depth and capacity for contrast' than a film camera, which only further interferes with the spectators' reading of affect in Joe's expressions. In this way, the production values of the BBC *Eh Joe* served to add to the ambiguity of interpretation that Beckett aimed for in his representation of Joe's 'impassive' demeanour (23).

Voice's narrative of the green one, however, also contains details that aestheticise and add pathos to the scene. There is, for instance, a poetic reference to the moon and to the green one 'looking at the beaten silver' of its reflection on the water (Beckett, 2009a, 118). Her eyes are characterised as 'Spirit made light', which brings to mind the references to Romanticism in the later television plays (117). More disquietingly, while the scant clothing of the green one adds to the foregrounding of her vulnerability, the scene is also eroticised in Voice's description of her 'Sitting on the edge of her bed in her lavender slip' and later, of the 'Slip clinging the way wet silk will' (118). The three smiles that cross Joe's face in the SDR He Joe and the closing smile of the protagonist in the BBC production of the play beg the question of whether Joe is in fact taking pleasure in the affective intensity of the recollection. There is even a suggestion of frisson in the manner in which Joe lingers on the scene. The formal details of the two productions reinforce the affective ambiguity of the play, since after the opening long shot, it becomes increasingly difficult for the spectator to situate Ioe in the room.

The final camera close-ups progressively fracture Joe's face, and at the close of the SDR production, only his eyes and nose are visible. The close-ups, which Beckett wanted to sever from the voice – 'never camera move and voice together', as he put it (113) – serve to foreground the medium of television, for not only is the spectator brought preternaturally close to Joe's face, but the face itself seems to be dissolving 'into the insubstantial lines which make up the image' of an analogue television set (Connor, 1988, 161). In this way, *Eh Joe* seems both to elicit empathy and repeatedly to revoke it by foregrounding its affective, aesthetic and erotic complexities, which are paired with the formal qualities and techniques of the television medium.

As Billie Whitelaw once remarked, the set of *Eh Joe* closely resembles that of *Ghost Trio*, and both plays have a somnambulant air (Whitelaw, 1995, 227), an effect that applies to all four of the plays discussed. The kindness that we might intuit as a kind of ghostly shadow within V's austere, formalised and abstracted instructions to the viewer in *Ghost Trio* or in the fragmented rendering of Yeats's poem in . . . but the clouds . . . and the Schubert *Lied* in *Nacht und Träume*, is indicative of the way that, in Beckett's telepoetics, affect is both evoked and withheld. Affect in Beckett's television plays works from a distance, moving us, when at all, as if from a place far away.

Notes

- 1 For Aristotle, art offers us not merely the particular, as history does, nor solely the universal, as is the case with philosophy, but an undecidable combination of the two, the particular or exemplar in the universal (2013, 1451b).
- 2 For a useful summing up of the difficulties critics have faced in finding the correct term of reference for Beckett's fictional 'characters', see Ratcliffe (2008, 55–6).
- 3 See Ackerley (2004, 165) and Mays (1977, 199). For Mays' discussion of the correspondence between Austin Clarke and the character of Ticklepenny in *Murphy*, see pp. 199–203.
- 4 Beckett writes to Antoni Libera in May 1977 that V 'is observing and presenting from a distance, rather than manipulating. Her "imperatives" hardly warrant the name, as if she knew what was going to happen and was merely announcing it. A sort of astral presenter' (2016, 464). This would suggest that V operates as the modern-day equivalent of the chorus in a Greek tragedy, but for the reader and the spectator of the play, the fact remains that V's lines appear to represent commands or 'imperatives', in Libera's sense.
- 5 Although the telescript and the BBC version leave F's agency over the music ambiguous, in the SDR production the spectator does witness F turning on the music.
- 6 Similarly, although *Nacht und Träume*, as Trish McTighe has argued, is unique among Beckett's television plays 'for its visualization of the act of touch, that touch happens only in a dream space', which perhaps emphasises 'the failure of touch, relationality, and bodily wholeness', thereby again diminishing the affective charge of the scene (McTighe, 2013, 12).
- 7 For a discussion of suicide in Beckett's work, see Maude (2018).
- 8 Beckett wrote to Alan Schneider on 11 February 1966 about the filming of *Eh Joe* in London: 'Voice very low throughout plenty of venom' (Beckett, 1998, 198).
- 9 Whitelaw played the role of Voice in a later production of the play.

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Understanding Quad

Julian Murphet

'Kindly tune accordingly' (Beckett, Ghost Trio)

The twentieth-century humanities, where they tended toward theoretical sophistication, fell squarely under the influence of a certain theory (or theories) of the sign: the arbitrary relationship between the signifier and the signified, maintained via differentials spread throughout the linguistic structure. The irony built into this Saussurean linguistic turn - which only affected the social sciences and arts after 1950 – is that, at the very time the hypothesis was being hatched in the 1920s, the dominion of the sign over human affairs was already effectively over: 'since the beginning of the century, when the electronic tube was developed by von Lieben in Germany and De Forest in California, it has been possible to amplify and transmit signals' (Kittler, 1999, 2). With telegraphy and telephony established as routine point-to-point interactive media, radio spreading its immaterial web over entire continents, and television completing its long gestation, the sign had not exactly disappeared as the privileged vessel of communication so much as it had been radically repackaged and reformulated. For signs do not travel well or with the kind of celerity that was now essential to the effective running of international joint-stock companies, national governments or colonial administrations. To traverse the now enormous distances that capitalism had erected between the vital nodes of a new regime of accumulation imperialism, monopoly capitalism – the sign was an insufficient and well-nigh redundant tool.

In its place – or, better, in its *time* – was put that new all-purpose semiotic instrument of the signal, which David Trotter has defined as 'a sign equipped for distance' (2020, 6). However, signals in the age of electromagnetic propagation are not exactly signs; rather, they are elaborate technical instructions, from one machine to another, whose purpose it is to convey a sign (a spoken or written word, an image, a moody chord) across space at speeds the human sensorium cannot even detect. Or perhaps it is more accurate

to say that a sign is not conveyed so much as it is broken down into a certain amount of 'information' (variations in electric currents or electromagnetic waves) that can be moved at near-light speeds along wires or through the air, to where a receiver equipped to interpret that information can then reconstitute it as something analogous to the original sign – a tinny 'voice' in a telephone earpiece, a printed message on a telegram, or a fuzzy tone in your radio speaker. It is determinately not the same sign that meets the ear or eye at the far end of this circuit, which entered it only moments before: it is a mechanical simulacrum of that originating sign (the handwritten script, the vocal presence, the acoustic vibrations of a strummed guitar), newly available for human consumption where the limitations of sense perception would once have rendered its reception impossible. The signal is what makes that spatio-temporal extension of the sign possible, but it is also what transforms it, from the inside out, into something else.

Not long ago, the only way to hear Beethoven's Eroica symphony was to purchase a ticket and participate in the curious ritual of a concert performance: 'row upon row of people in formal clothing, seated without stirring within their armchairs, each seemingly without contact with his neighbours, yet at the same time strangely divorced from any immediate visual spectacle, the eyes occasionally closed as in powerful concentration', and so on (Jameson, 1971, 12). If by the 1920s it began to be possible to hear this same performance in the comfort and anonymity of one's parlour - in the full knowledge that in parlours all across the country millions of other individuals were sharing, mediatedly, in the identical experience – then that is only because it was not the same at all; and the difference was radio, or, the complex signals that relayed the broken-down auditory 'content' of the concert performance from the studio to the broadcast tower to the network relay station to the domestic receiver. In such a momentous reconfiguration of the symphonic sign, in all its heteroclite complexity, it could safely be asked - as Adorno did -

Does a symphony played on the air remain a symphony? Are the changes it undergoes by wireless transmission merely slight and negligible modifications or do those changes affect the very essence of the music? Are not the stations in such a case bringing the masses in contact with something totally different from what it is supposed to be, and thus exercising an influence quite different from the one intended? (Adorno, 2009, 135)

The medium is *always* the message: signals may masquerade their insensible machine-languages as so many passable 'signs' to human end-users, but those users are now hooked up to an apparatus whose code is inaccessible, whose speeds are imponderable, and whose social function is opaque to them. The result is that, where once the listener in a concert hall confronted music as a

negotiated act of often confounding social symbolism, she now confronts it as an equivalent radio phenomenon, or a commodity. Signals, decomposing and recomposing signs in the medium of electromagnetic pulses, reinvent them in their image, without ever emerging into consciousness as such.

This is as true for humanistic critical comprehension as it is for unselfconscious cultural consumption. To the extent that the humanities were incubated under the nurturing regime of the sign (whose analytic method is hermeneutic or interpretive), they remain frankly incapable of cognising the signal (whose analytic method is functionalist), preferring that it should remain – just as it desires – out of sight and out of mind. If signals universalised cultural forms in the previous century, disseminating the kingdom of the sign far beyond its traditional boundaries (the walls of the museum, of the library, of the theatre or auditorium), and in the act made cultural criticism a central discourse of twentieth-century reflective utterance, then all of that was arguably a ruse of reason, allowing the regime of signals and signal processing to extend its dominion without check and without any serious critical attention. To this day, the number of cultural critics who can read a television signal or a radio signal, let alone a digital video signal, is so small as to be negligible; and it would be perfectly accurate to state that not humanists but engineers are the true bearers of cultural understanding today, as they have been for the last 100 years. 'Engineers [...] had been planning media links all along. Since everything from sound to light is a wave or a frequency in a quantifiable, non-human time, signal processing is independent of any one single medium' (Kittler, 1999, 170-1); and independent, a fortiori, of signs and our obsession with their interpretation. Humanists miss the inner logic of our culture, fixated as we are on a death-mask of that last century - the nineteenth - for which the sign was still the salient operative unit.

What we most require, in that case, are artists who took signals seriously – who, by virtue of training or temperament or inclination, grasped that the *truth* of their work in the twentieth century lay not (or not only) in the elaborate semiology of their articulated sign-systems, but in the underlying processes that would convey those systems from A to B, in the material infrastructure of information itself, which is to say in signals and in signal processors. Fortunately, we know of at least one indisputable genius of the century of signals, who contrived work not only for the fading empire of signs (of the novel, and of the theatre, in their respective death throes), but composed directly for the newer media of signals, and undertook to conduct his aesthetic missions into enemy territory with immense perspicacity. His name was Samuel Beckett.

Table 9.1 shows some of the variables that ran throughout Beckett's work for television, over seventeen years. The tinted variables – the presence of

Table 9.1 Technical permutation schema of Beckett's works for television.

Work	Year	Prod.	Colour	Voice	Music	Shots / moves
Eh Joe	1965/6	BBC2	NO	YES F, separate from image, M.	NO	1 9 movements.
Ghost Trio	1975/7	BBC2	NO 'None. All grey. Shades of grey.'	YES F, separate from image, M.	YES Beethoven's 'Geistertrio', played on cassette.	I: 13 + 4 moves II: 1 + 4 moves III: 15 + 5 moves 29 13 movements.
but the clouds	1976/7	BBC2	NO Light grey. Dark grey. Black shadow.	YES M, separate in time from image, M & F.	NO	29 No movements.
Quad	1982	SDR + BBC2	I: YES White. Yellow. Blue. Red. [II: NO 'No colour.' White.]	NO	YES 4 distinct percussion parts, associated with 4 players.	1 No movements.
Nacht und Träume	1983	SDR	NO Grey.	YES M, singing, humming, separate from image(s), M.	YES Schubert's 'Nacht und Träume'.	1 [+1 superimposed] No movements.

colour, music and voice, and the number of shots and camera movements – seem to chart a logical territory specific to the medium, which it was arguably Beckett's intention to exhaust. There is a binary logic, an either/ or approach on show here, as one progresses through the table. The given piece for TV will either use a voice, or not; if it does, it will be male or female; but it will always be more or less acousmetric, never belong, in time or in body, to the human figure or image that we see. The piece will either use music as an accompaniment to the image, or it will not; and if it does, it will not be simply non-diegetic – rather, it will emanate from or be motivated by, albeit cryptically, some element within the diegesis. The shots comprising each piece will either be multiple or singular; and each shot will either move, or not move.

Considering the distribution of those three variables alone – voice, music, shots – one perceives a permutational strategy at work. There is a permutation of <Voice, Music, single shot>; one of <Voice, no-Music, single shot>; one of <Voice, Music, multiple shot>; and one of <no-Voice, Music, single shot>. There are other possible permutations not explored here, but if you rule out the apparently impermissible combination of no-Voice with no-Music, most of the available permutations are duly exhausted. It is clearly as if, at some stubbornly formal level, Beckett wished to subject television to its combinatory reduction as a material medium, with regard to its cinematography, its soundtrack, and its colour.

Colour is the variable I have not yet mentioned, though that is what I want to spend most of what follows discussing. There is only one, solitary YES in the colour column, and its situation amidst all those NOs suggests something truly exceptional about this work, Quadrat I, whose singularity in the canon has often been remarked, if rarely properly understood. It is, then, in the name of understanding Quadrat I & II, not as a work tethered to linguistic semiotics or a regime of the sign, but designed - indeed, engineered - for what Beckett called 'TV technicalities' (Beckett, 1998, 403), and specifically the technicalities of colour signal processing, that this chapter is offered. If Ouad 'flatly refuses to be complicit with the meaning-making enterprise' (Herren, 2007, 136), and if we glimpse in it nothing like 'Dasein's spatiality' (Zarrinjooee and Yaghoobi, 2018, 47), then that is because it is complicit with something else altogether: the signal processing enterprise, which – despite Beckett's notable resistance ('Television is beyond me' [Beckett, 2016, 549], 'I shall never write again for that medium' [Beckett, 1998, 403]) – this work rejoins with considerable ingenuity and grace.

The option of a colour television signal had been available to Beckett since *Ghost Trio* (the first PAL colour transmissions were made in 1967 in the UK), which means that three out of the four TV productions that could have been mounted in colour were deliberately not – which is one reason

why we read all that insistence in the teleplays on grey and black and white. Ghost Trio (like the film version of Not I) was indeed 'printed in color, but before broadcast the decision to go with color had been dropped' (Brater, 1985, 52); which suggests that there was felt to be some fundamental incompatibility between the work and the technical realities of colour broadcasting in the mid-1970s. A potential méconnaissance was rectified prior to transmission; the black-and-white signal rescued Ghost Trio from its unwonted subjection to the televisual tricolore. It is also the case that Nacht und Träume, not to mention Quadrat II itself, revert to grevscale and monochrome after the singular exception of *Quadrat I* – in a movement that I want partly to qualify under the rubric of 'worsening', but mostly as a function of signal compatibility. Above all, though, we must remark the extraordinary novelty, in Beckett's oeuvre, across all media, of those primary terms, 'red', 'blue' and 'vellow'. Out of a universe of grey monochrome there suddenly erupts this vivid triangular bolt of chromo-luminescence, never to be glimpsed again.

David Cunningham has written at length on Beckett's campaign of 'asceticism against colour' (2005, 116), and Badiou's work on Beckett particularly remarks its prototypical greyness, its stubborn commitment to monochrome and 'the dim', sheltered from a world of spreading colours. Revealingly, for Badiou, this commitment to the grey-black and dim is indissociable from a corresponding fidelity to the project of 'boring holes in language', and specifically to a certain clearance of space, a 'scene-setting' for the subject oriented toward an impossible speech:

the dim – the grey-black that localises being – is ultimately nothing but an empty scene. To fill it, it is necessary to turn towards this irreducible region of existence constituted by speech – the third universal function of humanity, along with movement and immobility. But what is the being of speech, if it is not the speaking subject? It is therefore necessary that the subject literally *twist* towards its own utterance. (Badiou, 2003, 54; emphasis in original)

Which is as much to say that, for Beckett, the grey is the last remaining space for a withered, vestigial humanist project: the scene of the subject's tortured assumption of that 'universal function of humanity' that is its inscription within the order of signs, within language and signification. The pointillist greyscale of *Eh Joe*, *Ghost Trio*, . . . but the clouds . . ., and Nacht und Träume, can all retrospectively be justified according to this criterion: that in them the subject speaks, or is spoken to, however brokenly. It is a law of Beckettian television that where the 'grey-black localises being' in a scene, there we shall hear the voice, male or female, speaking athwart the scanned moiré of the image-pattern, boring holes in it; and where there is colour, there shall be no voice at all, for in colour there is no residual subject

to perforate or worsen. Language, in colour, is aesthetically unimaginable; as *Quad* cameraman Jim Lewis recalled of an on-set conversation with Beckett, 'every word he used seemed to him to constitute a lie and [...] music (in the sense of rhythm) and image were all that were left for him to create' (qtd. in Haynes and Knowlson, 2003, 49). *Quadrat II* confirms through exception one's sense that *Quad* marks Beckett's fullest emancipation from those 'function[s] of humanity' that operate the regime of theatrical signs.

If *Quad* represents a determinate shift away from the qualified humanism of language, toward a radically posthumanist regime of the televisual signal, it is imperative to resist all the thematic lures that have entranced even the best of this play's readers. Be it Hans Hiebel's insistence that Ouad concerns the 'compulsive repetitions' that fixate subjects in the orbit of the death drive (Hiebel, 1993, 341), Les Essif's intuition that the work engages some 'essentially unstructured extension of the mind' (Essif, 2001, 87), Mary Bryden's proposal of the teleplay as a peculiar instance of Cixous' écriture feminine (Bryden, 1995, 113-20), Phyllis Carey's suggestion that Ouad 'dramatizes the rational and imaginative constructs humans have projected, which, in turn, have enslaved them' (Carey, 1989, 146), Minako Okamuro's speculations about the work's debts to the Jungian mandala (Okamuro, 1997, 125-35), Herta Schmid's situation of the play 'not in the outer world, but in the inner mind of the spectator' (Schmid, 1988, 281), or even the 'kinaesthetic' reading of the affective intensities unleashed by Ouad according to Hannah Simpson (2019, 132-48) - whatever the proposed 'theme' or schema, it is finally impossible to disagree that humanist interpretation seems 'to lag behind the text [that it] is trying to interpret' (Critchley, 1997, 141).

More satisfying are those efforts to think within the mathematical paradigm of this work, whose specific adjustment of the 'Gray code: a cyclic ordering of the subsets of a 4-set', has led some mathematicians to christen the resultant modification to it in Quad a 'Beckett-Gray code' (Cooke et al., 2016, 2; Sawada and Wong, 2007); something further developed by Conor Houghton in his highly inventive Ouin - an extension of Beckett's original quadrangle into a more mathematically compelling pentangle (Houghton, 2013), and Carboni's emphasis on *Quad*'s players as 'subsets of an *n*-set arranged in a circular list, such that each one appears just once, two adjacent subsets differ by the inclusion or removal of just one element, and the only element that may be removed is the one that has been most present in the previous consecutive subsets' (Carboni, 2007, 51). In a similar spirit, Baylee Brits claims that *Quad* 'constructs a mathematized version of the unword, using numbers to exit not only the constraints of signification but also the constraints of a pre-scriptive choreography' (Brits, 2017, 130); and Piotr Woycicki correlates the later Beckett's increasingly 'mathematical aesthetic' with an absolute reduction in the late plays' 'representational aspirations' (Woycicki, 2012, 136).

However, what we most require is an approach to *Quad* that, while respecting this mathematical dimension, seeks to comprehend it as specifically applied to the medium of television itself. Doubtless, Beckett's 'move towards the mass media is prompted by his keen awareness of their media make-up' (Voigts-Virchow, 2001, 211), but that awareness was more than merely 'keen'; it was intensive and mathematically precise, as befits media that channel their signifying processes through signal processors. Voigts-Virchow is thus right to insist that 'Beckett's late TV plays address the ontology of TV images' (211); a claim that echoes Steven Connor's assertion to the effect that, just as the TV image relies upon 'the retinal persistence of the interrupted lines of light which shuttle back and forth across the screen', so 'Quad is made up from the repeated movements of the players' (Connor, 1988, 72). And Elizabeth Klaver writes: 'Writing across the screen, [the four players] outline for a brief moment the trace of their own progress in photons of light and replicate in the playing area the shape of the television set' (1991, 374). While Daniel Albright aptly specifies how the 'generation and passing away of line', as 'electrons trace paths boustrophedon across the inner surface of the screen', speaks directly to Beckett's wish to 'worsen' and 'unconstitute' the new media imaginary (Albright, 2003, 137).

Yet all of these efforts, bar Voigts-Virchow's, sidestep the precise 'TV technicality' with which Beckett was wrestling in *Quad*, namely the signal processing dilemma associated with colour transmission. But Voigts-Virchow opts merely for an 'aisthetic' approach to *Quad*'s colour, reducing its technical dimension to the chromatic sensations thrown off by Enzenberger's *Nullmedium* (Voigts-Virchow, 2001, 213). It is, rather, the suggestive path first trodden by Linda Ben-Zvi – in her McLuhanite assumption that 'the low-density, blurred images' of Beckett's black-and-white TV works 'have a heightened power and involve viewers directly' in their direct elevation of the medium to the message (Ben-Zvi 2006, 478) – that we must follow, on a different frequency, in the case of *Quad*.

'As everyone knows', writes an engineer, 'the TV picture is formed through scanning line-by-line, field-by-field and frame-by-frame' (Cheng, 1994, 135). But that scanning, its practical operation and the signal that informed it, went through a major transformation at the end of the 1960s. We approach here the problem of compatibility, the often-forgotten fact that television sets manufactured in the 1970s and 1980s could receive the new colour signals, but also the older black-and-white signals; and that colour TV signals had to be able to be received by older black-and-white as well as colour sets. So, every colour TV signal came packaged with its monochrome

variant, and the same broadcast signal could be interpreted by both kinds of set differently:

Color-TV technology [was] faced with a difficult challenge at the time of its introduction into the consumer electronics market. While the technology was sufficiently developed, it was required that the new color broadcasting system be compatible with the old black-and-white system. That meant that the two additional color channels had to be efficiently compressed into the electromagnetic spectrum allocated for TV after the monochrome system had liberally exploited it, not anticipating color TV. The additional chromatic information had to be 'tacked on' to the black-white signal in a way that would not interfere with its reception in monochrome TV. (Buchsbaum, 1987, 266)

In the days of monochrome analogue broadcasting, the spectrum of a TV signal on a standard 6 MHz channel looked like Figure 9.1.

There are two carrier signals, one for the video information at a frequency of 1.25 MHz, and one for the audio information at a frequency of 5.75 MHz. As with all analogue broadcast signals, however, those carrier frequencies had to be accompanied by sidebands – bands of frequencies on either side of the carrier, containing the necessary power for transmission, subject to the modulation process. The lower sideband of the video carrier was significantly truncated, to allow room for the remaining signal. The largest band of frequencies – the upper sideband, taking up almost 4.5 MHz – was

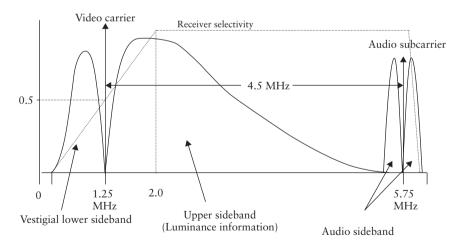


Figure 9.1 The spectrum of a vestigial-sideband (VSB) monochrome television transmission.

Source: http://what-when-how.com/display-interfaces/standards-for-analog-video-part-i-television-display-interfaces-part-1/ (accessed 23 September 2019)

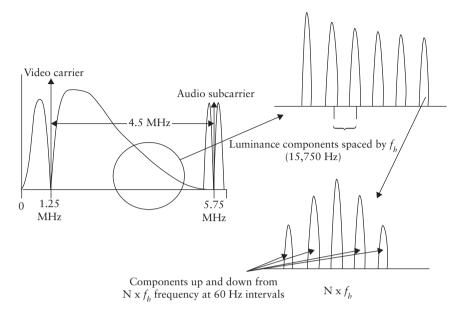


Figure 9.2 Details of the spectral structure of a monochrome video signal. *Source*: http://what-when-how.com/display-interfaces/standards-for-analog-video-part-i-television-display-interfaces-part-1/ (accessed 23 September 2019)

reserved for the 'luminance information' of the video carrier. This broke down the video signal into specific values of luminance for the cathode ray beam as it scanned the lines on the back of the phosphorescent TV screen, every 64 microseconds. The frequency modulated audio subcarrier was squeezed in unceremoniously at the very upper end of the channel's bandwidth, its sidebands also highly compressed. A closer look at the luminance sideband shows a 'picket-fence' spectral structure, thanks to the raster scan transmission, which clusters components around multiples of the line rate, and then around multiples of the field rate.

Since the entire channel width was already occupied by this monochrome signal, the technical question was how to 'add' colour without losing the information necessary for a monochrome receiver to decode and operate it. The answer is typically discussed in terms of 'tacking on' the colour signal via a kind of 'smuggling' or 'concealing within'. The health of the black-and-white TV industry, and the millions of sets already on the market, dictated that not only would the additional information required for the display of full-colour images have to be provided *within* the existing 6 MHz channel width, but it would have to be transmitted in such a way as not to interfere with the operation of existing black-and-white receivers (Zarach

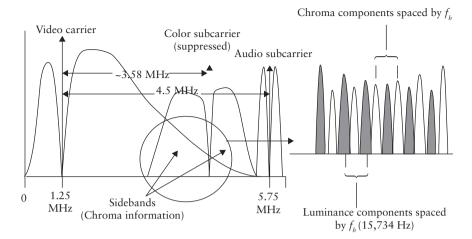


Figure 9.3 Through the selection of the colour subcarrier frequency and modulation method, the components of the colour information ('chrominance') are placed between the 'pickets' of the original monochrome transmission. *Source*: http://what-when-how.com/display-interfaces/standards-for-analog-video-partitelevision-display-interfaces-part-1/ (accessed 23 September 2019)

and Morris, 1979, 12). It was precisely in the 'gaps' left by the picket-fence spectral structure of the luminance signal that space was found to interleave chrominance information.

The subcarrier signal for chrominance was set at a frequency that was an odd multiple of one-half the line rate of the luminance signal – so the added components of colour information could be centred at frequencies *between* those of the luminance signal.

Another way of visualising this ingenious solution to the problem of packaging chrominance information *within* an already existing luminance sideband is in Figure 9.4.

This was, in broad outline, how the problem of compatibility between monochrome and colour TV signals was solved: literally by interleaving the chroma sidebands into the 60 Hz gaps left between the frequency centres of the luminance carrier's upper sideband.

All of which begs the question of how colour information was encoded as a signal in the first place.

The solution for color coding in TV was to transform the color signals R[ed], G[reen], and B[lue] into a new set known as Y, I, and Q. Y is the luminance signal, designed to equal and be compatible with the old black-and-white signal; I and Q carry the color information and are known as chrominance signals. (Buchsbaum, 1987, 266; emphasis in original)

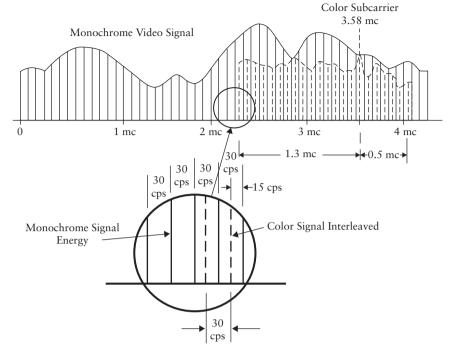


Figure 9.4 Colour information in a subcarrier signal 'concealed within' the main picture signal.

Source: https://antiqueradio.org/RCACT-100TelevisionDesign.htm (accessed 23 September 2019)

The process known as *IQ* modulation presented engineers with a very efficient way of transferring information of this sort: *I* representing the 'in-phase' component of the waveform, and *Q* standing for the quadrature component. In chrominance signals, which were the first to take advantage of this new kind of modulation, *Q* is an axis that stretches from Yellow-Green to Purple on the colour scale, while *I* straddles Cyan to Orange.

White stands at the dead centre of this circle, where the axes meet, and every other colour can be plotted around the circumference with exactitude. The *angle* of the chrominance signal, from 1 to 360 degrees, will determine the desired *hue*; while its *length* will decide its relative *saturation* – its distance from white as the negation of all colour. When this *IQ* signal modulation is combined with *Y*, the luminance signal (which determines how bright the electron beam is at any given point), we have a precise accounting of what colours appear where, at what level of saturation and brightness, on every pixel of the screen, at each refresh cycle.

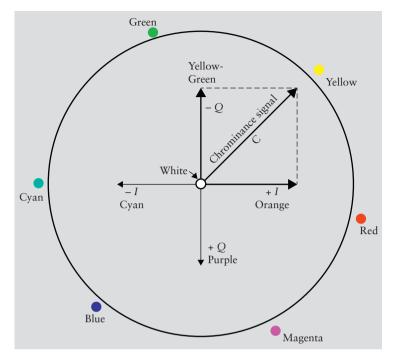


Figure 9.5 *I-Q* axes and the colour wheel. Source: https://antiqueradio.org/RCACT-100TelevisionDesign.htm# Three Modulation Methods (accessed 23 September 2019)

The two signals, *I* and *Q* are expressed like this:

$$I = 0.596R - 0.275G - 0.321B$$

 $Q = 0.212R - 0.523G - 0.311B$

These signal descriptions remind us that the TV transmitter and receiver could only modulate the colour signal using a tricolour system, the *R-G-B* triad (which is essentially Beckett's three colour 'characters' of red, yellow and blue); and the engineering genius that allows us to move from the *I-Q* pair to the *R-G-B* triad – that actually allows the tricolour chroma signal to be interleaved with the luma signal (or, Beckett's white player) – turns out to be a very fancy piece of higher mathematics. It is called 'quadrature amplitude modulation', and the subcarrier made from it is known as the 'quadrature amplitude modulated subcarrier'. I cannot possibly do justice to the elegance of its equations, but here, for your edification, is what it looks like at the transmitting end:

$$s(t) = Re\left\{ \left[I(t) + iQ(t) \right] e^{i2\pi f_0 t} \right\}$$
$$= I(t)\cos(2\pi f_0 t) - Q(t)\sin(2\pi f_0 t)$$

where $i^2 = -1$, I(t) and Q(t) are the modulating signals, f_0 is the carrier frequency and $Re\{\}$ is the real part.

And, in the ideal case, at the receiving end I(t) is demodulated by multiplying the transmitted signal with a cosine signal:

$$r(t) = s(t)\cos(2\pi f_0 t)$$

= $I(t)\cos(2\pi f_0 t)\cos(2\pi f_0 t) - Q(t)\sin(2\pi f_0 t)\cos(2\pi f_0 t)$

Using standard trigonometric identities, this can be written as:

$$r(t) = \frac{1}{2}I(t)\left[1 + \cos(4\pi f_0 t)\right] - \frac{1}{2}Q(t)\sin(4\pi f_0 t)$$
$$= \frac{1}{2}I(t) + \frac{1}{2}\left[I(t)\cos(4\pi f_0 t) - Q(t)\sin(4\pi f_0 t)\right]$$

Extraordinary ingenuity and logic had to be applied to make the colour *IQ* signal compatible with the monochrome *Y* (or luminance) signal, in order that we could receive colour images on colour sets, and black-and-white images on monochrome sets, from the same signal over the same channel. And I particularly want to remark that the name given to the technical solution to the problem of colour compatibility with monochrome sets – quadrature amplitude modulation – begins with the telling syllables: 'quadrat'. As Baylee Brits has pointed out of the movements in *Quad*, '[i]f this is a choreography, it is a choreography that is palpably indistinguishable from the playing out of a code. The artistic appears reduced to the arch formality of mathematics' (Brits, 2017, 127). What is more, those mathematics are specifically applied to a critical problem in the history of signal processing in the late twentieth century: the compatibility of two (actually, three, counting the audio signal) types of signal within the same channel.

Friedrich Kittler makes these pertinent observations about colour TV signals:

With 5 MHz bandwidth for luminance, only 1 MHz bandwidth for chrominance and in comparison an infinitesimally small bandwidth for the accompanying sound, the technicians [...] just succeeded in compressing complete color television programs into a VHF or UHF channel. In contrast to radio signals, therefore, television signals never corresponded to analog vibrations, but rather they were extremely complex assemblages. Like a spelled-out sentence, they were composed of various different elements and they adhered to the appropriate rules of syntax; you could even say they had their own electronic punctuation marks, which naturally consisted of synchronization signals. (Kittler, 2010, 220)

One of the things that Table 9.1 makes clear is how well Beckett understood the TV signal to be just such an 'extremely complex assemblage', obeying posthuman laws of syntax and grammar that the naked eye has no way of understanding. By delaminating image from sound, combining and recombining them, then decoupling them again, he showed how arbitrary and dissociated the relationship really was between the luminance of the screen and the weak FM signal for the accompanying sound (Murphet, 2009, 60–78). That he understood cameras as semi-autonomous agents in the video work was already apparent from *Film*, in 1964; but in the TV pieces, he showed a variable interest in that technological agency, accentuating it in some, but under-privileging it in others.

What now is clearer still is Beckett's grasp of the added, optional element of colour in television, and its 'compatibility' with monochrome signal information. Ouad is many fascinating things, of course, but one of those things is a meditation on colour, not simply as a qualitative property, a sensation, or an affect, but as a set of variable relations governed by abstruse technical instructions; and also a kind of optional supplement to an image composed out of light by mechanically traversed horizontal, vertical and diagonal lines. There is little doubt that the relationship between the text of *Quad* and the medium of television is more than just mimetic in this sense; it goes far deeper than that, extending to the crucial realisation that the script itself is not 'adaptable' in the usual sense, but amounts to a precise set of operational instructions for a TV production – it is in that sense more like a signal than a text. The quadrature amplitude modulated PAL colour bar signal, which Süddeutscher Rundfunk used to broadcast Quadrat I & II in 1981, looked like Figure 9.6 on a vector analyser screen. It is not a long way away from Beckett's own 'quad' colour bar signal, structured around the white spot or 'danger zone' where all colour dies.

What I am suggesting is that, more than anything else, *Quadrat I* functions as an allegory of the underlying technical matrix of its production, of the electromagnetic signals and electronic signal processing that made possible its transmission and reception as a 'bundled' amalgamation of chrominance and luminance information in the first place. The nature of the script – less a play text than a set of coded instructions – shows that the aesthetic burden of the work is placed squarely on the mathematically structured principles of its periodical sequencing; more than that, the obvious homologies between the movement of the players – their colour coding, horizontal, vertical and diagonal trajectories, the strict rhythmic pacing of their repetitions – and the movements of the three bundled *R-B-G* electron guns operating the *IQ* colour signal inside every colour TV set, makes clear a prodigious mimetic impulse behind the conception of this work for television – mimetic not of any human or subjective dimension, but of

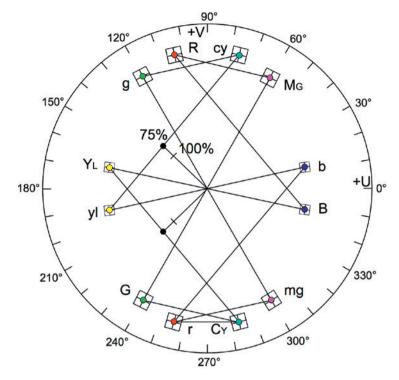
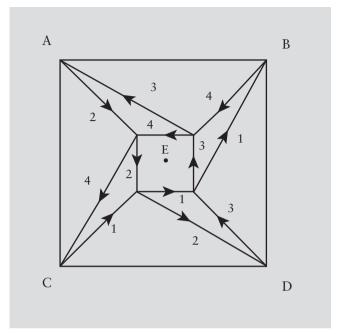


Figure 9.6 Analogue QAM (quadrature amplitude modulated) measured PAL colour bar signal on a vector analyser screen.

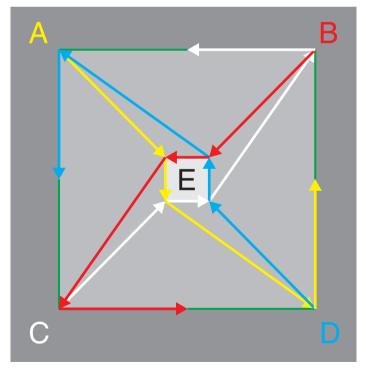
Source: https://commons.wikimedia.org/wiki/File:PAL_colour_bar_signal_measured_vector_edit.svg (accessed 23 September 2019)

the very 'TV technicalities' of which Beckett had been so wary during his preparations for *Quad*. Still further, what we have seen is that Beckett's awareness of these 'technicalities' extended deeper into the very nature of the electromagnetic signals that conveyed this complex information from one machine to another, especially the highly ornate equations supporting the 'quadrature amplitude modulated subcarrier', after which Beckett might, very possibly, have named his enigmatic work.

What is most critical here is that this subcarrier, and the mathematics that made it possible, simultaneously made possible the separation and differentiation of the very signals that it compatibilised. Quadrature amplitude modulation allowed for the chrominance signal to be interleaved with the luminance signal, tessellating new IQ data with older Y information; but the underlying purpose of this tessellation was, of course, that the same signal could be decrypted in two different ways by two different kinds of



Source: Beckett (2006, 453)



Note: In this monochrome representation of the players' movement, light grey stands for yellow (A), black stands for red (B), white stands for white (C), and dark grey stands for blue (D).

Figures 9.7 and 9.8 The players' paths in Beckett's Quad.

receivers. A programme like *Quad*, broadcast in PAL colour, had its chrominance information read by colour sets, and ignored by black-and-white sets, resulting in two radically incommensurate sign systems for human end-users – both outcomes of the self-same signal. It is this ability of a single signal, thanks to 'quad' modulation, to yield one set of aesthetic properties here, and a very different one there, that ultimately led Beckett to conceive of his work in *Quad* as dialectically doubled within itself, as *Quadrat I & II*.

Perhaps the most revealing moment in the long, frustrating process of getting Quad on air happened when the head of production at SDR, Dr Müller-Freienfels, took Beckett home for dinner and told him how 'impressive the piece looked in black and white' (Knowlson, 1996, 592). Music to his ears, no doubt – this great artist who had so steadfastly avoided the affective pitfalls of 'red, blue, yellow, green' his entire working life, and with especial aversion over the previous decade. What this news taught him was the extraordinary fact that even here, where so much attention had been paid to the chrominance subcarrier, the image itself could always be 'worsened' by the simple fact of compatibility itself – the dominance of the luminance signal over the chrominance; the fact that every colour signal is concealed inside a monochrome one. Seeing was believing, and when he witnessed the evidence of the monochrome monitor, Beckett fell in quickly with the idea that SDR should broadcast two versions of Ouad, one in colour, and one not. Only he took it further: demanding a new recording session the next day, using only white robes, at a much slower speed, and with all percussion removed (Knowlson, 1996, 593).

What Quadrat I & II together demonstrate is the logic of televisual compatibility exposed to an aesthetic of 'worsening'. What we see is, first, an elaborate, energetic, ingenious, and for this artist utterly unique display of colour for its own sake, colour liberated from theme and content and genre, and given over in its pure form to the one medium, colour TV, that could truly do justice to it. Only, given the very structure of the medium in question, all that autonomous, dancing colour, is actually the result of a complex mathematical formulation – a quadrature amplitude modulated subcarrier signal – that allows it to be smuggled in the interstices of a much older monochrome signal. Ouadrat II shows us that older signal, the monochrome luma carrier signal, in the troughs of whose frequency components the chrominance signal had been brilliantly interleaved – truly the dominant signal, carrying information over 5 MHz of the channel, as against the chroma signal's paltry 1 MHz. Only, now, all the fascination is gone, the hypnotic and tonal appeal of the first version gives way to exhaustion in the second. The former energy is subject to a certain entropy that lies at the heart of Beckett's aesthetic project. Which is why he appreciated this

version so much more, declaring it set 10,000 years later, in a future of inevitable heat death and depletion. It is not the future of television, to be sure, which has more colours than ever, and is no longer reliant on the *R-G-B* electron gun, but the future of art, which in a world dominated by ubiquitous colour screens will need all the more urgently to protect itself against colour, and return, after this dangerous sortie into the lands of the enemy, into the testy negations of greyscale.

It was Perry Anderson who wrote that

if there is any single technological watershed of the postmodern, it lies with colour television. The machines pour out a torrent of images, with whose volume no art can compete. The decisive technical environment of the postmodern is constituted by this 'Niagara of visual gabble'. The new apparatuses are perpetual emotion machines, transmitting discourses that are wall-to-wall ideology. (Anderson, 1998, 89)

Beckett's *Quad*, produced just as Jameson and others were formulating their critiques of postmodernism, and on the heels of the elections of Thatcher and Reagan, is a contemporary critique offered from within the belly of the beast: a work for colour television that at once achieves an apotheosis of autonomous colour, in sync with the mechanisms and signals of the medium, and renounces it, in the same complex gesture. Beckett understands that there is no competing with colour television, only analysing and then worsening it, withdrawing from it tactically. In the deft modulation between *Quadrat I* and *Quadrat II*, the conditions are created for one final TV masterpiece, in studious monochrome, called *Nacht und Träume* – that astonishing meditation on care and kindness that only attains its power through the already achieved recantation of the solicitations of colour. But that is another story.

In the mature era of signal processing, what Beckett, forty-six years after writing it, called the existential 'German bilge' (Beckett, 2016, 578) of his famous letter to Axel Kaun assumes a far less pretentious, more pragmatic significance: 'As we cannot eliminate language all at once, we should at least leave nothing undone that might contribute to its falling into disrepute. To bore one hole after another in it, until what lurks behind it – be it something or nothing – begins to seep through; I cannot imagine a higher goal for a writer today' (Beckett, 2009, 171–2). In *Quadrat I & II*, the author's most radical break with the regime of human language, we see that what 'lurks behind' that superannuated discourse network of the word is neither 'something' nor 'nothing', neither an absence nor a presence, but a *code* – a pervasive machine language whose function is to operate the luminance (and chrominance) of a differentiated array of television screens. What emerges is not a meaning, and certainly not a truth; indeed, it has

nothing to do with the hermeneutic logic of the order of signs. It is, rather, the determinate effect of a set of lucid instructions that will function any time the technical conditions of analogue television transmission and reception are met. The teleplay, clearly, is not committed to the sign or composition of signs that it gives rise to. It is a complex suite of coded directions broadcast, today, into a digital night where even the memory of the cathode ray tube seems as distant and hypothetical as a blinked-out dead star. The power of the work consists for us in that radical historicity and the sudden absence of those 'TV technicalities' that were its infrastructural support in the real; for when there is nowhere on the face of the earth, or in the cosmos, where it can ever be played again, *Quad*'s code assumes the melancholy gravity of a signal without a processor.

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Black screens: Beckett and television technologies

Jonathan Bignell

This chapter analyses how the aesthetics of black in Beckett's dramas for television illuminate recent theorisations of the significance of texture in television and film, and how Beckett's television dramas reflect on histories of television production and reception technologies. These changing television technologies affect how viewers can make sense of the visual textures and spatiality of the dramas, since visual style needs to be understood in relation to the materialities of production. This chapter centres on Walter Asmus's 1986 television version of Beckett's play What Where (1984), transmitted in Germany as Was Wo, and his 2013 reworking of the same drama for the screen, making a comparison between the two dramas in terms of their spatial and textural aesthetics. Moving outwards from how black works in the two What Where programmes, the chapter explores the significance of light and dark screen space and texture across the much longer history of Beckett's screen work, produced at different times from the mid-1960s to the 2010s. The chapter argues that Beckett's plays can be regarded as explorations of, and commentaries on, television aesthetics, and especially that they use the apparent nullity of black to draw attention to the representational capabilities of the television medium.

What Where was written for the theatre, and first performed in New York in June 1983. The play's structure is based on a series of interrogations by the figures Bem, Bim and Bom, led by Bam, whose voice, V, is presented via a megaphone separate from the actor playing him on the stage. Each figure is identically costumed in grey, with long grey hair, and one after another they appear in an empty, dimly lit playing area surrounded by darkness as Bam questions each of them. He asks whether information about 'what' and 'where' has been extracted from their victim, and the play alludes to interrogation and torture but without offering the means to place the action historically or geographically. The German theatre director Asmus, who frequently worked with Beckett and knew him well, helped Beckett to make

a television version of the play in 1986 at the studios of the German regional broadcaster Süddeutscher Rundfunk (SDR). Much later, in 2013, Asmus shot the play again after Beckett's death in a version produced by Australian academic and Beckett specialist Anthony Uhlmann. Uhlmann's version was hosted by the Writing and Society Research Centre at the University of Western Sydney. It was not commissioned or shown on broadcast television or at the cinema, but made available on the video streaming portal Vimeo. At first, access was limited to invited viewers only, but now the film and documentary are publicly available on YouTube (Uhlmann, 2016) and are most likely to be watched on the monitor screens of home computers or on a modern flat-screen domestic television connected to the World Wide Web.

The visual styles of both of Asmus's television productions of What Where are different from the staging of the theatre play. The look of the figures is changed, the megaphone embodying V is removed, and the figures' spatial arrangement changes from a three-dimensional composition to a twodimensional one. In Beckett's production notes (Beckett, 1985) made during the shoot at SDR studios from 18 to 28 June 1986, Beckett headed one of the pages 'Process of elimination'. The whole process of adaptation is indeed characterised by reduction and subtraction from the theatre original. There are only faces and no stage set or other indication of spatial depth or dimension, except that Bam's face appears large while the others' faces are much smaller. Beckett noted 'Colour eliminated' and 'Black ground unbroken'. and the faces appear light grev against a uniformly deep black surround. The production team went to elaborate lengths to dehumanise the performers by representing only the lighted faces against this black background, with the rest of their bodies unseen. The performers' faces were made the same oval shape by the addition of prosthetic masking, their ears were invisible under the gauze hoods they wore, and their voices were electronically slowed down. The 2013 format very closely resembles Asmus's earlier version for broadcast television, with lengthy opening and closing captions, written in a sans serif typeface against a black background, enfolding the main body of the video which lasts about ten minutes.

The embedding of a Beckett drama within a framing documentary feature has been a common means of presenting his work for decades, and Uhlmann's online production closely resembles a television programme in form and structure. Larry Held plays Bam on screen and also the voice V (credited separately), and the shapes and composition of the faces against the black surrounding screen space are very similar to Asmus's 1986 version. What is visually different is the texture of the images, and it is the analysis of textural identity that is the main challenge for this chapter. As Lucy Donaldson puts it: 'Evocation of feeling by means of visual illusion or, to put it another way, the association of sight and touch and their sensory mingling, is at the

heart of texture's uniqueness' (Donaldson, 2014, 18). Such effects are difficult to both describe and analyse, but are at the heart of how television images (often in association with speech or music) produce their affective as well as intellectual response.

Surface and depth

In both the 1983 and 2013 versions, Asmus fades the faces in and out of vision as if they were intersecting with a plane of light parallel to the television screen. They seem to move out of blackness towards the viewer, speak their lines and then retreat again into the dark. Bam's large, diaphanous face is on the left side of the screen, and three smaller but brighter faces of Bim, Bom and Bem appear on the right. It is as if a planar surface and a source of light enable them to appear, and their appearing and vanishing parallel the play's oscillating relationships of power and powerlessness among the voices. This oddly shallow yet deep plane of visibility questions 'what' and 'where' it is, and the faces seem to hesitate between material presence and fading into null blackness. In each adaptation, the technical capabilities of the studio are used to shoot the faces in different shot sizes and with different levels of light. In post-production, Asmus made a collage of the separate shots within the same screen frame, so that the different faces appear together, impossibly, on the same surface.

Flat compositions represent the studio space as the planar surface of a picture, and refuse its three-dimensionality. As Donaldson notes, an emphasis on surface is implicitly connected with the notion of texture as used in visual art:

Thinking about texture in art then draws attention to the qualities of form and surface, and to the interrelation of material decisions and their functionality, expression and affect. It also underscores the physicality involved in the production of the art object. (Donaldson, 2014, 15)

The flat monochrome technique was first adopted for a Beckett adaptation when French director Marin Karmitz made a film version of Beckett's *Play* (1964) in 1966, working closely with Beckett in a Paris studio (Herren, 2007, 171–97). This production used the interior space to explore the possibilities of a frontal relationship that matched the theatre play, in which three figures are stationary in a row of large urns throughout. The studio became a fully abstract space that both retained a link with theatrical staging and also sought to develop montage in ways specific to television (Foster, 2012). The urns and speakers were suspended in a dimensionless space that is only comprehensible through the relative sizes of the characters in the

image: large if they are near, and small if they are far away. Cutting provides rapidly alternating montages of frontal images that transform the theatre play, and the rhythms of editing produce a fugue-like system of combinations of shot sizes and compositions, matching the rapid alternations of the characters' stichomythic dialogue.

The planar surface was also used in the BBC version of *Not I* (1973) in 1975 and in the SDR adaptation of *Footfalls* (1976) in 1988 which Asmus directed. In each, light picks out images that are always on the same linear plane at the same distance from the camera. In *Not I* there is just Billie Whitelaw's mouth surrounded by darkness, gabbling words in close-up, with no cuts between shots, so that the viewer seems to be confronted face to face. In *Footfalls*, Whitelaw plays a single lit female figure who trudges slowly from left to right across a dark space and back again. Action in three-dimensional space is flattened onto a plane that reproduces the planar surface of the television screen, producing image compositions that seem graphical as much as representational.

Anna McMullan (1993, 38) calls the space of the 1986 What Where a space of memory or fantasy, and like the other dramas discussed here it is certainly not a 'realistic' space. The radical nature of Asmus's productions is starkly revealed when they are contrasted with the Beckett on Film (2001) production of What Where, directed by Damien O'Donnell. Post-production editing enabled O'Donnell to have the same actor playing the three personae Bem, Bim and Bom, who can appear on screen together. O'Donnell's adaptation is set in a three-dimensional room whose walls are lined with bookshelves, like a library. The set is well-lit, and the furnishings, costumes and neon lighting allude to the spaces of television science fiction (reminiscent of space station cabins in Star Trek: Deep Space Nine (1993–99), for example), and help to suggest an oppressive future society that befits the story of repeated interrogations that the text relates. The textures are hard, shiny, and lit by a predominantly harsh white light that shows a functional high-tech space with a coherent design signature. Choices of shot type, lighting and composition have very different effects, as comparison between adaptations can show. Moreover, these choices invite work on the specificities of visual media and the intermedial relationships between those media.

Textures of black

Beckett wrote the word 'Black' across a diagram of the television screen in his production notes for the 1986 Was Wo (Beckett, 1985) and when Asmus's new What Where was first released privately, the accompanying note on the Vimeo web page read: 'This production of What Where is faithful to

Beckett's original vision regarding the brightness of the image, it is therefore quite dark and best viewed in a dark room'. The video is presented integrally with a documentary, *The Remaking of Samuel Beckett's What Where*, lasting about 15 minutes. It begins with video documentation of the shoot, in which Asmus is seen spotlit in a dark studio reading Beckett's text, while the actors can be seen in role, their faces also spotlit, with monitors and members of the production crew visible. Uhlmann explains the context of the 1983 invitation from SDR for Beckett to make something for television, then Asmus explains the process of discussion that led to the 1986 television adaptation. At first it was to be a record of the theatre *What Where*, transferred to the studio, but gradually a distinctively different version was created for television broadcast.

Throughout the documentary, interview and rehearsal footage is interspersed with archive photographs shot during the SDR production process, implicitly authorising both of Asmus's versions and demonstrating their provenance. Asmus recalls that when Beckett saw the 1986 version, 'he saw it on the screen, and he loved it when it was almost grey, and hardly to be seen'. Asmus recalls that in 1986 the technical staff at SDR in Stuttgart warned Beckett that professional monitors in the studio might register the images being shot, but they were so dark that viewers at home would not see them. But darkness is crucial to Asmus's realisation of the play, reflecting Beckett's own wishes.

Asmus comments in the 2013 documentary: 'The Stuttgart version is so diffuse because the quality of the images is not so good because it was so dark and so on at the time.' By 'diffuse' he means that although the 1986 shoot used state-of-the-art technology, there were limits to what could be achieved. Television sets used cathode ray tubes (CRT) that created monochrome images by drawing a beam of electrons across the screen from the top left to the bottom right, 50 times per second. The screen displayed an image made up of 625 horizontal lines, created from alternating passes of the electron beam which scribed an image comprising 312.5 lines on one pass and another 312.5 on the next. The image was imperceptibly woven together from these repeated scans across its surface. At the same time as this brightness (luminance) signal was emitted, creating the outlines of the shapes on the screen, the screen's tiny triads of red, blue and green phosphor dots across its entire surface were selectively stimulated by another scanning beam, the chrominance signal, which added colour to the images. While the luminance signal of 625-line television had comparatively good image definition (compared to the former technology of 405-line images that it replaced), the colour was relatively ill-defined, like a wash of watercolour paint over a sharp pencil outline. By the time that viewers watched Asmus's second version of Beckett's play, modern light emitting diode (LED) and liquid crystal display (LCD) televisions had much sharper images because their picture composition is equivalent to a scanning rate of 1,080 lines. For the main contours of light and dark in the image, thousands of tiny diodes in a mesh of LEDs inside the screen are individually controlled. A layer of bright LCDs in front of the LEDs provides colour, high-resolution shapes and outlines for the whole television screen. The combination of these LED and LCD technologies produces much brighter, larger and more resolved images than the CRT television of the twentieth century. Asmus was well aware of the greater precision now available for the faces illuminated against a black background in *What Where*, and noted in the 2013 documentary that 'the digital technique has much more possibilities to have a very sharp, very precise image quality'.

However, the very precision of the image can detract from the richness of its texture, in inverse proportion to the sophistication of the technologies used to produce it. Contrast ratio is integral to this, and the term refers to the relationship between the light emitted (the luminance) by the brightest white on a television screen compared to the darkest black. A high contrast ratio makes blacks seem deeper, although all dark television images can be compromised when the ambient light in the room where they are viewed erases distinctions between levels of blackness. Television screens have backlighting to increase the luminance of their images, but are designed to reduce or switch off the backlighting when a mostly, or fully, black image is shown. With selective dimming of the backlighting, contrast ratio is greater so white looks brighter and black looks darker. The best way of viewing What Where would be on a screen with full-array local dimming, where backlighting reduction can be accurately applied to the dark parts of the image, or on a new OLED set where backlighting is replaced by diodes that emit their own light and can be left switched off and thus completely black. But such precision was not wholly what Asmus wanted.

so what Ben [Denham, the editor] might do is to reverse it a little bit to get away from the mathematics of the digital to a sort of poetics, to sort of put some poetry back into it which the old way, the old style, may have had in terms of overall atmosphere.

Asmus wanted to retain tone and texture by making aesthetic choices during production, rather than relying on the viewer's screen technology.

Asmus's 1986 version was broadcast in a 4:3 ratio of screen width to height, the ratio adopted in classical cinema for the projection of films and in most twentieth-century television, whereas the 2013 version is in 16:9 aspect ratio, used in most contemporary cinema and in the production of contemporary programmes for widescreen television. These changing

television production practices and broadcast contexts affect how the viewer can make sense of the drama's spatiality, because they affect compositional proportions. But each version invites the viewer to wonder about the unlit space behind, beside and in front of the faces. Viewers see a black space with a velvety, tangible texture. Or instead perhaps they might perceive the background of the faces as a flat, black, glossy and smooth plane that the faces intersect with, as if they are breaking the surface of a pool of viscous crude oil. The 2013 version both adopts the precision of contemporary image technologies but also uses those resources to recreate the palpably textural feel of earlier analogue aesthetics in a new way. Asmus commented in the 2013 documentary:

I think the atmosphere of the digital image of course is different as we all know – these music addicts who only hear old records and would never touch a disc – so somewhere in between I guess there are beautiful possibilities to create something new.

In other words, Asmus's approach to texture is a way of recognising and replaying the histories of television production technologies, aesthetics and viewer expectations.

This chapter focuses on texture in relation to visual properties, but Asmus's mention of differences between analogue disc recordings of music and digital audio also raises the issue of differences in sound textures. The 1986 What Where is of course a German translation of Beckett's English text, and to a British person at least, the timbre of the voices is relatively deep, harsh and grainy. This is largely the result of mechanical intervention, since the soundtrack was slowed down in the 1986 version. The 2013 version uses actors who are all Australian (though some, like Held, have spent significant time overseas, including living in the UK). The English of the voices, though not especially marked by regional accent, is noticeably Australian in inflection to a British native speaker. The voices are pitched higher, and have a narrower tonal range and lighter timbre than in the 1986 German version. But they eschew markers of national characteristics, such as might be found in 'natural' conversation, for example the rising inflection common in Australian speech. The voices, as they were in Asmus's previous version, are performed so as to match Beckett's direction in the text that they speak without variation of emphasis or pace. In the 2013 documentary, Asmus recalls that after talking with Beckett during the 1986 rehearsals, they arrived at 'an almost mechanic way of speaking', devoid of lyricism or sentimentality. Speech (and other sounds), like television images and paintings, can have texture, as Roland Barthes (1977) noted when writing about the 'grain' of a voice. While further consideration of vocal timbre and performance style is beyond this chapter's focus on visual textures, similar comparisons could be made about the materiality of voice and the textures of sound in the television versions of What Where.

Television genealogies

Long before Asmus's adaptations of What Where, production methods on Beckett's television plays were unusual in their relationships between image and sound and in the technology used to realise them (Bignell, 2003). One of the similarities between the 1986 and 2013 versions is that both were shot as-live, with multiple cameras. In other words, each actor had a camera and a light just a few feet away from his face, and all of the cameras were shooting at the same time while the lines were spoken in a continuous performance. By contrast, after the waning of live television drama production in the 1970s, the great majority of drama programmes in Western Europe were shot in multiple takes and then edited in post-production to cut the best sequences together. So, in the 1986 version, Asmus was already adopting an outmoded 'theatrical' method of working. In 2013, multiple takes of the four cameras were edited together digitally in post-production, to enable the timing of the piece (visually and in the pacing of the dialogue) to be controlled to within fractions of a second. Again, contemporary precision coexisted with inherited, older modes of production.

By the end of the 1960s, programmes in Western Europe were also being made and broadcast in colour, whereas Beckett's television plays were in monochrome. This made them unattractive to audiences (Bignell, 2009, 176-84), and monochrome was a deliberate and significant choice for their producers. So, in the context of a focus on Asmus's use of black, it is important to consider the significance of black in the earlier genealogy of Beckett plays for television. For example, Ghost Trio (1976) was made for inclusion in a BBC arts feature, The Lively Arts: Shades in 1977 and in the same year in a German version, Geistertrio, for SDR. The drama opens with a wide shot of a set with a window, door, bed and a stool on which a dishevelled male figure (F) sits. An unseen female voice, V, introduces the viewer to the shapes and components of the set before F makes a series of moves around the room, appears to hear music, and finds a boy who seems to indicate wordlessly that an expected female visitor will not arrive. Right at the start of the play, V draws attention to the fact that the visual images are all in 'shades of grey', thus remarking implicitly on the unusual fact that the play is broadcast in monochrome. When the critic Sean Day-Lewis (1977) reviewed the broadcast for the Daily Telegraph newspaper he drew attention to the plays' dim shadows: 'The shades are all grey, Beckett does not believe in colour television, it seems, just in case too much information

is let loose. And then the grey is made as misty as possible so that the characters are dimly perceived.' Grey darkness was a prominent element in the experience of watching the play.

Ghost Trio's title clearly alludes to death, and the paradoxical life after death that a ghost represents, offering an internal significance for the play's visual greyness inasmuch as it might connote ghostliness. Moreover, the phenomenon of shadowed edges around the edges of shapes within a television picture (caused by inaccurate aerial position or weather conditions) is called 'ghosting' and is particularly noticeable in monochrome pictures with strong contrasts of dark and light, like those in Ghost Trio. The grey in all of the images in the play is also the colour that a television screen of the period had when it was switched off, because the inner face of the glass CRT television tube was coated with a grey fabric-like material. So, monochrome has material significance in relation to the choices of television mise en scène and the meaning of monochrome for producers and audiences at the time of production. Lack of colour distinguishes Beckett's television plays from the programmes surrounding them in the schedules of the time and has connotations of the preceding, pre-colour era. Asmus's versions of What Where would be perceived as anachronistic in form and realisation. This in itself produces another kind of ghostliness, whereby the productions are dislocated from the television present, and linked to earlier 'dead' modes of television production. Eckart Voigts-Virchow, incorporating a reference to the dull, grainy texture of the plays' images, contends that 'the stone age of TV production is exactly where Beckett's television locates its aesthetic strategies as a perennial offence to the medium's surface gloss' (Voigts-Virchow, 1998, 227). The terminology of the comparison between the matt grey grain of the television image in Beckett's plays versus the bright, glossy smoothness of contemporary screens is both a metaphor for this contrast between anachronism and modernity, and also a literal description of how materially different Beckett's old-fashioned screens and modern screens actually look.

Quad (1984) was shot in colour at the SDR studios and screened on both SDR (as Quadrat 1 + 2) and BBC television in 1982, and thus conformed to the conventions of colour transmission at the time. The play presents a square of lines on the studio floor, with diagonal lines connecting their corners, and the entire piece is shot from one overhead camera position. The performers appear one at a time from the dark surrounding space, and move in criss-crossing patterns around the square and its diagonals, before disappearing again into darkness. The shrouded figures of indeterminate sex each avoid the centre of the square when they approach it, before resuming their paths along the lines. Patterns of movement and the question of why the figures move as they do are left open to interpretation, and there

is no dialogue or voice-over to frame the action. Beckett's original screenplay aimed to use coloured light systematically for each of the four performers, in parallel with their differently coloured costumes, but the lighting system was abandoned because of problems during production (Fehsenfeld, 1982, 360). Recording in colour for *Quad* Part One and then broadcasting monochrome for Part Two draws additional attention to the possible significance of black and white. Not only its dramatic form, but also the textures and tones of the play's images, multiply interpretive questions in a similar way to the earlier, wholly monochrome plays.

There is a ghostly and fluid quality in the images of . . . but the clouds . . . (1977), created by repetition, ambiguity and the absence of dialogue, and the ventriloguism by the male figure M of the female W's recitation of the Yeats poem that supplies the play's title. At the same time these features draw attention to the mechanical reproduction and apparent fixity provided by television technology. Both M and W are said to appear or reappear autonomously, as if they were ghosts summoned from off-screen space in the same way that the faces in Asmus's What Where versions appear and reappear. They are living, moving faces but bodiless and mask-like, resembling the plaster death-masks sometimes made in Europe in the nineteenth century. for example, to memorialise the dead. As is often the case in Beckett's screen dramas, close-up shots at first seem to follow the television (and cinema) convention of revealing psychological depth, interiority and character. By contrast, the close-ups on faces in What Where have minimal expressivity and their white make-up and abstraction from the rest of the performers' bodies seem to fetishise their surfaces, behind which there is no assurance of the depth that underpins dramatic characterisation. The reflexivity of the television plays gives particular prominence to their performative features (Bignell, 2018), inasmuch as they self-consciously perform and deconstruct the capabilities of television representation.

Intermediality and medium specificity

Twentieth-century adaptations of Beckett's theatre work were recorded in studios, in long takes with few cuts, so their form associates them with theatre's linear, continuous performance. At the same time, a concentrated form of spectatorship is required by Beckett's television plays and this connects them with the concentrated gaze of cinema rather than the casual glance associated with television viewing (Ellis, 1982, 50). Whereas the film spectator is encouraged to give full attention to the screen because of the darkness of the cinema, the surrounding sound and the commitment to the film produced by paying for a ticket, the television viewer has been

regarded as a glancing and often inattentive spectator. The textural quality of film is important to the perceived differences between media too, since film has a luminous, limpid quality while video has a narrower contrast ratio and less luminescence, and (until HD) poorer image definition. Those dramas that Beckett wrote for television, and also the screen dramas that were adaptations of plays written for another medium, adopt structural, textual and spectatorial conventions from media other than those of the medium in which they are experienced.

Many of Beckett's screen dramas are intermedial in these ways, inviting analytical approaches that address their borrowings, reworkings, transgression of boundaries and questioning of medial identity (Bignell, 2020). The title of Beckett's first screen work, *Film* (1964), designates the specificity of celluloid as a production and exhibition medium, and a surface separating one space from another as the screen does in a cinema auditorium. This interest in surfaces can also be seen in the camera's attention to textures in *Film*, for example the skin of its protagonist (played by the ageing film star Buster Keaton), especially in shots that focus on his eyelid and his hands, and shots of a tall decaying brick wall in the film's opening scene and later the badly plastered walls of the protagonist's room. The fact that Beckett's work seems explicitly interested in the specificities of a medium's identity might in fact be a lure that leads instead towards the volatilisation of the notion of medium itself (Bignell, 2010).

The medium of 35 mm cinema celluloid film was first adopted for a Beckett screen adaptation when Karmitz made Comédie, filming a version of Beckett's Play in 1966 (Herren, 2007, 171-97). On film, Karmitz was able to exaggerate and control contrasts of light and dark, and the sharpness of outlines, much better than television technology could achieve at the time, and the film was shown on a large cinema screen at the 1966 Venice Film Festival where lighting conditions would have made these effects very striking to the audience. This production used a front-facing arrangement of three speakers, as in the theatre play, with the three figures each encased in a large urn. But Karmitz also used montage in ways specific to cinematic technique. The urns and speakers are suspended in a dimensionless space that is only comprehensible through the relative sizes of the figures in the image. Cutting between close and distant camera positions provides rapidly alternating montages of frontal images that transform the theatre play, and the rhythms of editing produce a fugue-like system of combinations of shot sizes and compositions, matching the rapid alternations of the characters' speech. As Graley Herren has noted, Asmus's use of strongly contrasting black and white in his versions of What Where on television seem to derive from Beckett's experience with Karmitz on film (Herren, 2010, 400). Ideas and motifs from work in one medium migrate to another.

As Jonathan Kalb has pointed out, contrasts between light and shadow and the compositional arrangements in Beckett's work recall Caravaggio's paintings, though the painter's evocation of the tints of human skin against darkness, and especially his placement of foreground objects to generate spatial extension into the viewer's space, are significantly different from the planar compositions of the settings in Beckett's televised plays (Kalb, 1989, 100). Nevertheless, Kalb argues that, like Caravaggio's work, the television plays are like 'windows looking inward on particular souls' and represent 'Man [sic] existing on his own in a kind of nothingness' (99). Blackness on screen becomes a metaphor for existential 'nothingness', by analogy with the limpid, glossy black backgrounds of the paintings. The reduction of the visual field to self-consciously two-dimensional surfaces and geometric arrangements recalls twentieth-century abstraction and modernist painting, with their emphasis on the picture plane and reflexivity about technique. But some of the effects of depth produced by light, figures and darkness are similar to Renaissance religious art, and these different traditions load the television plays with potentially elusive and ambivalent meanings deriving from them.

The television screen was rectangular in the 1970s, providing a frame around the image, and rectangles in Beckett's screen work can be interpreted as both reflexive allusions to the medium and also as references to the framed rectangles of paintings in a gallery. The effect of subdividing the rectangular space within the frame is to energise parts of the space and to suggest relationships between the frame and the spaces demarcated within it. Painterly abstraction using geometric forms seems to have been behind Beckett's principles of image composition, such as the grey squares representing the setting in Ghost Trio or the lighted circles of . . . but the clouds The room in Part One of *Ghost Trio* is represented as a series of rectangles, becoming a two-dimensional and pictorial series of forms. The movement of the sole male protagonist in . . . but the clouds . . . is across the plane of the set in left-to-right directions, entering and leaving a spotlight that leaves the surrounding area completely dark, whereas movement in Ghost Trio is into and out of the set, from the front to the back. In ... but the clouds ... there is an almost immobile male figure and in the closing moments a static female figure, returning to a static framing on the television screen, just as in *Ghost Trio* the male figure returns to a position that recapitulates the opening shot. In Quad, a static camera frames a rectangular shape on the studio floor. In the 1983 SDR transmission of Beckett's Nacht und Träume (1984), the wipe effect that creates the shift from the 'real' space in which a lone male figure sits to a dreamed space in which he features in his own reverie is also parallel to the panning of a camera across the surface of a planar picture. The plays use similar ideas of the picture

plane and the flatness on the television screen of three-dimensional objects and spaces.

Static compositions and geometric figures present the television viewer with an image which invites the movement of the eve across it, as a composition and a surface rather than a window through which action and movement are perceived. Thus, Beckett's plays encourage attention to the tones, textures and forms within the image in a way that is close to the conventions of painting, art cinema or television with high production values. Whether the viewer's attention is drawn to striking compositions, uses of contrasting light and dark or colour effects, or details of setting or costume, these other art forms seek to arrest and engage their spectator. But the moving images of time-based media like television and film are not the same as looking at a static painting. Asmus's adaptations of What Where, for example, create a dialogue between the planar surface of a picture and the spatial and temporal extension of action that characterises the ongoing broadcast flow of television. The experience of viewing is dynamic, and the appearance and reappearance of the faces in What Where, rhythmically and repeatedly, are the most obvious examples of this. Duration, pace and temporal patterning are crucial to the experience of viewing. In addition, the requirement of attention that contemplation of art implies is reconfigured for the domestic and private experience of television viewing. Beckett's dramas negotiate a position between art for television, art on television, and television as art.

Viscosity and value

Television Beckett seems alien to the medium's identity inasmuch as television has been characterised by temporal flow, lightness, evanescence and populism. Since the viewing practices of television have been understood as fickle and distracted, the identification of aesthetic value in programmes by attentive, concentrating viewers seems alien to the cultural identity of the medium. But a modernist aesthetic can be traced in Beckett's plays written for television, exemplified by the simultaneous reduction and enrichment of verbal and image textures, and the foregrounding of geometrical forms and music. This concentration and reflexivity has been noted by scholars such as Linda Ben-Zvi (1985), Enoch Brater (1985), Stan Gontarski (1983, 1986), Anna McMullan (1993) and Catherine Russell (1989). The audiences and viewing practices that might be assumed for art cinema, avant-garde theatre or painting, in which slowness and depth involvement are invited, mean that Beckett on television seems not to be like television.

Disparaging views of television emerged in the 1950s and 1960s, and as Jeffrey Sconce explains,

the medium's distinctive 'electronic elsewhere' became instead an 'electronic nowhere'. Rather than portray television as a magic means of teleportation, these more ominous portraits of the medium saw television as a zone of suspended animation, a form of oblivion from which viewers might not ever escape. (Sconce, 2000, 131)

Critical work on Beckett's television work such as Jonathan Kalb's, for example, claims that:

television has been dominated by the narrowly circumscribed formats of commercial programming since its birth, and those formats have contributed to egregious, worldwide psychological changes: shrinking attention spans, discouraging reading and encouraging passive, narcotized habits of viewing art of all kinds. (Kalb, 1994, 137)

Beckett's refusal of colour for almost all of his television dramas can certainly be seen as a counter to the assumption, beginning in the USA once technical and regulatory standards for colour television were established there in 1953, that 'color viewing as an experience is more immersive, expansive, and both more realistic and more sensational than viewing monochrome' (Murray, 2018, 9). These assumptions underlay British resistance to colour television, which appeared potentially gaudy and sensational, so that British channels only began colour services in 1967. By repudiating colour, Beckett's grey and black images seem more serious and analytical. As Linda Ben-Zvi and others have argued, on this basis theorists can claim that Beckett's plays for television and radio educate the audience about their means of production: 'Beckett foregrounds the devices – radio sound effects, film and video camera positions - and forces the audience to acknowledge the presence of these usually hidden shapers of texts' (Ben-Zvi, 1985, 24). Thus, the plays are argued to empower the audience by requiring attention to the conventions of signification in the medium, redressing its more usual tendency towards cultural 'oblivion'.

In terms of texture, Beckett's screened plays in general, and Asmus's What Where adaptations in particular, are viscous, sticky and deep, in contrast to the conventional attitude that the television medium is light, flowing and shallow. They foreground the material base of the image, and the historical contingencies of its production at a particular time. Moreover, the problems of interpreting the non-naturalistic action and spatiality of the plays draw attention to the role of the viewer as interpreter. For Donaldson, '[t]he sense of textuality as a layering of influences and echoes of references and experiences creates an impression of thickness, that a text gains richness through multiple layers, and of density, as the reading process packs many layers together' (Donaldson, 2014, 31). This kind of awareness of interpretation as a relational and material activity was what the influential

theorist of communications, Marshall McLuhan, for example, was keen to emphasise:

The TV image is not a still shot. It is not a photo in any sense, but a ceaselessly forming contour of things limned by the scanning-finger. The resulting plastic contour appears by light *through*, not light *on*, and the image so formed has the quality of sculpture and icon, rather than of picture. [...] the viewer of the TV mosaic, with technical control of the image, unconsciously reconfigures the dots into an abstract work of art on the pattern of a Seurat or a Rouault. (McLuhan, 1964, 313; emphasis in original)

The viewer is then a sort of artist, participating in the process of representation, and is no longer the alienated consumer of a fragmentary commodity object. McLuhan's references to sculpture, and the action of shaping the image, conjure the significance of tone, texture, depth and sensory engagement which guided Asmus's realisations of What Where on screen. As Sarah Kember and Joanna Zylinska (2012) have argued, media can be regarded as processes of mediation, rather than established representational systems through which a rendering of reality might pass. Thinking in this way leads to considering media as intermediaries that shape both the content of their representations and also their audiences, in a mutually defining process. Media are ways of establishing relationships between people and the world, thus actively engaging their users rather than keeping media separate from humankind. The choices made in the technological, electronic and material production of the images and sounds in the video studio negotiate with the limits of the domestic screen equipment within the viewer's space. The textures of black in the television versions of What Where engage their viewer's senses and invite a hesitation about the viewer's relationship with the screen's surface and apparent depth, its lush and enigmatic velvetiness, and with the figures who emerge from it towards the viewer and disappear back into a null space that is both full and empty.

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Digital Beckett

11

Directing Play in digital culture

Nicholas Johnson

Although nearly every known text composed by Samuel Beckett has made at least one journey between media – plays becoming films, novels becoming performances, and manuscripts becoming XML – few texts have crossed between so many media as *Play* (1963). In its first decade of life, the play was performed in theatres (in three languages), published in periodicals and books (in three languages), and adapted – with significant revisions – for both cinema (Marin Karmitz, 1966) and radio (BBC Third Programme, 1966). Beckett approved non-commercial experimentation with the text as early as 1969, authorising Michael Scott's student project at the University of York in which photographs were used in place of urns, voice-overs in place of actors, and a camera (using close-ups) acted in the 'inquisitorial role' of the light (Beckett, 2016, 165).¹

Beckett's correspondence (especially that with Alan Schneider gathered in No Author Better Served, as well as with other collaborators in Volumes III and IV of the Letters) testifies to the persistent yet evolving specificity of Beckett's vision, repeatedly showing the extent of his effort to manifest Play accurately with the available theatrical technologies. In S. E. Gontarski's editorial work with the version of *Play* in the *Theatrical Notebooks* (1999) and Olga Beloborodova's genetic study in The Making of Samuel Beckett's Play / Comédie and Film (2019), the evidence that such creative experimentation also fed back into the text itself - not to mention altering its afterlife as performance – is overwhelming. Its early journey suggests that *Play* structurally invited adaptation, pushed at technological limitations, and challenged the boundaries of theatre. In the first wave of its performance history, lasting approximately from composition to the end of Beckett's life, Play also tended to reveal salient features of the medium in which it was presented, whether it appeared in a theatre or made the transition into recorded or broadcast media.

Revolutionary changes in media technologies, underway at the time of Play's composition but pervasive since the 1990s, have inaugurated a second wave – what might be called the 'digital' or 'cybernetic' phase of *Play*'s performance and reception. Thirty years after its first adaptations to analogue film and radio, two suggestive digital experiments with *Play* occurred as a result of these new affordances. In 1996 Lance Gharavi adapted Play for a blended live/video performance using head-mounted displays (HMDs) called 'i-Glasses!' (Gharavi, 1999, 258-62). That same year, David Saltz staged Play within a multi-work Beckett installation exploring humancomputer interface, using a programmed light known as the 'Intellabeam' to prompt speech, with live projection of each speaking head onto a fourth urn (Jaleshgari, 1996; Saltz, 1997, 45). Play's twentieth-century performance history ended with Anthony Minghella's provocative adaptation for the Beckett on Film project, in which he sought, like Michael Scott before him, to 'find a cinematic correlative to the interrogative light' (Knowlson and Knowlson, 2006, 281), but which employed digital-native editing, sound design and dissemination modes (like DVD or YouTube) that separate it from what 'film' might have meant to Marin Karmitz or Beckett in 1966. So far in the current century, Play has been translated into three new media that did not exist in any form when Beckett wrote the play: live webcast from a robotic camera (Intermedial Play, 2017), virtual reality (Virtual Play, 2017–19) and augmented reality (Augmented Play, 2018–19).

As I am the director and co-conceiver (with Néill O'Dwyer and others) of these latter three works, these most recent intermedial and virtual adaptations inform this chapter, along with my theatrical direction of *Play* within the Ethica project in 2012–13. In discussing specific choices made in the context of these performances, my aim is threefold: 1) to expose the practicalities of rehearsing and staging Beckett in digital culture, in a form comprehensible to non-practitioners; 2) to extend the impact of these projects by rigorously documenting their preparation; and 3) to reflect on the affordances of contemporary digital media as such, and how these might alter production and reception of Beckett's works in the future. Multiple past publications describing our recent work, all of them co-authored, have addressed the technical, philosophical and interdisciplinary issues at stake, and have almost all focused on the second recent experiment (Virtual Play).² In order to write as a single author in a context targeted mainly at fellow scholars of Beckett or scholars of media, I have immersed myself mainly in questions relevant to directorial agency, especially as regards issues of mediation, stage technologies and the formal characteristics of Beckett's text, across its entire (documented) performance history. What this research into past intermedial adaptations of *Play* has revealed is that these apparently new projects, which we thought of as a 'break' due to their activation in wholly new media, in

fact highlight the play's surprising continuity over time and suggest an inherently open quality inscribed within the drama. Innovations that we thought of as new and original to our versions have been revealed to have precursors in the performance tradition – even in Beckett's own practices with the text – of which we were unaware at the time of production. Such comparisons illuminate what might be called the 'durable' features of *Play* as an event.

Writing in 'Ghosts', his seminal essay about directing Beckett, Xerxes Mehta notes the tension that is always present when a text migrates from page to (presumably) stage:

A script is not a theatrical event. It is a blueprint for an event. Art is not engineering. Artists are not machines. The animation of the blueprint involves hundreds, thousands, of acts of cocreation by director, designer, performer, each act being inevitably conditioned by the differing personalities and life histories of the artists involved, by the circumstances of performance, by the pressure of the cultural moment, and so on. (Mehta, 1997, 182)

The 'circumstances of performance' that Mehta refers to must include, naturally, the medium in which the play's performance occurs, which can no longer (or, in the case of *Play*, perhaps could never) be presumed to be the live theatre – nor is 'theatre' a static category, in any case. The internet and the whole terrain of extended reality (XR) form a new 'media space', which Nick Kaye calls 'a kind of palimpsest in which real, virtual, and simulated spaces and events negotiate a writing over, reconfiguration, and translation of each other' (Kaye, 2009, 129). Directors, actors and audiences spend an increasing proportion of their lives in such media spaces. By addressing what is different as the text moves through time via new media, this analysis necessarily throws into sharper relief what remains the same: the transmedial features of the play's intermedial history. The starting point for such an exploration is the same work that precedes rehearsal for a director: an exploration of *Play*'s dramaturgy.

A threshold and a chameleon

Despite its early history of intermedial translations in which Beckett was personally involved, *Play* is typically discussed as a pivotal work mainly in relation to his dramatic oeuvre, notable for self-reference (in title, content and form) to the medium of the theatre. Dramaturgically, in its handling of embodiment and scenography, *Play* marks the transition between the development of 'characters in situations' in his earlier, longer plays – *Waiting for Godot*, *Endgame*, *Happy Days* and *Krapp's Last Tape* – toward the

'arrangement of images' (and sounds, voices and senses) in configurations that are less recognisably naturalistic, and often more dependent on stage technology for their effect. Play can therefore be considered a threshold work within Beckett's drama, after which the algorithmic apparatus of works like Come and Go, Not I, Footfalls and What Where becomes thinkable. A feature of the masterworks that precede *Play* is that they clearly take place as part of life on the planet; a place where the Macon country exists, where a person can record themselves speaking before they die, and where one character can say to another: 'you're on earth, there's no cure for that!' (Beckett, 2006, 118). At the level of plot (but also, fairly obviously, scenography), *Play* appears to take place after death, in a purgatorial space or limbo, where life elsewhere is discussed and reflected upon, a past time referred to as 'when it was the sun that shone' (313–14), as opposed to the present light that enforces sequence and compels speech. At the level of language, the play signals that music (which had, of course, always been a lodestar) is growing closer to the surface in Beckett's writing, with obsessive notes in the *Theatrical Notebooks* about tempo and tone, not to mention structural features like a repeating chorus and the da capo.

Writing as early as 1979 in Frescoes of the Skull, James Knowlson and John Pilling asserted 'with some certainty that Play laid the foundations for Beckett's later emphasis on a subtle choreography of sound and silence, light and darkness, movement and stillness' (Knowlson and Pilling, 1979, 112). Anna McMullan has argued more recently that 'Play initiates a new phase of Beckett's dramaturgy', which she suggests is 'characterized by an even greater de-naturalization of the actor's body and formal patterning of all elements of the *mise en scène*: delivery of the voice, movement, gesture, spoken text, space, light and sound' (McMullan, 2010, 105). These shifts in Beckett's theatrical development mirror wider cultural changes in the theatre of the 1960s, which could be considered under several different frameworks. Viewed from the perspective of actor characterisation and scenography, Play buttresses a movement from the 'representational' aesthetics of realism, naturalism and the period's popular cinema - rightly or wrongly associated with verisimilitude - to a more abstract or 'presentational' model (which in fact characterises the majority of theatre history, including mask, mime, vaudeville, melodrama, surrealism and a range of pre-colonial/indigenous and classical Asian theatre traditions).³ Play also seems to map productively onto the shift from high modernism toward late modernism (Carville, 2011; Weller, 2015), which somehow fails to exclude its relevance at the emergence of postmodern dramaturgy, in relation to the discourse of 'theatre of images' (Marranca, 1977). It has even been enrolled in the expansive category of 'postdramatic' theatre (Lehmann, 2006, 26). In addition to changing its media spots with regularity, *Play* is apparently

a chameleon that can blend in against the background of almost any aesthetic discourse.

In terms of *Play*'s genesis, it is no accident that the Beckett Digital Manuscript Project module and monograph pair the play with *Film*; Beloborodova highlights the manuscripts' 'growing emphasis on the visual element and a progressive obfuscation of the textual' (Beloborodova, 2019, 25). Drawing on Martin Harries (2012), Beloborodova usefully challenges past readings of *Play* as being essentially or transcendentally about the medium of theatre as such. Due partly to its gnomic title, it has always been appealing to point to *Play* (like *Film* for film) as an example of Beckett's attraction to the unity of content and form, and to view it mainly as a philosophical commentary on the theatre. Writing in the *Journal of Irish Studies* about Beckett and radio, Joseph O'Leary seems at first (through an aside) to elevate *Play* as a paragon of this feature of the author's general approach: 'Beckett exaggerates the typical traits of whatever medium he tackles, so that his writing is hyper-theatrical (*Play*, 1963)' (O'Leary, 2008, 9). However, O'Leary goes on to make a more nuanced point:

Thus he signals the limits of the medium in its conventional forms at the same time as he wrings from it new potential – just as some modern composers writing for traditional instruments or ensembles parody the conventions of the medium and then force it to do unprecedented things [...] The 'hyper' of parody becomes the self-reflexive 'meta' that makes the performance a representation of the medium itself as such. (9)

In this union of 'hyper' and 'meta', even if *Play* both literally and figuratively takes place in the theatre, it also exerts outward pressure on the boundary conditions and conventions of theatre. What was latent in the earlier plays - small eruptions that remind an audience that they are in a theatre, moments like Waiting for Godot's 'at me too someone is looking' (Beckett, 2006, 84) or Endgame's 'I see a multitude in transports of joy' (106) - becomes a guiding and persistent dramaturgical principle here: 'Is anyone looking at me?' (314). Play is simultaneously a cliché of a theatrical story, the 'love triangle' plot, and a reflection on the situation of the stage actor, minimally defined: get into your jar and wait; when the light is on you, speak; when the light is off you, cease; repeat. Rather than an emphasis on plot points or immersion in character (both of which are reduced by the speed of speech), the system of *Play* should lead the audience to a reflection on the light itself, its status, its operation, its meaning and the ways in which it might also stand in for them - their persistence in coming to hear these stories, their culpability and responsibility that the system continues. Twenty years later, when Beckett uses a recording of audience applause at the end of Catastrophe, the same gesture of implication of the theatre's audience seems to persist. A key question for digital adaptation is what becomes of such gestures when actors and audiences are no longer sharing the same physical space, and how current media might help us to identify, more strongly than ever before, with the light.

One final detail of note, as regards a threshold represented by Play, is that Beckett's officially credited work as a solo theatre director begins in the period shortly after its production. In their Companion, Ackerley and Gontarski relate this directly to Beckett's collaboration in 1966 with Karmitz on the film adaptation of Comédie, but the beginning of Beckett's thinking like a director can, in fact, be dated earlier within the life of this play. Beckett's correspondence with Schneider during the contretemps with Kenneth Tynan during the 1964 Old Vic production of *Play* in London – in which he was viewed unfavourably by theatre management as a co-director with George Devine – predates the filming of Comédie by two years.⁴ Although Ackerley and Gontarski assert that 'as a director SB remained a generic purist, treating the systems of theatrical communication separately' (Ackerley, 2006, 142), the production history of the 1960s versions of *Play* suggest that Beckett was immensely flexible in his approach to this play's form, permitting a range of cross-media interventions while allowing and initiating numerous variations. The wide-ranging intermedial history since that period suggests an expansive set of possibilities contained within the play's few pages. In *Play*, Beckett did not merely write a play. He invented a surprisingly malleable performance system, developed through collaboration and shaped by his emerging artistry as a director of his own work. What resulted is, quite understandably, highly adaptable to conditions beyond its native theatrical environment

From analogue to digital: actors and rehearsals

After the preparatory work involved in dramaturgy and casting, a director's task is to plan and facilitate rehearsals, such that the performance will be fully ready on time (and ideally under budget). How actors and directors arrive at the appropriate form of rehearsal for a given work is dependent on a large number of variables external to the text: interpersonal relationships, regional theatre cultures and funding levels all have an impact. Designers, stage managers and crew members must participate in the rehearsal room as well: never a separable element, design is especially central in the case of Beckett's plays, and even more important to incorporate early when working with new technology specifically. In the ecological understanding of acting pioneered by Phillip Zarrilli (2009; 2018), the actor within a performance is 'enacting a performance score while responding to the immediate environment

the actor inhabits each moment of performance' (2018, 102). This reveals the extent of entanglement between the work of design and acting, since the 'environment' that will ultimately stimulate actors and perhaps even govern their embodied responses often depends upon microscopic differences in the external surroundings, imperceptible to audiences: width of urn, intensity of light, height of hidden pillow, texture of fabric, even olfactory sensations. Zarrilli describes the purpose of rehearsal, if the actor is treated as a 'sentient being' responding to 'constraints and affordances':

In this view, both the design process and rehearsals are devoted to problemsolving the constraints of a text as interpreted in this specific production, as well as discovering how actors as individuals and as an ensemble exploit, utilize, enhance, embody, and actualize what is afforded. (Zarrilli 2018, 102)

In terms of constraints that require problem-solving for both actors and designers, Play has a great deal to offer. An obvious hurdle, familiar from post-show discussions everywhere, is 'how do you learn the lines?' Before directing actors in Play for the first time as part of the Ethica project in 2012–13 (presented in Dublin, Sofia and Enniskillen), I performed the role of M in a student production at Trinity College Dublin on 13 April 2006 (directed by Bush Moukarzel). I made the natural mistake of preparing lines block by block and performing them based on cues provided by the other actors. If this approach is taken, then the person cueing lights must follow the actors or try their best to follow the script, rather than exert real agency over the proceedings by leading the actors, and this inevitably diminishes the accuracy of timing, 'depressurising' the event to a large extent. While this situation is conventional for naturalistic drama - where mistakes or missed cues can be more easily rectified with ad-lib improvisation without drawing notice – any form of responsiveness between the urns is not aligned with the performance system in this case, where the sole relationship of each performer is with the light. In spite of the appearance of the script as a dialogue, each actor in *Play* is actually just speaking a monologue, and the light determines where the monologue is prompted or arrested midstatement. Beckett noted this in correspondence as early as 1964; reflecting on the newly introduced variation in the repeat, he wrote in a letter to Barbara Bray that it 'Won't matter to them as they are not cueing one another' (17 March 1964; Beckett, 2014, 596).

My experience as a performer verified that it is fundamental to the play for the light to have the supreme authority in the space. In order to incorporate that idea early on with actors and to accustom them to responding solely to the technological prompt, since 2012 I have asked actors to memorise their own text as a monologue without cues; typed into a single document at a comfortable font size, each speech is only three pages (excluding repeat).

This stage of rehearsal can begin from the date of casting, without calling all three actors into rehearsal together or needing to book any space; in the lead-up to *Intermedial Play* in 2017, I was able to rehearse with W2 (Caitlin Scott) using FaceTime while she was still at home in the UK, covering or exposing the camera to trigger the next line ('am I as much as ... being seen?'). I encourage actors to become accustomed to doing the full monologue with precise textual accuracy at all hours, in all weathers and physical configurations, in different spaces and with different levels of distraction, and to get used to being interrupted. This prepares them for the situation of performance – the dramatic action of being obliged to speak, but never being allowed to complete the speech in full – while also strengthening recall.

In naturalistic drama and its associated training, actors are often encouraged to examine their text critically for evidence of a 'character' with motivations, objectives, actions and obstacles, to break down 'beats' of individual action, and to live truthfully in the moment 'as if' one were the character in that situation. In *Play*, all that is required to achieve this is to *enact the system*, which will automatically produce the emotional state in the actor (and, one hopes, in the audience), due to the embodiment of the actor under duress. David Saltz categorises *Play* as an 'interactive algorithm', which, although 'written out like a conventional playscript, with sections of dialogue ascribed to characters and transcribed sequentially', nonetheless has the 'underlying logic' of an algorithm: 'a text and a rule' (1997, 45; emphasis in original). I have strongly encouraged actors to experience the interaction of text and rule as a challenge or game at which one could gradually improve through practice, rather than to perceive it as torment or trauma, which is a tempting but historically problematic discourse in testimonies of Beckettian acting (see Johnson, 2018, 58–62). To emphasise this, we would practise quite freely and with an element of fun, but always maintaining the game-structure of the 'goad' or the 'prompt'. We played naturalistically with situations like one-on-one interrogations, in which each line of monologue was prompted by an invented question (helping understanding of the text, early in rehearsals). We imagined this at n=1 (the first time it was asked), n=10 (the tenth interrogation), n=100 (the hundredth time) and n=1000 (at which point both the interrogator and subject are exhausted); this enabled us to create our own agreed scale of speed and intensity for the repeat, which we varied throughout the rehearsal period. We played with different methods of prompting the three heads: pointing a phone, a flashlight, a pair of scissors, or tapping on the shoulder when the actors' backs are turned, never allowing Beckett's actual sequence to arise until late in the rehearsal process, so that actors would not become too accustomed (through memory) to a textual cue, rather than a visual one. This approach ensured that the actors engaging with the technical demands would always be working in

a situation of 'live risk', a condition palpable and engaging to an audience in performance.

The secondary challenge of the performance is physical, or perhaps 'athletic': the actor will ultimately be constrained inside a narrow urn, which - in line with Beckett's specifications to avoid 'unacceptable bulk' (2006, 319) – requires either standing below stage level (i.e. through trap door or false raised stage) or kneeling. In the case of Ethica, the audience entered the theatre with the urns already populated by the actors' heads, telling their cyclical story in barely audible tones, as in the opening of Not I. This added ten minutes to what was already a twenty-minute stress position. To prepare for this in performance, actors can use rehearsal time to gradually build up tolerance for 'playing the game' in a kneeling position, preparing at each rehearsal by building breath and diction control. Initially in rehearsal this requires kneepads; once the urns are built, they can be fitted out with foam cushioning and interior handles, to stabilise the performers. Each time I have directed *Play*, the actors have formed a strong bond with their urns (which have slight variations based on construction and the actors' heights), inscribing their names or initials on the interior, so that arrival on stage becomes a kind of homecoming.

The methods above, worked out with an eye toward theatrical presentation, form the same underlying infrastructure for actors working in intermedial, digital or virtual translations. Indeed, digital culture has already slyly intervened in these descriptions of theatrical rehearsals, so much so that we could only be talking about the second wave of Beckett's *Play*: scripts were typed and reformatted on digital retrieval systems; rehearsals were held through video calls; mobile phones were used as flashlights. But the most important question for directing actors in our virtual experiments might be: what becomes of Beckett's system, of the performers' 'live risk', in other media than theatre? The next section takes on this question via a closer look at the design elements, especially the role of the light, in our cycle of digital adaptations.

From analogue to digital: designers and technicians

As stage lighting – which is dramaturgically central to the play given the role of the 'unique interrogator' (Beckett, 2006, 318) as a fourth character – moved away from analogue technologies in the mid-1980s to a digital communication protocol, *Play* entered a new era of performance possibilities that were unavailable at the time of composition. Both Rosemary Pountney (1988) and Olga Beloborodova (2019) have already traced the history of the light's centrality and the key moments of its development for Beckett

in terms of today's published text. To illustrate just how transformative the shift to digital lighting was for performance in particular, however, a close reading of the (Faber) published script's note entitled 'LIGHT' is necessary (Beckett, 2006, 318); the form of the philosophical dialogue is used to illuminate its many confounding issues. B, in the following extract, represents Beckett, whose dialogue is taken verbatim from the Faber text and his related letter to Christian Ludvigsen (22 September 1963; Beckett, 2014, 574); D is a twenty-first century Designer, whose text is imagined.

- B: The source of light is single and must not be situated outside the ideal space (stage) occupied by its victims.
- D: 'Victims' is evocative. But what do you mean by 'outside the ideal space (stage)'? The stage is a real space to me; it is never ideal. What is 'inside' or 'outside' the stage to you? The wings? The flies? Do you mean that you want the lighting instrument itself to be visible to the audience on stage?
- B: The optimum position for the spot is at the centre of the footlights, the faces being thus lit at close quarters and from below.
- D: Can we assume there will be footlights? Footlights are a technology from the late seventeenth century that stopped being essential to theatre architecture in the early nineteenth century. We perform mostly in black boxes with open stages now. Sometimes we rent strips of footlights for effect but what if there are no footlights, or even a raised stage?
- B: When exceptionally three spots are required to light the three faces simultaneously, there should be a single spot branching into three. Apart from these moments a single mobile spot should be used, swivelling at maximum speed from one face to another as required.
- D: Single lighting instruments do not 'branch into three' definitely not in the 1960s, anyway. Achieving this effect at reasonable cost will take four lights: one spotlight for the faces, and three others for the moments where all three faces have to be illuminated. Are you prepared to give up on 'the source of light is single', or do you want to cheat these so they *seem* to be coming from the same place? And remind me again: you want these lights to be on stage somewhere, not hung from the ceiling or behind the audience?
- B: The light should have a probing quality, like an accusing finger levelled at them one after another. This is obtained by a single pivoting spot and <u>not</u>, as in Ulm, by three fixed independent spots, one for each face, switching on and off as required.
- D: We've been over this you need four lights. But if the single spot has to move, who moves it? Where is that person? If you don't have somewhere to conceal the body, it looks like we will need to rent a moving light remotely controlled by digital multiplex protocol (DMX invented, by the way, in 1986). Those are still expensive and did not exist when you wrote your notes.

- B: It should be worked by an <u>invisible</u> operator with perfect knowledge of text, either by electric control from wings or manually from a kind of prompter's box below footlights.
- D: Operators are neither invisible nor perfect. The prompter's box died out with the footlights more than a century ago. This twenty-minute script has 260 lighting cues.
- B: This mobile spot should be set mechanically once and for all so as to strike full on its successive targets without fumbling and move from one to another at maximum speed.
- D: (exit weeping)
- B: (*a fortnight later*) I shall never give another theatre text, if there ever is another, to be published until I have worked on it in the theatre.⁵

One of the reasons the light proved so challenging – still the 'chief problem' of *Play* as Beckett writes to Schneider on 11 December 1981 (Beckett, 1998, 417) – is that Beckett seems to have been imagining a future capability for lighting that did not exist in the 1960s, and which is still quite challenging to achieve today. Beckett describes a mobile/pivoting light in which both the instrument and the beam can be visible. For the beam to be visible before it hits the faces, some form of medium in the air is necessary – though some smoke effects were used before electric light in the Elizabethan theatre, theatrical haze (again, usually controlled by DMX) did not become commonplace for this purpose until the 1980s. For the instrument to be visible within the same 'ideal space' as the actors, but also moveable without adding a visible operator, it needs some form of digital control. The 'Intellabeam' used in David Saltz's *Beckett Space* (1996) appears to be the first use of this solution.

Unaware of this precedent at the time, in *Ethica* in 2012–13, my collaborators Marc Atkinson Borrull and Colm McNally used an unconcealed, DMX-controlled moving-head light (MAC250), which was visible on the floor of the black-box theatre in front of the urns. This light switched on (pointing straight up) for the pre-show announcement and returned again post-show, suggesting a potentially threatening relationship with the audience as well as the actors. To begin *Play*, it would come to 'life' with an audible motorised swivel, sweep over the heads of the audience, rove back and forth across the faces to initiate the chorus (our interpretation of 'branch into three'), and then begin interrogation, changing intensity over time in line with the stage directions. The cues were pre-programmed following Beckett's order for the first round, but with a variable set of variations in the repeat, injecting additional risk into the system. The lighting operator, Ali Haves-Brady, rehearsed extensively both on her own and with actors, learning to cut off the actors by hitting the 'go' button on each cue slightly before their final word, to account for the latency in the digital cable. The MAC250 enabled pinpoint accuracy for each focal point spatially, but also created new challenges temporally: we discovered that it used different motor speeds for different distances, so a minor repositioning (between W1 and M, say) might go at a slightly slower speed than a larger move (from W1 to W2). The powerful bulb activated risks that analogue lighting does not have: even at low intensity, it was dangerously bright for the actors to look at directly, although this is called for in the 'meditation' section of the script – we 'cheated' it.

The concept of Intermedial Play (2017) was to stage Play 'live', but for an audience in a different room from the actors, using a web-enabled 'pan-tilt-zoom' (PTZ) camera in the role of the light. The audience would be watching a performance they knew was happening almost simultaneously, but with each line having been said just seconds before in a different space. Like Karmitz and Minghella before us, we would be finding a cinematic correlative for the 'mere eve' (Beckett, 2006, 317), but unlike both, we would not have recourse to any editing - the piece would have to be delivered accurately in one sitting as if in the theatre, but without the actors getting any live feedback from the audience's attention, and with the audience accessing the intensity of the actors' task only through a screen. Highlighting the surveillance aspects of this new technology and our uneasy relationship with our own devices was a strong motivation conceptually, but practically there was a huge problem; an actor does not know when the camera is on them, unless there is also a light on that camera. After exploring numerous options for a cueing system linked to the camera, we settled on the human interface as the most effective: sitting at the console, I would hit a lighting cue with my left hand, at the same instant as the right hand triggered the aligned video cue. One system was communicating with the actors in the room, while the other system opened the channel of visibility to the remote audience, manifesting the liminal status of this part-live, part-screened adaptation.

One of the conceits of *Intermedial Play* was the idea that the audience would gradually be seduced into identifying with the camera itself. The videography, designed by Néill O'Dwyer, referenced both Karmitz's *Comédie* and Beckett's SDR adaptation of *Was Wo* at the beginning of the piece, using a static, wide-angle shot, with the lights picking out the heads of the actors, perhaps initially lulling the audience with the 'film-of-a-play' aesthetic. Only from the first meditation did the camera begin to move, zooming in on the actors looking back into the lens. Referencing an idea from Minghella's version, the sound designer Enda Bates added the sound of the camera's own motor from the start of the repeat. This suggested that the viewer was travelling inward into the mechanism itself, actively 'converging' in our era of convergent media. The VR and AR adaptations,

Virtual Play and Augmented Play, completed this trajectory by turning the user into the light itself.

Towards the virtual

A week after their first proto-XR experiment with *Intermedial Play* in April of 2017, the same actors and creative team entered the green-screen studio at V-SENSE, a laboratory at Trinity College Dublin concerned with 'Extending Visual Sensation through Image-Based Visual Computing'. The project's principal investigator, Aljoša Smolic, was supporting our VR/AR experiment with Play out of a belief that creative projects would generate novel questions and challenges, driving research forward and creating new opportunities for impact. In this case, the research was on how to (relatively inexpensively) capture high-quality interactive 'free-viewpoint video/volumetric video' and 'ambisonic audio', for implementation in six-degrees-of-freedom (6DoF) immersive VR. On the day of the shoot, each actor would get into a single urn surrounded by carefully calibrated cameras in a 150-degree arc. Months later, after extensive digital processing of these files and integration with sound, audiences would ultimately experience Play by donning a head-mounted display and being immersed in a 360-degree digital environment: a grey, somewhat misty oculus with an open dome, referencing both crypt and eve.

Digital urns – finally narrower than the bodies of the actors, and needing no holes for legs – hold the captured performance of the live actors' heads, extracted into voxels and mapped on to a 3D mesh, to create the striking illusion of dimension and weight where there is, in fact, only code. A user, unconstrained by the time or space of this captured live performance, acts as the light exploring this dark space, and whenever their attention rests on an urn, its inhabitant speaks. As soon as their attention diverges, the monologue stops, but it immediately picks up and precisely where it left off if the user looks again, enacting the interactive algorithm of the play without the mediation of a separate light operator. Deprived of its single da capo repetition, Virtual Play is effectively infinite: a user could explore all possible permutations and sequences, if they wished, forever. Augmented Play, perhaps even more powerfully and intimately, uses the same source files and algorithms to insert the *Play* actors and urns into whatever room the user is currently in, through the interface of a smartphone screen, a HoloLens, or a Magic Leap.

Such virtual dramaturgy obviously opens new potential for this text, while also doing violence to it: Beckett's sequence, for example, cannot be preserved unless the user is already intimately familiar with *Play*. This

violence, however, is not without precedent. Describing the radio adaptation of *Play* for the BBC Third Programme in 1966, Martin Esslin records:

In his original production [...] Beckett had not merely had the whole text repeated exactly as it had been spoken the first time round; he had supplied a new way of permutating the order in which each of the three characters spoke his text. Each character spoke the same lines in the same order *within his own text*, but the order in which he was called upon to speak was different. Beckett suggested that each character's part should be recorded separately and that these permutations of exactly the same words spoken in exactly the same way be achieved by cutting the tape together like the takes of a film. (Esslin, 1983, 139; emphasis in original)

In his authoritative essay on Karmitz's Comédie, Graley Herren offers an alternative reading of Beckett's infamous 1957 proclamation, made in a letter to Schneider, that genres must be kept distinct. In his reading, Beckett's resistance to All That Fall on stage is 'an insistence that any work of art take its medium of expression appropriately into account' (Herren, 2009, 14). Herren boldly extrapolates, observing Beckett's own practice, that 'if a work is to be effectively transplanted into a new medium, it must be adapted; otherwise distinction between genres is lost and confusion ensues' (14; emphasis in original). This adaptation of *Play* depended on identifying what the virtual medium is truly about, making an argument that it is about truly opening narrative to the user's control, engaging the user in the 'game' of the actor and the director, moving from the sequential to the simultaneous. In his 2019 essay 'Digitizing Beckett' for The New Samuel Beckett Studies, Dirk Van Hulle writes that in Virtual Play, 'Lessing's Neben- and Nacheinander are turned into a Durcheinander' (Van Hulle, 2019, 20), whereas in Intermedial Play, he sees instead that

The striving for the *Miteinander* – both the literary aim of simulating simultaneity and the human wish to truly live together – turns out to be a painful realization of our fundamental *Nebeneinander*-ness, living next to, rather than with, each other, everyone in her/his own urn. (20)

All available evidence suggests that two ideas can be true at the same time: *Play* can be an immensely specific and refined performance system with clear restrictions, organically related and responsive to the medium of theatre in which it first appeared. It can also make a translational journey between languages, nations, directors, contexts, performers, eras and indeed media, with the performance system altering, but with the thought the play is thinking left intact. Through such transmissions between contexts, some of which may result in quite radical differences from an original medium, the experimental heritage of Beckett's own work is reinvigorated, and the work is opened to a new generation accessing Beckett through new media.

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Notes

- 1 Michael Scott's description of the project's visual structure resembles the second and fourth movements of *Intermedial Play* (2017): 'When the actors start speaking individually, the camera would zoom into a close-up showing the top of one urn and the actor's face, and remain on this as lines are spoken' (Beckett, 2016, 165, n. 1). Beckett's letter to Scott in response included a note of caution against this approach: 'you lose the speaker's urn and the other two urns and faces whose shadowy presence during individual speeches is of use'. But he also offered some (conventionally self-deprecating) support, perhaps sharing lessons from his own film adaptation of the play three years previously: 'There is really no film here as I think you will discover perhaps not without pleasure and excitement [...] I hope in any case that you will enjoy trying' (after 23 June 1969; Beckett, 2016, 165).
- 2 A full description of the projects and full list of publications, with images and video content from all three versions, is available at https://v-sense.scss.tcd.ie/research/mr-play-trilogy/. Publications from the project include a generalist overview of the project for a special issue of *Contemporary Theatre Research* (Johnson and O'Dwyer, 2018) and an interdisciplinary assessment of VR narrative strategies for the *International Journal of Performance and Digital Media* (O'Dwyer and Johnson, 2019), as well as the proceedings of several computer science conferences, including IEEE (2017), SIGGRAPH (2018) and HCII (2020). *Virtual Play* received first prize at the New European Media Awards in 2017.
- 3 There is considerable complexity in the terminology around 'presentational' and 'representational' qualities in drama, due to conflicting usages of these terms in

actor theory and the semiotics of drama considered as a whole. My terminology here draws on Keir Elam, who writes of 'presentational' moments like audience address that 'they appear to be cases of "breaking frame" [...] but in practice they are licensed means of confirming the frame by pointing out the pure facticity of the representation' (Elam, 2002, 81). In fact, there are also elements of *Play* that are (perhaps parodically) aligned with what Elam describes as 'representational' but which he notes are in fact quite non-naturalistic conventions: 'dialogic exchange [...] organized in an ordered and well-disciplined fashion quite alien to the uneven give-and-take of social intercourse' (82). Elam could be writing of the action of the light in *Play* when he says, of such conventions: 'The exchange proceeds, usually, in neat turn-taking fashion, with a relative lack of interruption and the focus firmly centred on one speaker at a time' (82).

- 4 Writing on 17 March 1964 to Barbara Bray, he exposes just how much he was involved, to the extent of seeing actors on his own for half the day: 'Rehearsals morning with George, then individually with me afternoon' (Beckett, 2014, 596). This extent of unmediated contact with actors would be unusual for a playwright, or even an assistant director.
- 5 This final line comes from a different source, but it was also written in the context of *Play* Beckett's letter to Siegfried Unseld (19 March 1964; Beckett, 2014, 598).
- 6 Sean McCarthy references *Play* in the context of his argument that Beckett is a 'convergent artist' (2009, 104), drawing on the concept of 'convergent media' as discussed in the first decade of the twenty-first century by Henry Jenkins (2004) and Gracie Lawson-Borders (2006).
- 7 These terms and the specific research aims of V-SENSE with *Virtual Play* are explained in greater detail in Johnson and O'Dwyer (2018) and O'Dwyer et al. (2017).

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Editing Beckett in digital media: Towards a digital Complete Works Edition

Dirk Van Hulle

Introduction

The printed medium has had a significant impact on the conceptualisation of Complete Works Editions (CWE). It has prompted editors to present authors' 'complete works' as a sort of holy grail: an editorial vessel that captures each word in the (capital A) Author's canonised works as if it were a drop of divine blood, purged from any kind of textual impurity or corruption. This 'purity' discourse marks, for instance, the influential Greg-Bowers tradition of 'copy-text' editing. Fredson Bowers presented the goal of textual criticism as follows:

The recovery of the initial *purity* of an author's text and of any revision (insofar as this is possible from the preserved documents), and the preservation of this *purity* despite the usual corrupting process of reprint transmission, is the aim of textual criticism. (Bowers, 1970, 30; emphasis added)

In the past few decades, this purity discourse has been questioned and criticised in editorial theory (Bryant, 2002; D'Iorio, 2010; Eggert, 2019a; Gabler, 2018; McGann, 2014; McKenzie, 1999; Pierazzo, 2015; Pierazzo and Driscoll, 2016; Robinson, 2012; Shillingsburg, 2017; Van Hulle and Shillingsburg, 2015), but in editorial practice it has turned out to be more difficult to find adequate alternatives.

At first sight, the editorial situation regarding Beckett's works – which have not yet been published in a critical edition, let alone a bilingual critical edition – may seem regrettable. But it may also be an opportunity. Instead of producing a print edition, Beckett's bilingual works present an opportunity to conceptualise a digital CWE. Such a reconceptualisation necessitates a shift from a 'grail' paradigm (conditioned by the print medium) to a 'quest' paradigm (as enabled by the digital medium), which means seeing Beckett's oeuvre not so much as a grail, but a quest, both from the point of view of

(a) the writer and from that of (b) the reader. Regarding (a), for Beckett, like for most authors, writing is a constant search for the right words and the right form to convey the content. This constant search on the micro-level of enunciation has consequences for the macro-level as it determines the author's 'voice' and the identity of the oeuvre. As a result, there are conscious or unconscious idiosyncrasies that connect the individual works within an oeuvre. Beckett emphasises these interconnections by means of intratextual references, such as his novels referring to the protagonists of the earlier novels. Beckett's literary quest is not straightforward or linear, nor does it necessarily imply 'progress', which would entail that the author is continuously 'improving' his writing. From a reader's perspective, (b,) an interest in Beckett's complete works goes beyond engrossment in a particular text and implies an interest in the complex development of the oeuvre as a whole. If a digital edition of Beckett's works really aims to be complete, it should present the entirety of this quest, not just the polished end result of the published works.

The CWE has always been an instrument in processes of canonisation. The traditional single-text edition in print format tends to reinforce two forms of canonisation: a CWE often helps establish an author's fame and status as belonging to the best writers of their period in literary history; at the same time, the CWE also plays a role in establishing an author's own canon, the set of works that are recognised as being genuinely by this author.

This latter canon usually serves as the centre of the CWE. The published texts of the canonical works thus become an endpoint: the reading notes, manuscripts, typescripts, proofs, and so on are mentioned only in so far as they have resulted in the endpoint or telos. This teleological approach certainly has its merits, but it raises two questions about (a) the completeness of a CWE, and (b) about the notion of the work or works.

'Completeness' and 'Works'

As for the 'completeness' of a CWE, it is often unclear what belongs to Beckett's canon and what does not. Sometimes a CWE includes works that were not published during the author's lifetime. Archival research often unearths more, sometimes unknown unpublished works, which raises the question: what belongs to the canon? Or in this particular case: what is the Beckett canon? In *A Beckett Canon*, Ruby Cohn discusses mainly Beckett's published works, but also a few unpublished texts (Cohn, 2001). In the meantime, Beckett scholars have found more unpublished works (Nixon, 2014; Van Hulle, 2011a; Van Hulle and Weller, 2018), which raises more fundamental questions: Do these works belong to the canon, or not? Should

they be included in a CWE? Or to put it differently: How 'complete' is a Complete Works Edition without them? What is the status of Beckett's notebooks, containing ideas and loose jottings that did not necessarily lead to any particular work? Some notes turned out to be dead ends, others ended up in multiple works.

Perhaps even more fundamental than the issue of 'completeness' is the question of what is meant by 'works'. CWEs usually have a rationale that is quite explicit about such things as the choice of copy-text, but often less explicit about their organisation. For CWEs in print, there seems to be an implicit consensus about the conceptual and material division between the reading texts and the critical apparatus. While the reading texts are the product of textual criticism, the apparatus is often regarded and treated as its by-product, so that as recently as 2018, Hans Walter Gabler still noted the hierarchical nature of the nomenclature of scholarly editions' various parts: 'the sections sensed as auxiliary are called 'Apparatus', 'Annotations', and 'Commentary' (2018, 122), to ask the key question: 'how is it that, in general awareness, editions are still mainly perceived simply as texts, and in terms of the texts only that they offer?' (136).

The oeuvre as a gestalt

For 'complete works', print still serves as the medium of choice. A few recent examples in the modernist period are critical or historical-critical editions of the complete works of Paul Celan (Suhrkamp), Joseph Conrad (Cambridge University Press), Katherine Mansfield (Edinburgh University Press), Marcel Proust (Gallimard), Dorothy Richardson (Oxford University Press), Arthur Schnitzler (de Gruyter) and Virginia Woolf (Cambridge University Press). The first decades of scholarly editing in the digital age have seen quite a few interesting new, pioneering editorial enterprises, but seldom of 'complete works'. In terms of scope, at least two tendencies mark the development of digital scholarly editions and digital archives at this moment.

Digital editions

Because the development of a digital scholarly edition is a time-consuming task, and funding opportunities are usually precarious and/or in the short term, many editing projects limit their scope to a single work, or to a selection of the author's oeuvre. For example, the *Woolf Online* project¹ hosts a digital edition of one novel, Virginia Woolf's *To the Lighthouse*, without tools for comparing the edition's different versions of *To the*

Lighthouse to one another. Similarly, the Digital Thoreau edition focuses on a single work, Walden. Digital Thoreau does offer a selection of other, shorter texts, but these are presented as reading editions, based on a single version of the text. The edition does not offer draft materials or transcriptions of different versions, nor do the editors connect the various works to one another, or place them in the larger context of Thoreau's oeuvre. By contrast, the Faustedition² does offer a high-level genetic analysis, but it is also limited to a single work. Unlike single-work editions, editions such as Arthur Schnitzler digital³ aim to provide a more detailed access to more than one work. However, their scope remains limited, as they offer a selection of works. Although the Schnitzler edition does offer detailed and annotated transcriptions of the extant documents, as well as an annotated reading edition of the full text, the editorial focus remains within the same work rather than across the author's larger oeuvre.

Digital archives

The more comprehensive initiatives are usually conceived as digital archives, which aim for completeness but have little regard for connections between the documents they host. The *Jonathan Swift Archive*, 4 for example, is a collection of transcriptions of Swift's works in the Oxford Text Archive repository, without analysis or links between versions. The Thomas Grav Archive, 5 on the other hand, offers more analysis, combining textual and explanatory notes extracted from earlier critical editions with an analysis of the form of Gray's poems. But although the archive's 'long-term objective' is to include 'published works, manuscripts, letters, notebooks, and marginalia' (Huber, 2000), few such documents have vet been added – and those that have, have not been transcribed. Digital archives such as the Shelley-Godwin Archive⁶ and the Whitman Archive⁷ do have elaborate transcriptions of a wide range of source materials but do not provide connections (such as links, side-by-side comparisons, or collations) between different versions of the same work. The few archives or larger-scale editions that do provide such connections (such as the Charles Harpur Critical Archive⁸ or the James Joyce Digital Archive⁹) do so from a teleological perspective, usually for a selection of the works.¹⁰

While most digital editions privilege a teleological approach and have a limited scope, the archive model is usually quite complete but offers few connections between the documents. These connections or relations between different documents are a key element in what distinguishes a digital edition from a digital archive. Similarly, relations are also to a large extent an element that would distinguish Beckett's digital CWE from a print counterpart. Owing to the limited space, a printed CWE of Beckett's oeuvre would

necessarily present it as a set of 'works', represented by a critically edited text and accompanied by annotations and a critical apparatus; and due to the codex format, the individual works are often contained in separate volumes. As a result, Beckett's complete works would appear as a sum of parts. By means of introductions and annotations, the editor will have to remedy this by explaining that the oeuvre also constitutes a gestalt, a whole that is more than the sum of its parts.

A gestalt, however, is not only greater than, but also different from, the sum of its parts. As Caroll Pratt writes in the introduction to Wolfgang Köhler's The Task of Gestalt Psychology, it is a common error to leave out the word 'different' and simply define a gestalt as 'the whole is more than the sum of the parts' (Köhler, 1969, 9). This definition mistakenly ignores that a relationship between the parts is itself something that is not present in the individual parts themselves (10). If all the parts of a bicycle are laid out on the floor of a bike shop, for instance, they still do not make up the bicycle. Only when the parts are assembled and come to take up a specific relation to each other, do they become something different, that is, a bicycle. The challenge, therefore, is to conceptualise Beckett's digital CWE in such a way that his literary oeuvre is presented in all its complexity: something that is both greater than, and different from, its parts because of the relations between them. Precisely because of this complexity, readers need to be provided with the tools – such as a 'Pathfinder' and 'Pathmaker' (see below) - to navigate the labyrinth of documents, to discover the relations between them and find the genetic paths.

Such a quest-based digital CWE of Beckett's oeuvre presents it as a web of inter- and intratextual relations and thus opens up new avenues for interpretation; it rethinks the role of the editor, from being the Author's high priest who guards the grail in the form of the 'definitive' single text to becoming a maker of connections, providing readers with tools to navigate the complete works; and it enables the macroanalysis of Beckett's complete oeuvre across versions.

To meet these objectives, we need to start from a change of mindset, a different way of conceiving of a writer's complete works. The difference between the 'grail' paradigm and the 'quest' paradigm goes to the heart of the key question: what is a work of art? If we treat the oeuvre as a gestalt, this raises the question whether the work of art is a clear-cut 'figure' (a finished product) or rather the dialectics between 'figure' and 'ground' (Van Hulle, 2011b), between the vase and the two faces in Edgar Rubin's famous drawing. Until now, the editorial theory and practice of producing a CWE have considered the work of art to be only the finished product (say, a vase or a grail), which implies that the manuscripts and other traces of the production process are merely a 'background'. But even if that is the case, it is

important that these traces of the writing process are recognised as such: as a ground whose contours give shape to the figure. Modern authors are often well aware of the function of the ground against which this figure came to the fore, and many of them therefore voluntarily place those traces of the creative process at their readers' disposal. Arthur Schnitzler, for instance, suggested that 'some of his unfinished failures would, in the future, be just as, or even more, interesting to his readers than the successful finished products'. The rationale behind the envisioned, digital CWE of Beckett's oeuvre is that, in order to find out why a particular literary oeuvre works, it is crucial to know how it was made. The model combines insights from digital scholarly editing and genetic criticism, whereby the digital format allows for a greater flexibility and scope, and genetic criticism introduces draft material into the edition.

Digital scholarly editing

According to Patrick Sahle's definition, digital scholarly editions are 'guided by a digital paradigm in their theory, method and practice' (Sahle, 2016, 28). This 'digital paradigm' is characterised by the use of multimedia, hypertextuality, modularised structures, fluid publication and collaborative editing (28–9). According to Hans Walter Gabler, this implies that 'manuscript editing in the digital medium constitutes a fundamental extension of the modes of scholarly editing' (Gabler, 2018, 133). For this 'fundamental extension', John Bryant's 'fluid text' theory has laid an important foundation. Bryant duly notes that most texts exist in various versions, but 'the problem of access' is a major reason that 'fluid texts have not been analyzed much as fluid texts' (Bryant, 2002, 9).

Bryant's theory applies in the first instance to individual works, but can be expanded to the scope of the oeuvre. If a writer's individual works are recognised as fluid texts, the oeuvre as a whole is not a solid, established canon but a continuous dialectic between the finished and the unfinished. A digital edition of Beckett's complete works does not deny the search for closure and completion that characterises each writing project, but it also foregrounds its textual fluidity. The difference with the fluid text theory, however, is that according to Bryant 'a text's full fluidity extends into numerous kinds of cultural revision, beyond the writer's death and "will." Thus, from a fluid-text perspective, genesis can be both authorized and nonauthorized' (Bryant, 2002, 75–6). Bryant's extensive understanding of textual fluidity would, however, make the corpus potentially so vast that the envisaged CWE would become unfeasible. Therefore, it seems more realistic to work with the more limited remit of genetic criticism.

Genetic criticism

To a large extent, the single-text paradigm reflects a similar product-oriented logic as the one that characterised structuralism, dominated – according to Pierre-Marc de Biasi – by 'a synchronic obsession with form' (de Biasi, 2004, 41). This 'synchronic' focus relates to the syntagmatic dimension of the CWE (the edited reading text represents one version of the textual history of a succession of works). Since the second half of the 1960s, genetic criticism took it upon itself to add a temporal, paradigmatic dimension to the syntagmatic one. Genetic editions such as the *Faustedition* give shape to this paradigmatic dimension, but only for one work or a limited set of works. Only when both the syntagmatic and paradigmatic dimensions are mapped for the complete oeuvre does the edition fully enable readers to perform both inter- and intratextual research across versions.

Building on Michael Riffaterre's definition of intertextuality as 'the reader's experience of links' between different works (Riffaterre, 1980, 4), a genetic approach suggests that this experience also includes that of the genetically informed reader. Often an intertextual allusion is positively recognisable in the published text, but Beckett's manuscripts regularly contain allusions and references to external source texts which have been gradually obscured or undone in the subsequent drafts. Editors need to provide readers with an edition that enables this kind of 'invisible' intertextuality. An example of 'visible' intertextuality is the first of almost 300 notes Beckett took from Robert Burton's *Anatomy of Melancholy* in his so-called '*Dream'* Notebook: 'little wearish old man (Democritus)' (Beckett, 1999, 104). As John Pilling notes, this entry was used in the poem 'Enueg I' (in the collection Echo's Bones) and in the story 'Echo's Bones' (209). Whereas these are examples of relatively straightforward intertextuality, recognisable in the published texts, a classic illustration of 'invisible intertextuality' is Beckett's reference to Dante in the manuscripts of Stirrings Still (Van Hulle, 2011a): the inconspicuous word 'faint' ('and then again faint from deep within ...'; Beckett, 2009, 114; emphasis added), which in the published text does not raise any intertextual suspicion, turns out – thanks to the manuscripts – to be an allusion to the line 'chi per lungo silenzio parea fioco' in Canto I of Inferno (Dante, 1960, 5; Canto I, line 63; emphasis added) when Virgil appears to Dante for the first time, 'faint' or 'hoarse' from long silence (even though Virgil has not yet spoken at that moment in the text). Not only is the reference important; the fact that Beckett undoes it is possibly even more significant as it exemplifies his poetics of ignorance; instead of showing off his erudition, Beckett consciously downplayed it. But that does not mean the reference is not there; genetically informed readers are aware of its underground presence in what Thomas C. Connolly - in his endeavour to destabilise canonical readings of Paul Celan's work – has called the 'sous-oeuvre' (Connolly, 2018), the marginalised parts of a work that are traditionally eclipsed. The classic 'fioco' example thus becomes more interesting and complex as an example of intratextuality across versions.

As mentioned, Beckett often alludes to his previous works, creating an intratextual network of references, a set of 'links established by a reader between at least two texts written by the same author' (Martel, 2005, 93). In the example of the 'wearish old man', he kept using this adjective, even after the Second World War, for instance in *Krapp's Last Tape*, thus creating an intratextual web of references. The same goes for the adjective 'faint'. For intratextual research across versions, readers require access not only to the 'complete works', but to all the manuscripts as well. This kind of hidden allusion can be, and has been, unearthed by means of digital genetic editing in an edition of Stirrings Still and 'Comment dire' (Beckett, 2011). But due to the limited scope of this edition, which comprised only two of Beckett's late works, the diachronic axis covers only a very narrow strip toward the very end of Beckett's oeuvre in the imaginary graph covering the complete works across versions. A CWE spans the entire oeuvre and should thus be able to show how the 'fioco' reference stretches back in time to the days before Beckett's career as a writer had even started. This opens up a whole new dimension: since the word 'faint' clearly had a very specific intertextual meaning for Beckett, a digital CWE would enable readers to investigate intratextually how this word functions in all of Beckett's works and to what degree it has a similarly Dantean resonance over the course of his career.

Synchronology and creative concurrence

By including the 'sous-oeuvre' we can transcend the single-text paradigm that the print medium has imposed on the CWE, and develop an edition of the author's complete writings that is larger than, and different from, the sum of its parts. In the same way that a critical edition adds scholarly value to a literary work by contextualising the text's development over time, so too should a complete works edition raise our understanding of an author's literary development to a new level by putting their individual works into the larger context of their oeuvre. Much like with individual literary works, a literary oeuvre does not develop in a straight line. Instead, the path of an author's literary career often includes a lot of trial and error, dead ends, and abandoned experiments. Equipped with the experience of what has and has not worked before, seasoned authors such as Beckett may revisit their previously published and abandoned works – even scavenge earlier drafts and manuscripts for unused materials – and consider what to try again,

and where to deviate as they continue working on new materials. At any point in this constant quest, an author may be working on multiple works simultaneously, taking up on one work when another is not progressing – at times consciously or unconsciously allowing these works to inform one another.

To illustrate just how interwoven the geneses of an author's individual works can be, it is useful to have a brief look at Beckett's writing desk in the winter of 1957–58. In the fall of 1957, Beckett was struggling with the translation of his novel *L'Innommable* into English, and so he interrupted his translation to write a first draft of a radio play, *Embers*. At that moment (10 December 1957), the BBC broadcast a fragment from Beckett's novel *Molloy*, read by Patrick Magee. Beckett was struck by the actor's voice, but the transmission was not ideal. While Beckett temporarily abandoned his work on the radio play and continued translating *L'Innommable*, he went to the BBC studios in Paris where they played a recording of Magee's reading. This was probably the first time Beckett saw a tape-recorder, which prompted him to start writing the play *Krapp's Last Tape* (originally called *Magee Monologue*) even before the end of his translation of *L'Innommable* – which he finished when he was three days into the writing process of *Krapp's Last Tape*.

As these crossovers between different works demonstrate, the study of writing processes defies the boundaries of the single-text paradigm. Genetic criticism begs to break free from this editorial paradigm, but has – until now – been unable to do so, because we simply did not have the data. With projects such as the *Beckett Digital Manuscript Project*, we are now on the verge of achieving critical mass for this research, where we start to have enough data to connect the writing processes of individual works of an entire oeuvre. And we have recourse to an environment (in the digital paradigm) that is flexible enough to host these data alongside our analyses.

Editorial model

The editorial model for Beckett's digital CWE, designed to see how an oeuvre effectively works as an oeuvre (rather than as a set of separate works), operates along four axes: 1) digital archive and digital edition; 2) endogenesis, exogenesis and epigenesis; 3) microgenesis and macrogenesis; and 4) teleology and non-teleology.

Digital archive and digital edition: The difference between a digital archive and a digital edition is not marked by a clear-cut border, but is a matter of degree (Eggert, 2019b). The decisive criterion that distinguishes a digital edition from a digital archive is the editor's role in establishing connections

between the various versions and works. Instead of generating a single, critically edited reading text, the editorial team maps the genetic paths through the genetic dossier by indicating how a particular note derives from a particular source text (upstream) and feeds into a particular draft (downstream). This involves discovering and making links, on the one hand, between endogenesis, exogenesis and epigenesis, and on the other hand, between the micro- and the macrogenesis.

Endogenesis, exogenesis and epigenesis: In addition to endogenesis and exogenesis, denoting respectively the 'inside' of the writing process (the drafts and successive revised versions) and the 'outside' (external source texts that have left traces in the genetic dossier), the model also takes account of the epigenesis (the continuation of the genesis after publication), acknowledging that at any point there is the possibility that exogenetic material affects the endo- or epigenesis.

Microgenesis and macrogenesis: The model enables the study of both the microgenesis (the processing of a particular exogenetic source text; the revision history of one specific textual instance across endogenetic and/or epigenetic versions; the revisions within one single version), and the macrogenesis (the genesis of the oeuvre in its entirety across multiple versions) (see Van Hulle, 2016).

Teleology and non-teleology: Readers are enabled to approach the materials both in a teleological and in a non-teleological way. The teleological approach starts from the published works; the non-teleological approach is organised according to the chronology of the writing process (i.e. not just the chronology of publication) and the typology of documents. To fully understand the dynamics of the writing process, it is necessary to build an infrastructure that allows Beckett's works to be organised and studied in more than one way, which necessitates not only a teleological, but also a non-teleological approach. This non-teleological approach enables readers to examine notes and drafts without the benefit of hindsight, to investigate what Beckett was doing and thinking when he did not yet have a clear idea of what his notes would lead up to, or even whether these notes would lead to any result at all. Non-teleology in this context is understood as a form of creativity that does not seem to serve a direct purpose (in the sense that it did not directly feed into a published work). Reading notes that were not appropriated or processed in a literary draft are not 'purposeless'. They may be compared to vestigial organs, such as the tiny, vestigial hind leg bones buried in muscles toward the tail ends of the boa constrictor that do not seem to have any direct function. These vestigial notes, however, do have an indirect function in the creative process and therefore deserve a place in a CWE. Beckett's manuscripts and other relevant materials (such as letters, notebooks and diaries) have been dubbed the 'grey canon' (Gontarski, 2005, 143). But

even this revaluation may suggest a hierarchy between the real canon and the grey canon. The author's works are typically compartmentalised in volumes (for instance, one volume per novel), which forces editors to present notes as belonging to the genesis of a particular work. As I have argued, this ingrained, teleological conceptualisation is to a large extent conditioned by the print medium. The digital medium offers us new means, not just to aim for completeness in a CWE, but also to find a new way of dealing with this completeness, a new way of interconnecting the documents and enabling readers to navigate the oeuvre and *sous-oeuvre*.

A digital edition of Beckett's complete works can play a pioneering role, for the corpus has all the necessary qualities: the availability of a large volume and variety of data (manuscripts, typescripts, marginalia, notebooks) that has been largely digitised; Beckett's canonical status as a Nobel-prize winning author, whose work – however – has not vet been published as a CWE: his works' frequent references to earlier works, which makes his oeuvre a suitable test case to see how the digital CWE can help the reader navigate this intratextual web and test the research hypothesis; Beckett's long creative career, which spans more than fifty years and constitutes a rich and multifaceted oeuvre; the variety of genres and media (radio, TV, film) that Beckett practised throughout his life, which allows for building a model suitable for drama, poetry, prose fiction and critical essays, and which makes it relevant to research fields such as intermediality and media studies. Beckett's translingualism is yet another asset to the new CWE model: since he wrote in two languages and translated his own works, this will be an edition of a bilingual oeuvre, which makes it relevant outside literary studies (e.g. translation studies).

Apart from the published works, the corpus for such an edition includes the manuscripts, typescripts and proofs of all of these works, as well as notebooks with reading notes that were used in the drafting process. It also incorporates unfinished fragments such as 'Long Observation of the Ray', 'Last Soliloguy' and 'Epilogue'. Digital facsimiles and transcriptions encoded in XML (eXtensible Markup Language) according to the guidelines of the TEI (Text Encoding Initiative) are supplied for all the texts. In addition to the facsimiles and transcriptions of the texts, the editorial configuration features a number of research aids such as a manuscript catalogue and bibliographical descriptions. The more demanding reader will be able to navigate the edition by using an automatic collation tool (in collaboration with the Huygens Institute, Amsterdam; Haentiens Dekker et al., 2015), genetic paths and genetic maps, and a search engine with suggested searches (including the advanced search for features such as intertextual references, dates, stage drawings and doodles in the manuscripts). The core features of the digital edition, and ones that set it apart from any print equivalent, are the Pathfinder (a chronology that guides readers through the maze of manuscripts) and the Pathmaker (with which users can make and store their own connections between documents). In addition to the integration of Beckett's digitised personal library, the editorial model includes a reconstruction of the virtual library – the books we know Beckett had read, based on information in notebooks and letters, but which are no longer extant. The aim of such a digital CWE is to respect the complexity of Beckett's oeuvre, without abandoning readers in the chaos of manuscripts. Digital media provide us with the means to design the tools that enable readers to explore this complexity, characterised by its dialectic of completion and incompletion.

Within digital humanities, both genetic criticism and textual scholarship are exceptional in that they are forms of microanalysis, whereas the general trend in digital humanities is toward macroanalysis (Jockers, 2013). But these forms of macroanalysis generally make use of only one version of the texts in their corpus. What is lacking, therefore, is macroanalysis across versions. That is why we need to invest in the making of digital CWEs, transcribing every single word or cancelled letter of a manuscript and thus assembling a large corpus of modern manuscripts. For the digital genetic microanalysis of Beckett's works, involving careful transcription of barely legible manuscripts and the encoding of deletions, additions and marginalia, is the key to enabling Beckettians of the future to perform macroanalyses across versions.

Notes

- 1 www.woolfonline.com (accessed 19 May 2020).
- 2 www.faustedition.net (accessed 19 May 2020).
- 3 www.arthur-schnitzler.de (accessed 19 May 2020).
- 4 https://ota-qa.bodleian.ox.ac.uk/repository/xmlui/handle/20.500.12024/126849 (accessed 19 May 2020).
- 5 www.thomasgray.org (accessed 19 May 2020).
- 6 http://shelleygodwinarchive.org (accessed 19 May 2020).
- 7 https://whitmanarchive.org/ (accessed 19 May 2020).
- 8 http://charles-harpur.org/Home/Site/ (accessed 19 May 2020).
- 9 www.jjda.ie/main/JJDA/JJDAhome.htm (accessed 19 May 2020).
- 10 Examples in other disciplines include the digital editions of philosophical works by Hannah Arendt, Søren Kierkegaard, Friedrich Nietzsche and Ludwig Wittgenstein. The Arendt edition will be published first in print form and subsequently online; the Kierkegaard CWE is, as Gabler puts it, a digitised edition 'in (simulated) book form' (Gabler, 2018, 129). Nietzsche Source publishes a digitised version of the Colli & Montinari edition and a facsimile edition.

11 'Manches von dem unvollendeten, ja dem mißlungnen wird denen, die sich in 50 oder 100 Jahren für mich noch interessiren gerade so interessant oder interessanter sein als das gelungene, das fertig gemachte' (Arthur Schnitzler, digitale historisch-kritische Edition (Werke 1905 bis 1931), www.arthur-schnitzler.de).

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Note: References to Beckett's texts and productions in French and German are given after the English title. 'n' after a page reference indicates the number of an endnote on that page. Page numbers in italics refer to illustrations.

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