Posthumanism and Deconstructing Arguments

Corpora and Digitally-driven
Critical Analysis

Kieran O'Halloran

ROUTLEDGE

Posthumanism and Deconstructing Arguments

Posthumanism and Deconstructing Arguments: Corpora and Digitally-driven Critical Analysis presents a new and practical approach in Critical Discourse Studies. Providing a data-driven and ethically-based method for the examination of arguments in the public sphere, this ground-breaking book:

- Highlights how the reader can evaluate arguments from points of view other than their own;
- Demonstrates how digital tools can be used to generate 'ethical subjectivities' from large numbers of dissenting voices on the world-wide-web;
- Draws on ideas from posthumanist philosophy as well as from Jacques Derrida, Gilles Deleuze and Félix Guattari for theorising these subjectivities;
- Showcases a critical deconstructive approach, using different corpus linguistic programs such as AntConc, WMatrix and Sketchengine.

Posthumanism and Deconstructing Arguments is essential reading for lecturers and researchers with an interest in critical discourse studies, critical thinking, corpus linguistics and digital humanities.

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To Catherine

Make a rhizome. But you don't know what you can make a rhizome with, you don't know which subterranean stem is effectively going to make a rhizome, or enter a becoming, people your desert. So experiment.

Gilles Deleuze and Félix Guattari

The notion of the non-human, in-human, or post-human emerges as the defining trait of nomadic ethical subjectivity.

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Preface

A snippet from an argument. I found it in a newspaper with wide circulation. The argument holds that UK farmers should be allowed to grow genetically modified (GM) crops, but activists opposed to GM are allegedly preventing this. Here are consecutive sentences from the conclusion:

[1] UK farmers must be given the freedom to choose modern, efficient farming methods based on tried and tested **science**.

[2] We need **science**-based decision-making. The world has moved on, and it's time the anti-**science** activists did too.

As the bolded words and arrows indicate, one way in which sentences [1] and [2] are held together is through repetition of 'science'. With 'science' a prestige term, associating GM with 'tried and tested science' and 'science-based decision-making' makes rhetorical good sense. This is especially so if you are going to label anti-GM activists as anti-science.

While sentences [1] and [2] appear to hold together, in fact they lack sticking power. I used a *corpus* to help me establish this. This is a body of texts from the same language in digital form. The contemporary corpus I used consists of over a billion words and contains a balance of many different text types – conversation, news, politics and so on. Due to its size, range and balance, I can treat it as a fairly reliable snapshot of English. 'Tried and tested science' in sentence [1] does not exist in the corpus. Creative texts, particularly poetry, often contain unusual expressions that would not be found in a corpus of English. Unusual is not necessarily bad. But 'tried and tested science' is from a serious argument, not a poem. When I first read the argument, 'tried and tested science' did not leap out as odd. So, the corpus is beneficial in revealing this blind spot. The corpus is also useful because it tells me instead that 'tried and tested' very regularly associates with 'technology'. This prompted me to do some research and think a bit harder. GM is a technology, not a science, genetics being the relevant

science here. 'Tried and tested' is better off associating with 'technology' in sentence [1]. But this breaks the link between sentences [1] and [2]. The argument unravels here, with its credibility affected:

[1] UK farmers must be given the freedom to choose modern, efficient farming methods based on tried and tested ~~science~~ **technology**.

[2] We need **science**-based decision-making. The world has moved on, and it's time the anti-**science** activists did too.

Traditionally, critical engagement with an argument evaluates the quality of its reasoning. As I show in this book, billion-word corpora help make possible a supplementary or alternative criterion for judging the quality of an argument: its 'cohesion' is stable or otherwise relative to a norm of language use for a topic.

* * *

What if I also look at this argument from the concerns of the anti-GM activists whom the argument criticises? Anti-GM activists make up a large group of campaigners. Before the World Wide Web, trying to determine key concerns across a large number of campaigners with the same goal would have been toilsome. I probably would have had to settle for the concerns of a handful of well-known campaigners. The problem with doing so, however, is that my selection would be open to the charges that it is limited and perhaps biased too. But I can get round such charges by accessing texts written by many different anti-GM activists as part of related campaigns on different websites. I can muster these digitised texts into a corpus and use software to understand common concerns; my understanding would thus have 'quantitative authority'. One common concern I found out is that many farmers in the developing world have had GM agriculture foisted upon them. This new information puts an earlier chunk from the argument in a different light:

> [3] 90% of those who choose to use GM crops are small-scale farmers living in developing countries.

Assuming this allegation to be true, sentence [3] is misleading in implying that freedom of choice in the use of GM has been habitual.

The reader will see that 'choose' is also mentioned in [1]. The repetition of 'choose' adds to the argument's cohesion. But just because words on a page stick an argument together, this does not mean that the argument is credible relative to the position being criticised, characterised or potentially affected by the argument's outlook. Asking that UK farmers be given the

freedom to choose GM seems ironic in the light of the allegation that many farmers in the developing world do not always have this freedom. Relative to the 'counter-discourse', the link between 'choose' in [3] and [1] thus appears suspect:

[3] 90% of those who **choose** to use GM crops are small-scale farmers living in developing countries.

[1] UK farmers must be given the freedom to **choose** modern, efficient farming methods based on tried and tested **science**.

   Small-scale farmers in the developing world do not commonly have much power. The relationship between power and social/economic inequality is important to this book. One of its positions is that showing hospitality to the socially/economically disadvantaged by using a corpus analysis to ascertain their key concerns and desires, then exploring the degree to which an argument unravels because it distorts or obscures these key concerns and desires, is to engage in an *ethical* reading.

   I have shown snippets of what the reader will find in this book: related ways of critically reading an argument intended for mass public consumption via comparison with something outside it. These deconstructive ways of reading both draw on digitised corpora to rigorously make visible in an argument what may have previously been blind spots for the reader and, in turn, how their revelation can lead to the argument unravelling.

Acknowledgements

Chapter 1

Introduction

1.1 Orientation

1.1.1 Public sphere arguments

The ref's ludicrous decision . . . blogging disgust at the electorate's bad choice of senator . . . I think you'll find it's *your* turn to empty the dishwasher . . . At the breakfast table, in court, on our phones, in all manner of places, with all manner of media and over all manner of things, the mundane and the elevated, we argue. And we don't just engage in argument – arguing is an entertaining spectator sport. A couple airing their dirty laundry on a bus, online clips of politicians in hot-tempered dispute with ensuing fisticuffs, and the more sedate pleasure of listening to meaningful political debate when that happens. Arguing is revelation too. Committing to a reasoned marshalling of our ideas which we are prepared to defend is to find out what we really think. And, to stomach counter-arguments from friends and colleagues, rather than retching back with indignation, can promote improvement of our ideas and different paths of thinking. To argue, to consume counter-arguments and digest them, is fundamental to being a human and fundamental to any progress. This is what makes the study of argumentation – the process of arguing – and argument – the product of argumentation – so fascinating.

While argument and argumentation penetrate many aspects of life, this is only one book.[1] I have a particular focus here – 'public sphere arguments'. These are arguments intended for wide consumption in the public domain. Public sphere arguments are part of our cultural connective tissue, having the power to shape agendas. The public sphere arguments that I deconstruct in this book are written. With the extraordinary advance of the World Wide Web, written public sphere arguments are more pervasive than ever. Learning how to evaluate effectively such arguments is then an important skill, vital to any participation in national and international debates.

1.1.2 Digitally-driven critical ways of reading

While there is no substitute for the effort spent addressing knowledge gaps, consider the reader who is not wholly familiar with the topic of an argument that concerns them. How might they still achieve a useful critical perspective in a rigorous manner (with detailed knowledge development later an option)? The first critical way of reading I flagged in the preface does this, opening the reader up to the appreciation of potentially relevant absences from the argument and how they may adversely affect its **cohesion – ** how the text ties together. These are absences from how the topic is normally discussed, such as in the expression 'tried and tested science', regardless of how a topic is evaluated. And, if an argument's cohesion suffers, if its sentences no longer stick together on the page, then there are probably repercussions for the sense we can make of it. If our reading comprehension suffers as a result of loss of cohesion, the argument also lacks **coherence**. In turn, its credibility suffers. The first critical way of reading has general application in that language use in any public sphere argument can be compared with the same in a large corpus. The concepts of cohesion (a property of the text) and coherence (a property of the mind) are key to this book.[2]

There are often two sides to an argument – and either side can use a well-known tactic: distorting the other's position so that it is easy to then knock it down and claim a victory. This is known as a *straw man fallacy*. The second critical way of reading involves, in the first instance, ascertaining whether an argument has committed a straw man fallacy. As I flagged in the preface, this entails creating a corpus of texts written by those arguing for that standpoint. Through use of software tools we can find out their common concerns. The analyst then explores the extent to which the coherence of the argument is affected by how it may have distorted the standpoint it is criticising or omitted crucial elements of it. Both critical ways of reading, then, rest on the following idea: *an argument may appear cohesive on the page and coherent in our reading because of what it excludes.*

1.1.3 Ethics of digital hospitality

The second critical way of reading applies to public sphere arguments with two sides. That said, in this book I will focus on a particular form of public sphere argument with two sides. This is one which misrepresents the standpoint of the relatively powerless, thus reinforcing – deliberately or inadvertently – a status quo of social and economic inequality. I take as obvious that the world is an unequal place in its societal opportunities, e.g. to education, cultural capital, clean water, housing, transport infrastructure. The world is unequal too in how the Other is treated: e.g. girls and women, homosexuals, those with different skin colours. And the world is severely economically unequal in many ways. Here is one: hundreds of thousands of children live

privileged, privately educated lives in the developed world; hundreds of thousands of children live off rubbish dumps in the developing world. I also take it as incontrovertible that a free market contributes to inequality of income. A free market rewards professions that can be 'monetised'. Premier league footballers provide entertainment; nurses provide care. Both have value. But members of the former profession will always be far richer because their profit potential is much greater. None of the above are political statements. I am merely describing life. Politics is the discourse and action politicians and/or the populace engage in to change society, which can include action to reduce inequality in addressing the problems of the disadvantaged.

In looking at a public sphere argument from the position of the socially/economically disadvantaged, I yoke the second critical way of reading to an 'ethics of hospitality'. By this I mean that the analyst shows hospitality to relatively powerless groups with which they are unfamiliar or do not know in any depth. This is an ethical deed because it entails leaving our own preoccupations for a moment and trying to understand the goals, concerns and frustrations of those who would benefit from political change which would address their social and economic disadvantage. Acting in this way interrupts our routine perspectives, enabling us to evaluate an argument from a new point of view, to assess whether or not it is coherent and thus credible relative to the 'counter-discourse'. We are refreshed and extended in the process.

In the preface, from the comfort of my office, I looked at the snippet of an argument from the point of view of small-scale farmers in the developing world. Ethical tourism? There is nothing like first-hand experience of people's problems. But most university students – primarily the target audience of the method being offered here for critically deconstructing public sphere arguments – are unlikely to be in a position, or have the inclination, to visit the developing world just to complete their assignment. They can voyage, instead, on the amazing resource of the World Wide Web beyond their natural habitat, and show 'digital hospitality' to those who are looking to change their circumstances. This does not mean, I should stress, that students are expected to take on the politics of (those who support) the disadvantaged. It is hardly the place of an educator to exhort students to follow a particular political outlook. It is, though, part of a teacher's job description not only to help students to think for themselves but to encourage them to extend their horizons, showing them appropriate software tools to enable this.

1.2 The software-based analysis of language use

1.2.1 Corpus linguistic method

Corpora (the plural of 'corpus') are crucial to the strategies of this book. The method used for analysing digital language corpora is important too – *corpus linguistics*. If you were asked to come up with the most recurrent five

word expressions in English, it would be quite a difficult task. We don't store information about our language use in this way. Yet, with corpora in the millions and increasingly in the billions of words, we have access to such quantitative information. We don't have to be stumped by the inadequacies of our intuitions about language use. It cannot be overstated just how important this still recent development is. This is because, as the corpus linguistics scholar, John Sinclair, said:

> the ability to examine large text corpora in a systematic manner allows access to a quality of evidence that has not been available before.
>
> (Sinclair, 1991: 4)

And one quality of evidence from a big corpus which largely eluded previous language study is that language use is highly patterned. Words habitually huddle together and habitually shun one another too. (So, as I highlighted, 'tried and tested' commonly associates with 'technology', but not 'science'.) This insight of corpus linguistics is important to the practices of this book.

1.2.2 Generating alternative subjectivities

A key value of corpus linguistic method for this book is how it helps us to create 'alternative subjectivities'. By this I mean how it enables us to see a public sphere argument from points of view other than our own. The first critical way of reading enables a reader to look at the argument from the perspective of a subjectivity which knows how a topic is commonly spoken or written about. For example, this subjectivity would be able to spot that 'tried and tested science' is a highly unusual expression. Since this subjectivity is associated with common discourse, I refer to it as a *discursive subjectivity*. The second critical way of reading relies on a different subjectivity. This subjectivity equates to the recurrent concerns of the standpoint which is opposed in an argument. I call this a *standpoint subjectivity*. As I have said, a standpoint I am interested in is that of the socially/economically disadvantaged. Since I have contended that it is an ethical deed to try to see things from the perspective of this group, I refer to this specific standpoint subjectivity as an *ethical subjectivity*.

1.2.3 Digital humanities and corpus linguistics

More and more scholars and students in the humanities are using software to facilitate their engagements with data. If someone is doing this, then they are doing their humanities study digitally. They are conducting work which would be seen as part of the *digital humanities*. This is a diverse, exciting and ever blooming set of practices in the humanities (and, despite the name,

in the social sciences too). Transformation is key. Digital humanities scholars use software to transform the habitual way of researching and teaching.

There is much cross-over between software designed in corpus linguistics for use by linguists and software used by digital humanists whose research involves looking at language. You don't need to be a linguist to use software developed by corpus linguists productively. However, there are techniques of language analysis within corpus linguistics which digital humanists may be less familiar with, but could be useful to their endeavours. I detail and use these techniques extensively in the book. Since use of software drives the evaluative analysis of argument in this book, and no specialist framework of linguistic analysis is required, the approach: i) sits across the digital humanities and social sciences; ii) could thus be used by students and lecturers open to the use of software in a variety of disciplines where the study of public sphere argument is relevant.

There are plenty of analytical frameworks in linguistics which are technically sophisticated, demanding to learn and challenging to apply successfully. But this is not the case for corpus linguistics. Compared to many other approaches in linguistics, it is accessible, and light on concepts and terminology. This is because it is much more a set of techniques and principles for the analysis of electronic language data than a complex theoretical perspective on language. That said, it would be misleading to cast corpus linguistics as only a method. It has produced important insights into language use. These have ramifications for anybody concerned with language study, ramifications that are less well known across the digital humanities than they are in linguistics. I detail, in Chapter 4, a number of these key insights since they are important for the approach of this book. I have produced a glossary where corpus linguistic terms are explained.

1.3 Deterritorialisations

Everything is something else from something already; nothing comes from nothing. The strategies of this book emerge from, and aim to enlarge, two traditions of pedagogy: critical thinking and critical discourse analysis.

1.3.1 Critical thinking

By 'critical thinking' I refer to a set of techniques for the practical evaluation of arguments. In many textbooks which teach skills of argument analysis to university students, there is usually much focus on the logical structure of an argument – the premises of the argument advanced in support of a conclusion. Written public sphere arguments – for they are the focus of this book – are rarely laid out with their premises in neat sequential fashion with a

conclusion at the end. A basic assumption of critical thinking is that if you want to get to grips with an argument, and evaluate its logical structure, then you need to attempt what is called its *reconstruction* – reorganising the text of the argument into its premises and conclusion.

With a face-to-face interlocutor, we can keep checking to see if we have reconstructed their argument accurately. A written public sphere argument is different. How do we know if we are reconstructing the argument into a form which the author would agree with if they are not around to ask? If the writer does not organise their argument in an obvious sequence of premises leading to a conclusion, this can create difficulty for the reader's reconstruction. This book produces alternative strategies for critical analysis of written arguments which circumvent this potential problem for reconstruction and bypass other challenges I will detail.

1.3.2 Pedagogical critical discourse analysis

Critical Discourse Analysis (henceforth CDA) is a multi-disciplinary set of practical approaches which investigates how language use can contribute to the reproduction of social and economic inequality, how language use can persuade listeners and readers to (re)produce the values and agendas of the relatively powerful which may not be in the interests of the relatively powerless. For example, critical discourse analysts have illuminated how certain language use can help to sustain sexist or racist relations. Argument is a key persuasion genre and so, not surprisingly, argument has been a focus in CDA.

One aim of CDA is pedagogical – to provide linguistic descriptive tools for students to facilitate detailed awareness of how texts can contribute to the domination of the relatively powerless through, for example, distorting or obscuring their motivations and actions. Understandably, these techniques of linguistic analysis are not so accessible to those outside linguistics. This book can be seen as also falling within CDA in its orientation to the socially/economically disadvantaged, and its focus on public sphere arguments which distort their concerns or those of their supporters. Unlike much CDA, however, it largely dispenses with detailed linguistic description of texts in showing how students can exploit big data to reveal distortion of the standpoint of the socially/economically relatively powerless.

You can't really do traditional CDA without having political commitments. This can create a problem when a student's political outlook is not yet so crystallised. This book expands the territory of pedagogical CDA to include an explicitly ethical perspective. In Part III, I will show how a student could construct an ethical subjectivity and still be doing CDA. This is not to water down CDA. As the reader will see, the ethical and political can be related via the approach of this book.

1.4 Stimuli

1.4.1 Jacques Derrida

I have talked so far about i) this book's critical deconstructive ways of reading; ii) its exploitation of corpus linguistic method; iii) the traditions from which it emerges and aims to open up. I have not yet mentioned the stimuli for this approach to the critical analysis of public sphere arguments. One stimulus is some ideas, generated in the 1960s, by the French philosopher, Jacques Derrida (1930–2004) – ideas about language, meaning and reading. Derrida is synonymous with an approach to the critical examination of texts known as 'deconstruction'. His approach to language and meaning is not an empirical one. He arrives at his perspective through philosophical reflection. But, however impressive your intellect, to produce a wholly credible theory of language use you need to draw on lots of evidence of how people use language. Otherwise, you risk building a philosophy of language on mere speculation. Much of Derrida's perspective on language and meaning does not tally with evidence from corpus linguistic study.

So, if Derrida's perspective on language and meaning is unproven, why do I bother with him? To try to produce an alternative approach to the critical analysis of public sphere arguments, a jolt out of the familiar was in order. Engaging with Derrida provided this. The encounter with, for me, the exotic and estranging gradually became a reorientation, stimulating use of corpora for an alternative pedagogically based analysis of public sphere arguments. Some key elements of Derrida's philosophy of language would need to be rejected on empirical grounds – and I will provide reasons for this. So, the approach of this book is certainly *not* equivalent to Derridean deconstruction. That said, there are reading procedures within Derridean deconstruction that I admire and appropriate – so there is some convergence between the two approaches.

1.4.2 Gilles Deleuze and Félix Guattari

While my engagement with Derrida flows across this book, there is a larger influence. One which channels this flow. This is the writing of another French philosopher, Gilles Deleuze (1925–1995), and his collaborator, the French psychoanalyst, Félix Guattari (1930–1992). In particular, a book they co-wrote, one of the most remarkable books of twentieth-century philosophy – *A Thousand Plateaus*. It was first published in French in 1980, and in English in 1987. But it is only really in the twenty-first century that its influence is being felt with force. *A Thousand Plateaus* is written as a *rhizome*. An actual rhizome is something botanical, a horizontal underground stem which can sprout roots or shoots from any part of its surface. Rhizomes grow via subterranean networks, helping to spread the plant over a large

area. Plants that have rhizomes include ginger, bamboo, orchids, Bermuda grass and turmeric. Because roots or shoots can sprout from any part of their stems, rhizomes do not have a top or bottom. This property makes them distinct from most seeds, bulbs and trees. Deleuze and Guattari view the rhizome as a productive image of creative thought, as unpredictable, growing in various directions from multiple inputs and outputs, leading to fresh connections and discoveries (Deleuze and Guattari, 1987[1980]: 23).

For Deleuze and Guattari, to live is to create and be open to transformation. Don't accept completely the 'normal' identity, way of thinking, of being, of doing things, the 'territory' we inhabit, which is most probably accidental and arbitrary. Rather, open up that territory through a process which Deleuze and Guattari refer to as *deterritorialisation*. My engagement with Derrida's philosophy of language is a deterritorialisation – I take it out of its original territory and plant it in very different soil. Crucially, to deterritorialise is to form a rhizome. We should be open not just to change but to unpredictable change. Life is then more likely to be creative. What emerges in this book does so from a set of rhizomatic twistings with Derrida's ideas.

1.4.3 Ethical philosophical grounding

In my engagement with Derrida's philosophy of language, I was also led to his ethical outlook. Derrida's ethics ended up influencing this book in a much more harmonious way than his language philosophy. It is a key basis for the ethical subjectivity in the second critical way of reading of this book. There is much convergence between Derrida, Deleuze and Guattari in their ethical orientation – what can be described as *becoming-other*. To be ethical means actively empathising with the socially and economically relatively powerless, seeking to understand how they experience the world, appreciating their problems and constraints from their perspective. An ethic of 'becoming-other' is also transformative since our own political subjectivity can become decentred. We may find out things we did not know about an oppressed Other which, in turn, may lead us to adjust aspects of our political outlook. Given CDA's political emphasis, the thinking of these philosophers could not be said, currently, to be major elements of its theoretical base. As the reader will see, interaction with these thinkers has assisted my attempt to deterritorialise pedagogical CDA so as to include a pronounced focus on the ethical alongside the political.

1.4.4 Posthuman Critical Thinking and Posthuman Critical Discourse analysis

We rely more and more on intelligent technology; in turn, these technologies – which perform functions better than we can, or indeed functions beyond

our capabilities – are transforming life. It is not so far-fetched to say that portable and wearable technologies are becoming integral to the human in the developed world. With the line between human and non-human intelligent machines becoming blurred, our lives are increasingly '*post*human' (Braidotti, 2013). Since this book encourages the decentering of human subjectivity through interfacing with machines for the creation of alternative critical subjectivities, it thus has a *posthuman* framing. The discursive and ethical subjectivities are *posthuman* subjectivities. In turn, the book presents a posthuman critical thinking and a posthuman critical discourse analysis.

1.5 Structure and chapter outline

I have cut the rest of this book up into four parts.

Part I consists of three chapters. Chapter 2 outlines challenges for the practical evaluation of arguments, and texts more generally, in critical thinking and pedagogical CDA. In so outlining, I flag a series of possibilities for an alternative approach to the evaluative analysis of public sphere arguments which could circumvent these challenges. Chapter 3 sets out some key ideas in the work of Jacques Derrida that I critically appropriate for stimulating the use of corpora for this alternative approach. The main focus of Chapter 4 is to outline principles, concepts and analytical techniques in corpus linguistics which I use in Parts II and III.

Parts II and III demonstrate the critical deconstructive approach to public sphere arguments, drawing on different corpus linguistic programs and functions. Part II (chapters 5–6) highlights the first way of reading. These chapters show where an argument can be deconstructed because of departures from normal language use for a particular topic. Part II shows how discursive subjectivities can be generated for using as critical lenses on arguments. Chapter 5 examines a public sphere argument which supports genetically modified (GM) agriculture. Chapter 6 engages with a public sphere argument which supports, five years after it began, the intervention of the US-led coalition in Iraq in 2003.

Part III (chapters 7–9) demonstrates the second critical way of reading. These chapters draw on corpora of texts to explore potentially relevant absences from the standpoint attacked in a public sphere argument; on this basis, the chapters show where the argument unravels. Part III evaluates arguments which attack the standpoints of relatively powerless groups who challenge the social/economic status quo. So the standpoint subjectivities that Part III constructs, for using as critical lenses on arguments, are ethical subjectivities. Chapter 7 looks at a public sphere argument contesting a campaign which seeks to have a topless model page removed from a popular tabloid newspaper. Chapter 8's argument data contests the 'new atheism' associated with intellectuals such as Richard Dawkins. Chapter 9 comes full

circle by looking at the pro-GM argument again – except this time from the vantage of an ethical subjectivity which equates to the counter-discourse of anti-GM activists. Moreover, Chapter 9 shows how the deconstruction from Chapter 5 can be combined with this ethically-based deconstruction. Lastly, in order to enrich and develop the deconstructive strategies, as well as the method for generating an ethical subjectivity, Chapter 9 also draws on ideas from Deleuze and Guattari (1987[1980]).

Part IV consists of two chapters which reflect upon and continue to enrich the strategy. Chapter 10 provides general reflection, situating the approach as a posthuman critical thinking and a posthuman critical discourse analysis. Chapter 11 discusses the various deterritorialisations of the book.

Notes

1 'If you dip your toe in the water of argument studies, you realize that you're on the edge of a small sea, and that in turn the sea is connected to bigger seas of rationality – the seas you were aware of turn out to be connected to oceans . . .' Andrews (2005: 108).
2 More detailed discussion of the concepts of 'cohesion' and 'coherence' comes in Chapter 5.

Part I

Preparing the ground

Critical thinking and pedagogical critical discourse analysis

2.1 Introduction

The argument-evaluating strategies of this book aim to open up the traditions of critical thinking and pedagogical Critical Discourse Analysis (CDA). After providing some general coverage of these traditions, I highlight a number of challenges with both critical thinking and pedagogical CDA for the analysis of written arguments. It is, in part, from these challenges that the approach of this book emerges.

2.2 Critical thinking I: Dimensions of argument

2.2.1 Orientation

I have been talking about arguments, but not yet provided a definition. An argument is:

> A system of propositions comprising one or more premises advanced by an arguer in support of a conclusion.
>
> (Bowell and Kemp, 2015: 289)

'Premises' are a set of reasons given in an argument for why a reader or listener should buy into its conclusion. We produce arguments, then, to try to persuade a reader or listener of our point of view. Crucially, since it is based on reasons, the attempt to persuade has a rational basis. In turn, if the reader or listener decides to align with the point of view of the argument, this is because they have been *rationally persuaded* by what they view as good reasons (Bowell and Kemp, 2015: 185–192).

Critical thinking refers to the learning of techniques to improve our capacities to evaluate arguments effectively. A byproduct of critical thinking is that we improve our ability to produce rationally persuasive arguments. Critical thinking is recognised internationally as an important ability; there are numerous textbooks devoted to teaching it (e.g. Bowell and Kemp,

2015; Butterworth and Thwaites, 2013; Cottrell, 2011; Fisher, 2011; Jackson and Newberry, 2016; van den Brink-Budgen, 2010).[1] The critical evaluation of argument has, in fact, featured in many curricula over the centuries, being traceable in the West to Ancient Greek philosophers. Contemporary approaches to the critical evaluation of argument are still framed via intersecting dimensions of argument – *logical*, *rhetorical* and *dialectical* – which bear some resemblance to how Aristotle understood these terms.[2]

2.2.2 Logic

One way in which we can evaluate an argument is to look at the quality of its *logical* structure. Consider the following:

Premise 1:   All human beings are talented musicians
Premise 2:   The US president is a human being
_____

Conclusion: The US president is a talented musician.

The conclusion follows on from 1 and 2. Or put more academically, the conclusion can be deduced from 1 and 2 – the premises of the argument. The above argument is *deductively valid*. But there is a problem with it. The first premise is obviously untrue. So, deductive validity is not the only criterion for judging the quality of the logical structure of the argument. The premises also need to be true. When the argument is both deductively valid and has true premises, its reasoning is said to be *sound*. Here is a sound argument:

Premise 1:   All human beings are mortal
Premise 2:   Morrissey is a human being
_____

Conclusion: Morrissey is mortal.

Since this is a sound argument, we can say it is also *rationally persuasive* – because its reasons (premises) are true and the argument is valid. This kind of tight deductively valid argument is referred to as a syllogism. In this type of reasoning, it is ultimately the form which matters rather than the content. The above argument fits into a more abstract generalised pattern which could apply to a gargantuan number of other arguments:

Premise 1:   All Xs are Y
Premise 2:   Z is X
_____

Conclusion: Z is Y.

A strong root for syllogistic reasoning is Aristotle's thought, particularly his book, *Prior Analytics*.

While we commonly use deductive logic in everyday thinking, trying to critically evaluate an argument using abstract syllogisms such as the above can be rather straightjacketing. The everyday situations we want to assess may be too messy and particular for the generalised pattern of a syllogism to capture. Moreover, there are many contexts when we cannot be 100 per cent sure of the premises, but all the same we are convinced by the conclusion. An example: the remains of the last Plantagenet king of England, Richard III – the inspiration for the eponymous Shakespeare play – were lost for five centuries. In February 2013, it was confirmed that a skeleton found under a Leicester car park was that of Richard III. This conclusion was based on a combination of evidence from radiocarbon dating, comparison with contemporary reports of his appearance, and a comparison of his DNA with two matrilineal descendants of Richard III's eldest sister. With the passage of time, there is no way of knowing with 100 per cent certainty that these are his remains. But, given the number of different experts involved, and different tests conducted, it is extremely plausible, a certainty of 99.9(recurring) per cent, to conclude that these are the remnants of Richard III. The argumentation theorist Douglas Walton refers to this kind of argument as a *plausible deductive argument* (Walton, 2006: 69–75). Compared to a syllogism, a plausible deductive argument involves a looser form of deduction where each premise would be qualified with something like 'assuming that this premise is true – and there is nothing to suggest otherwise'.[3]

Related to Walton's outlook, the branch of argument study known as *informal logic* developed from the 1970s onwards as a recognition that everyday arguments need more flexible criteria for judging their logical quality (Blair and Johnson, 1987). Since it is often difficult to tell if premises are 100 per cent true, informal logic avoids the criterion of soundness. Instead, it uses three broad criteria to determine a good argument: *acceptability*, *relevance* and *sufficiency*. Premises must be relevant to whatever claim is being made, should furnish sufficient support for the claim being advanced and be rationally acceptable. Acceptability is regarded as a more realistic criterion than truth.

2.2.3 Dialectic

Another time-honoured dimension to argument is *dialectic*. For Aristotle, and also Plato, dialectic is a way of critically testing ideas, and their consistency, in a dialogue. A protagonist puts forth a claim and then responds to a sceptical questioner – the antagonist. In the dialectic, truth is sought co-operatively. Plato's dialogues, where Socrates takes the role of antagonist, illustrate well the dialectic (called also the 'Socratic method').

Nowadays dialectic is more likely to refer to the dialogical exchange structure in a debate as well as the procedural norms for governing how participants respond to one another. Dialectic is fairly obvious in a formal face-to-face debate – whether real or virtual. In written argument, dialectic is reflected in how the arguer is in critical dialogue with an opposing standpoint, anticipating its objections. Dialogue and dialectic are not necessarily the same. Dialectical exchanges are always dialogical, but dialogues are not always dialectical. For instance, a chat at a Llandeilo bus-stop about the wet weather is not an instance of dialectic.

Where dialectical criteria are flouted, then the argument could be seen as invalid. For example, from a dialectical perspective, we might take account of whether or not participants in the argument had been given equal time to put their points across or if each participant had gone to the trouble to give a fair account of their opponent's position before seeking to rebut it. Douglas Walton flags the dialectical dimension in his definition of argument (as well as the logical dimension). A successful argument means for Walton:

> that it gives a good reason, or several reasons, to support or criticize a claim . . . there are always two sides to an argument, and thus the argument takes the form of a dialogue . . . The basic purpose of offering an argument is to give a reason (or more than one) to support a claim that is subject to doubt, and thereby remove that doubt.
>
> (Walton, 2006: 1)

A well-known approach in argumentation studies which makes the dialectical dimension salient is *pragma-dialectics*. Frans van Eemeren and Rob Grootendorst are the main architects of this approach. The focus of pragma-dialectics is resolution of differences of opinion between different participants in a debate. 'Pragma' refers to 'pragmatics', the branch of linguistics which studies how language users make meaning in different contexts, such as making a claim or challenging a point in an argument. In the pragma-dialectical model, participants employ argumentation to test the acceptability of each other's standpoints. This is done by adhering to ten rules which govern the argumentation. These rules reflect the 'dialectics' bit of 'pragma-dialectics'. If any of these rules is flouted, the argumentation is regarded as unreasonable.[4] Here is one of the pragma-dialectic rules – the *standpoint rule*. This relates to the need not to distort the other party's position:

> Attacks on standpoints may not bear on a standpoint that has not actually been put forward by the other party.
>
> (van Eemeren and Grootendorst, 2004: 191)

Pragma-dialectics does not only have to be trained on face-to-face arguments. It could be trained on written argument also. It should be noted that

pragma-dialectics is not alone in argumentation studies in flagging the importance of dialectical obligations. This is flagged in informal logic too; see, for example, Johnson (2003). And an important point: while an author is dialectically obligated to accurately *represent* the central element or elements of the standpoint they are attacking, they can hardly be dialectically obligated to *engage with* every single element of a standpoint, particularly where space is an issue, e.g. in a newspaper opinion piece.

2.2.4 Rhetoric

A speaker might persuade by not appealing to reasons. The speaker's utterance may contain little rational content, but they still may be persuasive because of their adept turn of phrase. Consider Adolph Hitler's use of the 'blood poisoning' metaphor in his *Mein Kampf* (1925–1926) warning about the alleged dangers of Aryans interbreeding with Jews:

> All great cultures of the past perished only because the originally creative race died out from blood poisoning.

Metaphor is also used in Dr Martin Luther King's 'I have a dream' speech in 1963 calling for the end to racial segregation in the USA. For example:

> With this faith, we will be able to transform the jangling discords of our nation into a beautiful symphony of brotherhood.

The above use of metaphor is a use of *rhetoric*. Here is a definition of rhetoric I follow in this book:

> Any verbal or written attempt to persuade someone to believe, desire or do something that does not attempt to give good reasons for the belief, desire or action, but attempts to motivate that belief, desire, or action solely through the power of the words used.
>
> <div align="right">(Bowell and Kemp, 2015: 46)</div>

In everyday discourse, 'rhetoric' can conjure something negative or even deceitful. Politicians are often accused of spouting rhetoric – attempting to press our emotional buttons with words they think we wish to hear when there may be little substance behind the words. For Aristotle, in his enormously influential book, *The Art of Rhetoric*, rhetorical techniques are, however, morally neutral (see Aristotle, 2004). This makes perfect sense. It is the *purpose* of persuasion which may be moral or immoral not the means available for achieving persuasion. Rhetorical techniques, such as use of metaphor, can be used for good in King's case or bad in Hitler's.[5]

I now consider some difficulties which we may face when trying to evaluate the rational persuasiveness of written arguments.

2.3 Critical thinking II: Evaluating written arguments

2.3.1 Reconstruction

Many arguments – particularly written ones – do not come in a readily identifiable form of a set of premises leading to a conclusion. In order to evaluate the rational persuasiveness of an argument, a basic assumption of critical thinking is that the argument needs to be reorganised so that the premises and conclusion are salient. The product of this extraction procedure is often referred to as 'standard form'. The critical thinking books mentioned in 2.2.1 carry this assumption. Here, for example in an excerpt from Butterworth and Thwaites (2013: 28–29):

> because there are many ways in which an argument can be expressed, it is convenient to have one *standard form* for setting arguments out. The customary way to do this, both in logic and critical thinking, is to place the reasons in a list, and to separate them from the conclusion by a horizontal line. The line performs the same function as words such as 'therefore' or 'so' in natural language reasoning.
>   [. . .]
>   Reconstructing an argument in a standard form helps to make the reasoning clear and assists with its subsequent evaluation.

The arguments in 2.2.2 and in this section are in standard form. This process of extracting the argument's logical structure, of distilling standard form, is known as *reconstruction*.[6]

With a face-to-face argument, or say a real-time ('synchronous') online debate, participants can check with one another whether they have accurately reconstructed each other's arguments. What happens, though, when we are confronted with a written argument with no access to the author? (Unless otherwise flagged this is what I mean by 'written argument' in this book). Recall two sentences from the pro-GM argument I laid out in the preface:

> [A] UK farmers must be given the freedom to choose modern, efficient farming methods based on tried and tested science.

> [B] We need science-based decision-making. The world has moved on, and it's time the anti-science activists did too.

Here is one possible reconstruction of its premises:

Premise 1:   decision-making about agriculture should have
                 a scientific basis
Premise 2:   GM is based on science

Conclusion 1:   anti-GM activists are thus anti-science.
Conclusion 2:   anti-GM activists should stop resisting a scientific attitude
                 to agriculture which, in turn, would allow UK farmers the
                 freedom to choose GM agriculture.

But how objective is my reconstruction? Your interpretation of the logical structure of the argument may be different to mine, and you may take issue with what I did. You may reconstruct the premises differently; you may say there should be only one conclusion. And this reconstruction is based on only two sentences from the argument (we shall see the complete argument in Chapter 5). The longer the argument, the more that possibilities open up for different readers to reach different reconstructions.

2.3.2 Implicit premises

Commonly, we leave out premises in arguments because we assume they are obvious to an audience and thus will easily be inferred. As illustration, let me return to an earlier example. The following argument is sound:

Premise 1:   All human beings are mortal.

Conclusion: Therefore Morrissey is mortal

once we flag the implicit premise:

Premise 2   Morrissey is a human being

Since 'Morrissey' logically entails 'human being' – and anyone who knows who Morrissey is will automatically know this – here we have a straightforward example of being able to recover an implicit premise. In a real-time debate, we have, in principle, the opportunity to ascertain from our interlocutor any implicit premises. Yet, as I commented in the last section, this is not so possible with a written argument where the reader is not directly debating with its author. And what if the argument is long and complex? There may be many implicit premises to recover, making the reconstruction of an argument laborious.

   When a writer constructs an argument, they have a particular audience in mind. Given this, they do not have to spell everything out. They can rely on their audience to fill in implicit premises, because they can assume relevant background knowledge. But what if the critical analyst of the argument does not know the target audience? They would not be wholly conversant

with the culture of the target audience, its values and background assumptions. In such circumstances, there is always the danger that the analyst either misses implicit premises (*under-interpretation*) or projects premises into an argument that the author did not intend and the target audience would not generate (*over-interpretation*).[7] There *are* ways of checking the potential under/over-interpretation of our reconstructions. For example, we could get help from other analysts to see the degree to which they confirm our reconstruction. If other analysts are members of, or know well the target constituency of the argument, all to the good. Moreover, there are software tools which assist such collaborative reconstruction by visualising the argument's (implicit) premises and conclusion(s).[8] This software is particularly helpful where arguments are lengthy and complex. All the same, if the most effective usage of this software is collaborative, in better addressing potential over/under-interpretation, this reduces its utility when we are faced with arguments we wish to critically evaluate solo.

2.3.3 Lack of knowledge of the topic

Another issue with assessing an argument – a fundamental one – is reflected in the following utterance of Socrates from Plato's *Gorgias*:

> The orator need have no knowledge of the truth about things; it is enough for him to have discovered a knack of convincing the ignorant that he knows more than the experts.
>
> <div align="right">(Plato, 1960: 38)</div>

If we lack knowledge of the topic, we may be susceptible to persuasion by charlatans who either pretend knowledge or deliberately omit things central to a topic. Without sufficient knowledge of the argument's topic, we are not in a position to assess relevant absences from the argument.

2.3.4 Lack of knowledge of the opposition's standpoint and the ubiquity of straw man arguments

In a real-time debate, an arguer's distortion of the opposition's standpoint will more than likely be spotted by the opponent and immediately challenged. Yet, with a written argument, if the audience is not so familiar with the standpoint being criticised, they could be swayed by the argument when it is a *straw man*. Tracy Bowell and Gary Kemp define a straw man argument as follows:

> the technique used when an arguer ignores their opponent's real position on an issue and sets up a weaker version of that position by misrepresentation, exaggeration, distortion or simplification.
>
> <div align="right">(Bowell and Kemp, 2015: 252)</div>

Straw man arguments contravene the standpoint rule of pragma-dialectics (2.2.3) and are thus dialectically fallacious arguments. Moreover, as the argumentation scholars Scott Aikin and John Casey rightly hold, straw man arguments are ubiquitous:

> One encounters the straw man virtually anywhere there is an argument. This is especially so in the heated exchanges about politics and religion on Cable TV talk shows, talk radio, internet discussion forums, and newspaper op-ed pages.
>
> (Aikin and Casey, 2011: 87)

The above general definition of a straw man by Bowell and Kemp can be discriminated. Talisse and Aikin (2006) argue for two different forms of straw man: i) *misrepresentation* and ii) *selection*. The first form involves a speaker or writer advancing an argument which, while accurately describing some elements of the standpoint, misrepresents crucial aspects. The second straw man type does not involve misrepresentation. However, it is a highly selective description; the antagonist presents peripheral aspects of the standpoint as being equivalent to the standpoint's main thrust. They do this because these peripheral elements are easier to criticise than the more central elements. Talisse and Aikin (2006) also call this second type of straw man the *weak man*.

Aikin and Casey (2011) expand upon Talisse and Aikin (2006) by proposing a further sub-type of straw man argument – the *hollow man*. While the misrepresentation straw man and weak man bear some resemblance to the standpoint which is attacked in the argument, the hollow man is a complete fabrication. The proponent of the standpoint which is being attacked simply did not advance an argument resembling the standpoint.

2.3.5 Deciding on irrelevance

What if an arguer makes irrelevant points? If we are not in the know, we may find it much more difficult to winnow relevance from irrelevance. There is a chance that we just give up on the argument, thinking we are not intelligent enough to understand it when actually it is a weak argument, and the author has deliberately brought in irrelevant material to try to obfuscate the argument's weakness. This is more likely to work with longer arguments:

> Relevance is by definition a relational notion (a premise is either relevant or not with respect to a given conclusion), thus assessing it involves appreciating the *structural connections* between different parts of the discourse, often involving long and complex sequences of sub-arguments.
>   [. . .]

> . . . relevance is difficult to assess and therefore relatively unproblematic to hide. As a consequence, unless the speaker is keen to invite criticism against his position, he has reason not to be too explicit in signaling the structure of his arguments.
>
> (Paglieri, 2009: 4)

One might counter, however, that if an author deliberately obfuscates the logical structure of their argument through making it difficult to decide on the relevance of certain information, then they have in effect sabotaged it, preventing the argument's assessment. Anticipating this counter, Paglieri (2009: 4) rebuts as follows. ('Argumentative indicators', mentioned below, are words such as 'so', 'then', 'thus'):

> we are all *inclined to see structure where there isn't any* . . . Hence, in the absence of any argumentative indicator, we are quite willing to provide them for free, and this in turn justifies a general tendency to be rather evasive on the structure of one's arguments.

I concur. And this leads to another problem. In imposing structure – effectively over-interpreting the argument – we may be strengthening the logical structure of an otherwise weakly constructed argument (Walton, 2005: 114–115).

2.3.6 Reconstructing an argument deforms cohesive structure with potential loss of non-rational persuasive text

Cohesion refers to how a text hangs together through its vocabulary and grammar. For example, in:

> Mary had a little lamb. Its fleece was white as snow.

cohesion is created across the sentences through 'lamb' and 'its'. Cohesion in a text is hardly trivial. Indeed, as the linguists Ronald Carter and Walter Nash say, 'The first requirement of any composition is that it should "hang together" . . .' (Carter and Nash, 1990: 189). Just like any effective text, the text of an argument needs to be well-formed:

> Cohesion distinguishes well-formed texts, focusing on an integrated topic, with well-signalled internal transitions . . . It is founded on a very simple principle: each sentence after the first is linked to the content of one or more preceding sentences by at least one *tie*.
>
> (Fowler, 1996: 83)

Cohesion is crucial, then, to the effectiveness of an argument and thus to its persuasiveness.

The three dimensions to argument – logical, dialectical and rhetorical – can intersect at different points. This means that premises (logical) might be cohesively linked by repeated rhetorical lexis. Where these dimensions intersect, reconstruction potentially evicts cohesion which relates to the rhetorical dimension. This can be alleviated by using as much of the language of the original argument as possible in laying out the premises and conclusion. Then again, there may be areas of an argument where repeated rhetorical lexis does not intersect at all with its logical structure. The upshot is that filleting logical structure in reconstruction runs the risk that we lose important aspects to the argument's cohesion which carry non-rational persuasive force.

2.3.7 Summary

If we want to evaluate the rational persuasiveness of an argument, we need to reconstruct it. So, I hope it is clear I am not against reconstruction. I also wish to be clear that there are times when we don't experience reconstructive headaches because arguments are elegantly and economically constructed; certainly, there are occasions when the road-map of premises to conclusion is easy to follow. But there are other times. By standardising the argument, we may be over-interpreting and under-interpreting implicit premises. There are ways of trying to get round this issue, using other analysts and software to facilitate collaborative reconstruction. But the more people we enlist to help us, the less convenient our critical engagement with the argument becomes. And no matter how successful the reconstruction, it necessarily entails that we are breaking up the textual form in which the argument first appeared. This can mean we lose cohesion relating to the argument's rhetorical (or dialectical) dimension which does not intersect with the logical dimension. Lastly, knowledge of the argument's topic and standpoint is key to its reconstruction, helping us to separate out irrelevant material. So, if our knowledge is insufficient here, reconstruction and subsequent evaluation of the argument will be impeded. As the reader will see in Parts II and III, the strategies put forward seek to circumvent these reconstructive challenges.

I have come to the end of my coverage of critical thinking. The strategies of Parts II and III also emerge from engagement with another tradition – Critical Discourse Analysis, in particular its pedagogical dimension. Sections 2.4, 2.5 and 2.6 provide coverage of this tradition.

2.4 CDA I: Introduction

2.4.1 Orientation

Critical Discourse Analysis (henceforth 'CDA') is the practical investigation of how language use may affirm and indeed reproduce the perspectives, values and ways of talking of the relatively powerful, which may not be in the interests

of the socially/economically relatively powerless. Key to CDA scholarship is the relationship between language and power. It is eclectic and interdisciplinary, consisting of a set of related approaches which attempt to describe, interpret and explain how use of language, and other semiotic modes such as images, can contribute to such inequality. CDA scholars are especially drawn to texts where the socially/economically disadvantaged are misrepresented or ignored by the powerful, e.g. media representations of asylum seekers, and impoverished immigrants. In seeing social inequality as a problem, CDA is then a problem-oriented form of discourse analysis (Wodak and Meyer, 2016). Among CDA's significant figures are Paul Chilton, Norman Fairclough, Teun van Dijk and Ruth Wodak. For compendia of CDA work, see Richardson *et al.* (2013), Wodak (2013), Hart and Cap (2014) and Flowerdew and Richardson (forthcoming).

CDA's take on 'critical' has its roots in the twentieth century in the work of the social theorist and philosopher Jürgen Habermas, and Frankfurt school theorists such as Max Horkheimer, and further back to Karl Marx in the nineteenth century. 'Critical' usually means taking issue with how dominance and inequality are reproduced through language use. Reproduction may be unwitting. We may be consenting to an inequitable status quo without being fully aware of how we are talking and acting. This state of affairs where we consent to be led or dominated – unwittingly or not – is known as *hegemony*, a concept generated by the Italian Marxist, Antonio Gramsci (Gramsci, 1971). When language use reflects social inequality (e.g. in the speech act at a wedding 'I now pronounce you man and wife'[9] as opposed to 'I now pronounce you husband and wife'), CDA argues that sustained use of such unequal representations can do ideological work in affirming hegemony. In CDA, *ideologies* are representations of the world which contribute to establishing and maintaining relations of power, domination and exploitation.

A salient aspect of CDA is that it is politically committed, with analysts often being actively involved in challenging the phenomena they study. Indeed, for critical discourse analysts, there can only ever be committed discourse analysis and so their political stance (usually left-liberal) is often evident in their interpretation of the data they examine. Of course, one does not need the appellation of 'critical discourse analyst' to be critical of how language use can be bound up with (ab)use of power. But where a critical discourse analysis differs from 'lay' critique, as well as uncritical reading, is in its 'systematic approach to inherent meanings', and the necessity as it sees it to include the 'self-reflection of the researchers themselves' (Fairclough and Wodak 1997: 279).[10]

2.4.2 *discourse/Discourse*

Usually in CDA, 'discourse' has two different but related senses (Fairclough 2003: 3–4). The communications scholar James Paul Gee refers memorably

to these types of discourse as 'little d' discourse and 'big D' Discourse (Gee, 2014), distinguishing them by initial lower-case 'd' and capital 'D' respectively. Let me start with 'little d' discourse. This is language in use. The 'little d' discourse of a conversation refers to the meanings made in interaction with those features of context which are deemed relevant, e.g. tone of voice of participants, facial movements, hand gestures. If the conversation is recorded, its *text* would be the transcription of the conversation. 'Little d' discourse can also refer to meanings activated in reading, that is, those meanings we derive from the text in line with the knowledge we possess, the amount of effort we invest, our values, how we have been educated and socialised, our gender, and so on.

Perhaps 'discourse' seems an odd choice for the meaning we create in reading. But reading is, in fact, quasi-dialogical. As we read, we pose questions of the text: 'What is the author getting at?'; 'What are they implying by that remark?'; 'Where is the author taking me?', and so on. The author 'replies' to our questions. In reading, we thus make a discourse from a text. The situation we make a discourse in is known as the *discourse practice*. This will affect the kind of discourse we generate from a text. So, for example, a teacher reading a newspaper article at home in their leisure time would be one discourse practice. Alternatively, that teacher may use the same newspaper article in order to teach students something of the news genre – a different discourse practice.

'Big D' Discourse is associated with the work of Michel Foucault, the French social theorist/philosopher. Foucault (1972[1969]) describes 'big D' Discourses as ways of talking about the world which are tightly connected to ways of seeing and comprehending it. For Foucault, Discourses place limits on the possibilities of articulation (and by extension, what to do or not to do) with respect to the area of concern of a particular institution, political programme, culture etc. For example, different religions promote their own Discourses which frame explanation of natural behaviour. Some now approve of 'the big bang' theory of the universe's birth (scientific Discourse) but that its genesis was by divine means (religious Discourse). Importantly, for Foucault and for CDA, it is the powerful who ultimately control Discourse and have the means to (re)generate it, such as newspaper moguls.

'Big D' Discourse is a more abstract and generalised notion than 'little d' discourse since it relates to the wider society and culture and how we behave in it – what is known as the *sociocultural practice*. But Discourse is never separate from discourse. There is a two-way relationship. The coalition of many instances of discourse helps to reproduce and reshape Discourse. Conversely, Discourse can constrain what we say and how we activate meaning from texts in reading or in conversation. So, for example, if a person is serious about their Islamic values (Discourse), this will probably affect how they respond (discourse) to a beer advert (text). Figure 2.1 shows
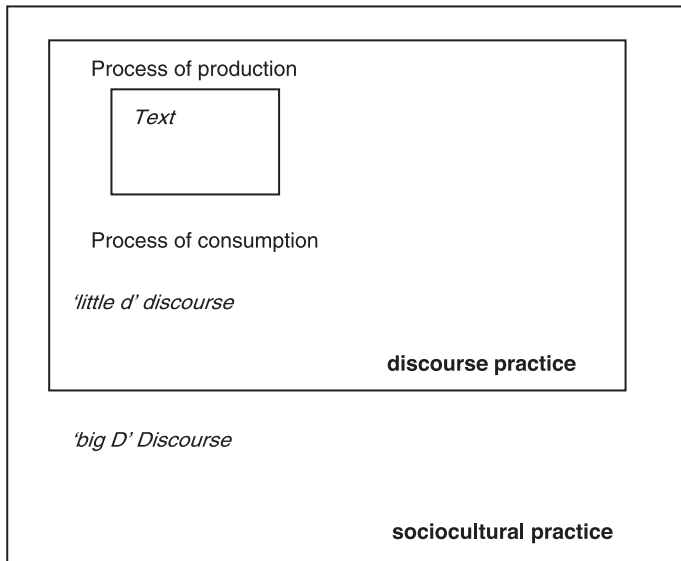
Figure 2.1 The relationship between text and d/Discourse in CDA.

the relationship between the concepts I have just highlighted. As the figure reflects, the socially situated nature of text consumption and production is a fundamental of CDA. Lastly, another assumption in CDA is that wordings potentially position target readers and listeners into particular discourse activations from a text which, in turn, could reproduce Discourse. So, detailed analysis of the text, in order to appreciate how this can occur, is a crucial operation for the critical discourse analyst.

2.4.3 Argumentation

Any text type which can potentially promote social/economic inequality is worth studying in CDA. There have been 'favourites', however. Because of their wide circulation, and thus marked potential for influence, news media texts have been a popular focus. Moreover, given CDA's emphasis on how language use can contribute to social/economic inequality, 'it is unsurprising that an important strand of theoretical and applied critical discourse research should be devoted to the language of persuasion and justification' (Fairclough, Mulderrig and Wodak, 2011: 365). In other words, CDA has seen argumentative texts as ripe for analysis.

Sustained pedagogical focus on argument is fairly recent in CDA, Isabela Fairclough and Norman Fairclough being its key developers. One of their aims is to help readers deliberate on the logical structure of political

arguments; this deliberation can, in principle, ground decision-making for subsequent political action. Fairclough and Fairclough (2012)'s analytical framework facilitates this. I shall come back to Fairclough and Fairclough (2012) in Chapter 11 in order to flag how the strategies of this book complement it. The pedagogical focus in CDA on the logical dimension of argument is recent. Traditional pedagogical CDA has been trained on media and political texts, including political arguments, where the analytical focus is the *rhetorical* rather than logical dimension. It is to this tradition which I now turn.

2.5 CDA II: The rhetorical dimension and pedagogy

2.5.1 Orientation

Now in its third edition, Norman Fairclough's best known pedagogically based CDA book is *Language and Power* (Fairclough, 1989; 2001; 2015). A key purpose of his book is:

> to help increase consciousness of how language contributes to the domination of some people by others, because consciousness is the first step towards emancipation.
>
> (Fairclough, 1989: 1)

'Emancipation' is understood here in a general sense – pulling off one's blinkers and seeing the world as it is, how it exploits and dominates others and seeing how d/Discourse contributes to this domination. It is also to be understood in a sense particular to the individual – how we might emancipate ourselves. In other words, we cease speaking and acting in ways which only serve to confirm the unequal conditions we inhabit. The argument made in *Language and Power*, and many other works in CDA, is that close and critical attention to language use can facilitate these forms of consciousness raising and emancipation.

In the model that *Language and Power* offers, analysis of a text is referred to as *description*. This is done using 'metalanguage' – language used to describe language, e.g. 'noun' and 'verb' are instances of metalanguage. In Fairclough's framework, description is the first stage of three. The other stages are interpretation and explanation. In the *interpretation* stage of Fairclough's model, the analyst conducts by-proxy analysis, seeking to understand the kind of 'little d' discourse a member of the text's target audience could produce. After completing the interpretation stage, a critical discourse analyst moves to the *explanation* stage. In this stage, the analyst critically explains how the coalition of many instances of related 'little d' discourse may do ideological work in the wider social and cultural context – the

'sociocultural practice' – in sustaining types of 'big D' Discourse associated with social/economic inequality. Figure 2.2 shows Fairclough's tripartite analytical framework in relation to Figure 2.1.

Different metalanguages may be used in the description stage. But the predominant one in CDA – and the one employed in *Language and Power* – has been systemic functional grammar (SFG). This is a form of linguistic description developed by Michael Halliday from the 1960s onwards (see Halliday and Matthiessen, 2014). SFG is a very detailed linguistic descriptive tool-kit. When applied to a text, it can help an analyst understand with precision how its clauses function in the communication of meaning. SFG has been used in CDA to articulate rigorously where media texts distort or obfuscate the actions and agendas of relatively powerless groups (See, for example, Fowler *et al.*, 1979; Kress and Hodge, 1979; Kress, 1985; Fairclough, 2015; Bloor and Bloor, 2007). I deal with how SFG can be used to articulate distortion first.

2.5.2 Distortion

As part of a critical discourse analysis, O'Halloran (2011) provides an SFG description of a news story involving eco-protesters. The story comes from the UK popular tabloid newspaper – *The Mirror*. It speculates on a series of actions which eco-protesters are to execute at Heathrow Airport the next day. Here are the first three sentences of a text of 461 words:
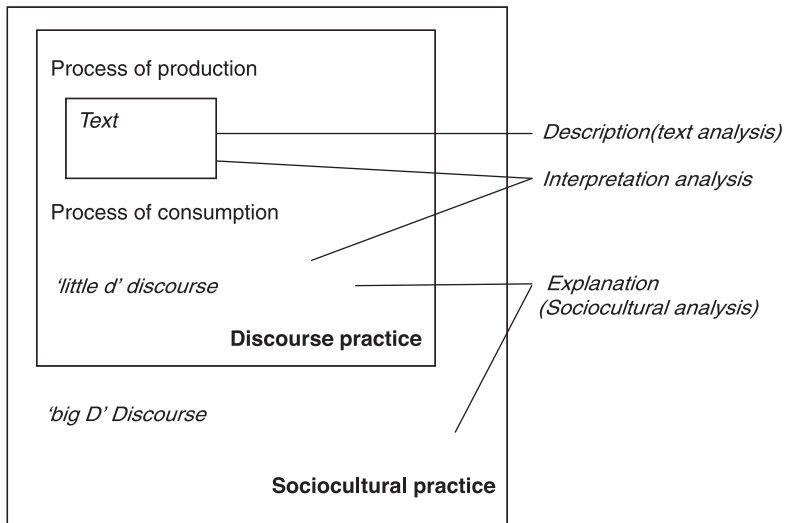
Figure 2.2 Fairclough's CDA framework (adapted from Fairclough, 2010: 133).

1   Air protesters target travellers.
2   Police are on a war footing at the UK's biggest airport as they wait for
     2,000 protesters determined to cause chaos for 3 million travellers.
3   The organisers of a week-long Camp for Climate Action are hell-bent
     on bringing Heathrow to a halt in 'mass direct action' that could cost
     tens of millions of pounds.

It should be clear that the text is biased from the off, e.g. the negative lexis
'war-footing'; 'chaos'. That said, without a systematic analysis of the whole
text, I could be accused of 'cherry-picking' data – selectively using parts of
a text to suit a ready-made interpretation. Perhaps the text is biased initially
but once we read on, it might turn out to be much fairer in its treatment of
eco-protesters?

   SFG is useful in enabling a systematic and comprehensive account of a
text's 'angle of representation', not just in its lexis but in how lexis and
grammar are combined for particular functions in clauses. In analysing
clauses functionally, SFG makes a distinction between types of participants
engaged in an action. In the above three sentences, we can see that the
protesters are construed as the agents of actions. SFG refers to the agent of
an action as 'Actor' and what is affected in the action as 'Goal'. Table 2.1
shows a functional analysis of the action processes of the first three sentences:

Table 2.1 Functional analysis of action processes in The Mirror text

Protesters as Actor	Action process	Goal
1. Air protesters	target	travellers
2. 2,000 protesters	to cause	chaos
3. The organisers . . . Action	bringing to a halt	Heathrow

   Table 2.1 shows clearly how the opening of the text construes the
protesters as Actors whose actions will have negative impact on airport-
related Goals. Indeed, in the 25 sentences of the entire text, when protesters
are described it is mostly via actions in which they (or their campaign) are
realised as Actor (26 times) and act on Goals (people or things) in a negative
manner. The primary aim of the protests – to raise awareness of the relation-
ship between aeroplane CO_2 emissions and climate change – is never really
made explicit. The text is systemically biased against the eco-protesters.

2.5.3 Absence and obfuscation

Below is an excerpt of a speech by the former prime minister of the UK,
Tony Blair, which is analysed in Fairclough (2000). The speech, which was
given in 1998 to the 'Confederation of British Industry Annual Dinner', is

an argument for a 'third way' in econo-politics between the laissez-faire of the right and government intervention of the left:

> We all know this is a world of dramatic change. In technology; in trade; in media and communications; in the new global economy refashioning our industries and capital markets. In society; in family structure; in communities; in lifestyles.
>
> Add to this change that sweeps the world, the changes that Britain itself has seen in the twentieth century – the end of Empire, the toil of two world wars, the reshaping of our business and employment with the decline of traditional industries – and it is easy to see why national renewal is so important. Talk of a modern Britain is not about disowning our past. We are proud of our history. This is simply a recognition of the challenge the modern world poses.
>
> The choice is: to let change overwhelm us, to resist it or equip ourselves to survive and prosper in it. The first leads to a fragmented society. The second is pointless and futile, trying to keep the clock from turning. The only way is surely to analyse the challenge of change and to meet it. When I talk of a third way – between the old-style intervention of the old left and the laissez-faire of the new right – I do not mean a soggy compromise in the middle. I mean avowing there is a role for Government, for the teamwork and partnership. But it must be a role for today's world. Not about picking winners, state subsidies, heavy regulation; but about education, infrastructure, promoting investment, helping small business and entrepreneurs and fairness. To make Britain more competitive, better at generating wealth, but do it on a basis that serves the needs of the whole nation – one nation.[11]

In Fairclough's commentary on Blair's argument, he notes how the verb 'change' has been turned into a 'noun'. This process is known as 'nominalisation'. By turning a verb into a noun, the causes and effects of the change Blair refers to are obscured:

> Nominalisation involves abstraction from the diversity of processes going on, no specification of who or what is changing, a backgrounding of the processes of change themselves, and a foregrounding of their effect . . . The absence of responsible agents further contributes to constructing change as inevitable. And one effect of the lists of changes . . . (beginning 'In technology . . .') is to iron out important distinctions in this regard – changes in 'family structure' are more adequately represented as changes without responsible agents than changes in 'trade'.
>
> (Fairclough, 2000: 26–27)

In a nutshell, since Blair does not use 'change' as a verb, it is not clear who the Actors initiating change are and who are being affected by change (Goals). His holistic and thus vague/superficial treatment of 'change', as one big thing that needs to be responded to, makes good sense rhetorically speaking. By this I mean that his rhetorical strategy is more likely to carry an audience than a more transparent speech which accurately highlights different forms of change which are not necessarily related. The latter kind of speech would need to get into specifics and detailed differences, as well as describing different Actors initiating change, thus demanding too much concentration from its audience.

Fairclough's analysis is written for a popular audience – so understandably he does not provide a comprehensive and systematic SFG analysis of Blair's argument. But for an academic analysis of Blair's speech, students would be expected to show they can provide just that in order to avoid charges of cherry-picking. Such an analysis can be operose. As a taste, take just the first sentence of Blair's speech: 'We all know this is a world of dramatic change'. The English language distinguishes a number of processes, not just action processes as we saw earlier. Good students would, for example, highlight how representing change as a nominalisation – referring to it as a kind of thing that exists rather than as an action process which is initiated by humans – is facilitated by use of an *existential* process ('is') as SFG would label it. SFG refers to the thing that exists as the *Existent* (Table 2.2):

Table 2.2 Functional analysis of 'This is a world of dramatic change'

	Existential Process	Existent
This	is	a world of dramatic change

The use of the existential process makes 'a world of dramatic change' seem like a fact. And the factual status of this proposition is enhanced by Blair's use of another type of process – *mental* process – in other words, a process that takes place in the mind. The process I am referring to here is 'know'. Blair's saying that 'we all know that change is a fact' reinforces the alleged factual status here through trying to make his audience complicit in this knowledge. To reflect the fact that a mental process is different in kind from an action process and an existential process, SFG ascribes different names – Senser and Phenomenon – for participants in mental processes (see Table 2.3). The clausal functional description of the first sentence of Blair's speech is as follows:

Table 2.3 Functional analysis of 'We (all) know this is a world of dramatic change'

Senser	Mental process	Phenomenon
We	know	this is a world of dramatic change

Functional structure of the Phenomenon

	Existential Process	Existent
This	is	a world of dramatic change

I must emphasise that what I have outlined is just one bit of a very large palette of analytical possibilities in SFG. Moreover, it should be stressed that CDA examines grammatical phenomena that are not exclusive to SFG, e.g. pronoun usage, modality, mood, voice.[12]

2.5.4 Reflection

When analysts use SFG in the description stage of their critical discourse analysis, it helps them to systematically explain how language is used to distort and obfuscate. Moreover, if the SFG description is done comprehensively, it helps analysts avoid the charge that they have cherry-picked material from the text to support their interpretation. All the same, such application of SFG is only a second-order operation. Application of SFG doesn't reveal distortion/obfuscation of social actors and other phenomena in texts – the first-order operation. How could it? Only possession of relevant knowledge enables such revelation. Moreover, from my CDA teaching, I know that some students can become frustrated with applying SFG. They don't fathom why they have to go to so much trouble to ground systematically what they intuited already. If SFG description were a first-order operation – if you actually needed SFG to *reveal* rather than *explain* distortion and obfuscation that you couldn't otherwise see – then the labour needed to apply it accurately is more likely to feel worth it for those who are not so interested in explaining how political language can nefariously operate.

When Fairclough promotes the use of SFG in CDA, he is in effect endorsing how SFG was used in a precursor of CDA, the Critical Linguistics of the 1970s and 1980s whose work culminated in a number of books (e.g. Kress and Hodge, 1979; Fowler *et al.*, 1979; Fowler, 1991). Fairclough has used SFG in a similar way to Critical Linguistics (though I should stress that Fairclough's work greatly exceeds the scope of Critical Linguistics in, for instance, his social-theoretical account of language and ideology). Reading the

works of Critical Linguistics, one can at times come away with the impression that its authors think that linguistic analysis is actually necessary for revealing distortion and obfuscation.[13] Furthermore, Critical Linguistics was developed in a pre-digital time. An aim of this book is to exploit the affordances of digital tools and corpora to go beyond the limitations of Critical Linguistics. Not to systematically unpack, in a labour-intensive manner, distortion/obfuscation that could well be obvious already, but crucially to help rigorously spot distortion and obfuscation that we *could not see so readily otherwise*.

A final issue in this section I wish to flag. In my experience, when students engage confidently in a critical discourse analysis, this is often because they possess a developed *political subjectivity*. This can enable an assured critical engagement with texts which espouse a different political perspective from that held by the student. Likewise, Fairclough's political subjectivity – socialist in Fairclough (1989) – is what ultimately guides many of his textual interpretations and explanations in *Language and Power*, enabling a confident critical engagement with texts espousing political lines different from his own.[14] As is self-evident, you can't do CDA – or any form of political reading – unless you have political commitments. But since it is a developed political subjectivity which ultimately facilitates an assured critical discourse analysis, what if a student's political outlook is not yet so crystallised? Another aim of this book is to try to evolve a form of pedagogical CDA to accommodate this student.[15] As the reader will see, this is not to impose political subjectivities on them, but instead to show how students can foster *ethical* subjectivities of their choosing which can then facilitate critical analysis.

2.6 CDA III: Use of corpora

2.6.1 Illuminating 'big D' Discourse

The advantages of using big data have been exploited in CDA for the last 10–15 years (see, for example, Baker, *et al.* (2008); Hidalgo Tenorio (2009); Mautner (2016); O'Halloran (2009). Large collections of texts from the same language – corpora – can provide relatively convenient insight into 'big D' Discourse. By way of illustration, consider Figure 2.3 originally from O'Halloran (2009). This consists of *concordance lines* which are generated using corpus linguistic software. Concordance lines allow researchers to compare how a word or expression is used across the different texts of a corpus (the singular of 'corpora'). Figure 2.3 consists of concordance lines which feature the expressions, 'Eastern Europe', 'East European(s)', 'Eastern European(s)' or 'the East' (where this referred to Eastern Europe). I searched for these expressions in a corpus of all news texts published by the popular UK tabloid newspaper, *The Sun*, in six consecutive weeks from 20 March to 30 April 2004. The 37 concordance lines in Figure 2.3 show the complete results of the search.

The reason I chose this six-week period is, on 1 May 2004, ten new coun-
tries joined the European Union. Eight of these countries are from Eastern
Europe – Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland,
Slovakia and Slovenia. The European Union allows free movement of its
citizens across member states. So, citizens from these countries, from 1 May
2004, were eligible to live and work in the UK. Figure 2.3 thus highlights how
The Sun recurrently treated the expressions mentioned shortly before this key
date. As the concordance lines show, 'East(ern) Europe(an(s))' occurs in
negative co-texts, e.g. 'arrested', 'criminal scam', 'false passport', 'suspected
visa scam', 'underqualified doctors and nurses', 'vice girls'. Since 'East(ern)
Europe(an(s))' is also recurrently associated with large numbers, the implica-
tion for regular readers of *The Sun* during this 6 week period is that large
numbers of undesirables would shortly be arriving. A key value of the
concordance lines is that they provide a convenient quantitative window on
'big D' Discourse. They show with precision how repeatedly biased *The Sun*
was in its treatment of prospective Eastern European immigration shortly
before 1 May 2004.

```
     March 12: Ms Hughes reveals 25,000 east Europeans were let into Britain in a
 fiasco.  Experts predict up to 54,000 East Europeans could head to the UK when
MigrationWatch UK predicts some 40,000 East Europeans will migrate here. Chairman
 get OUT of the UK for good — just as East Europeans are queuing to get IN, a
 new rules are dodged or challenged by East European migrants.  The Government
      just how easy it is to get a false east European passport and exploit the
 business plans — many identical — for East Europeans.  This gave them the right
crunch point" — days before millions of East Europeans become eligible to live
 countries to allow for the arrival of East Europeans.  But he will outline the
 had been snapped up last night by poor East Europeans seeking a better life in
 crackdown on migrants, it emerged that East European vice girls are set to join
 lottery time for (call) girls from the East because they can earn in a night what
 54,000 due to high unemployment in the East. And there are fears services like
 access to jobs for up to seven years.  East Europeans who find legitimate work in
 ,000.  Provisional figures show 138,000 eastern Europeans visited in January and
      If this trend continues, 1,376,000 eastern Europeans will come to Britain
and unelected institution.  30A 700,000 Eastern Europeans arrived LAST year By NIC
Political Correspondent  NEARLY 700,000 eastern Europeans arrived in Britain last
rity stay under a month.  Visitors from eastern Europe rose 23 per cent from
 masters.  The men and women — all from eastern Europe — were arrested in dawn
 underqualified doctors and nurses from Eastern Europe when their countries join
ber-stamping of bogus applications from eastern European countries, but instead of
 l keep a tight grip on immigration from Eastern Europe.  He is right to recognise
 out that many thousands of people from Eastern Europe could be heading here after
 head for Britain.  With coachloads from Eastern Europe tipped to arrive on Sunday
 in a wave of migrants from impoverished Eastern Europe.  The Sun followed the
 een told about a suspected visa scam in eastern Europe.  Ms Hughes met Prime
 ive criminal scam has been operating in eastern Europe with the full knowledge and
 which nationals of future EU nations in eastern Europe can come to Britain and set
 s said the survey did not show how many Eastern Europeans returned home.  But the
 land, Czech Republic and Hungary.  Many eastern Europeans will then be free to
 Statistics figures reveal the number of eastern Europeans coming to the UK is
 hours before May 1 arrives and most of eastern Europe has the right to live here.
 Real culprits DON'T blame the people of Eastern Europe for heading for Britain.The
 ve checks to hurry through a backlog of eastern bloc applicants was "only the tip
 er-stamping regime to clear backlogs of eastern European applications in a
      Kosice was repeated all through Eastern Europe.  Thousands set off to
```

Figure 2.3 Thirty-seven concordance lines for 'east(ern) Europe(an(s))' from *The Sun*'s
       news texts published six weeks before 1 May 2004.

2.6.2 Addressing criticisms of CDA

CDA has not escaped criticism (e.g. Blommaert, 2005; Martin, 2004; Stubbs, 1997; Widdowson, 2004). Probably its major critic has been Henry Widdowson. Two major criticisms in Widdowson (2004) are as follows. CDA can be:

- *arbitrary*: the analyst selects elements of a text which interests them or they find politically objectionable. But another critical discourse analyst may home in on different aspects of the text, perhaps on the basis of different political objections.
- *circular*: political judgements are made about the text at the outset and then ratified by subsequent analysis instead of being derived from the analysis.

To be as convincing as possible, it is in the interests of the critical discourse analyst to show rigorously how they have separated out how their political attitudes might be directing what they notice as distortion/obfuscation from distortion/obfuscation which is in a text regardless of their political attitudes. Indeed, it makes good practical sense for a critical discourse analyst to go to the trouble to reduce arbitrariness and circularity as far as possible. Otherwise, they are vulnerable to the rather easy rebuke: 'well, you would say that, you're left-wing, liberal etc'. It is worth saying, also, that avoiding arbitrariness and circularity is hardly something that only critical discourse analysts should care about. Any convincing text analysis should implement procedures to check these things.

Use of corpora in CDA has helped to improve methodological rigour by addressing charges of arbitrariness and circularity and, in turn, to mitigate attack from critics. Let me illustrate by returning to O'Halloran (2009). In this paper I examined a particular *Sun* text, published on 1 May 2004, which announced the accession of ten countries to the European Union. As mentioned, I knew from corpus analysis that the categories of 'East(ern) Europe(an(s))' were negatively evaluated in many texts published by *The Sun* in the six weeks leading up to 1 May 2004. Interestingly, 'Eastern European' was employed in the 1 May text in a neutral way. But because I had knowledge of relevant 'big D' Discourse here, I could make the following 'interpretation stage' analysis (Figure 2.2) with a certain robustness: even though 'Eastern European' was neutral in the text, for a regular and compliant reader of *The Sun* this expression potentially triggered, in their 'little d' discourse activation from the 1 May 2004 text, a 'big D' Discourse around immigration which is biased against Eastern Europeans. Crucially, going to the corpus released me from interpretative arbitrariness and circularity. I did not locate in the text things that *I* objected to or was intrigued by that day. Instead, I was *directed* to something in the text by empirical

evidence *outside* the text. This meant I was able to focus in a non-arbitrary manner on how 'Eastern European' was used in this text, using quantitative results from the corpus analysis to provide a non-circular qualitative interpretation.

2.6.3 'Data-driven CDA' and pedagogical utility

When corpora have been used in CDA, the approach is often referred to as 'corpus-based CDA' (e.g. de Beaugrande, 2001). Using 'corpus-based' as a pre-modifier is a fairly standard way of referring to foci and disciplines which employ corpus linguistic method ('corpus-based sociolinguistics'; 'corpus-based translation', etc.). Saying a research method is 'corpus-based' ('corpus-assisted' or 'corpus-informed' are alternatives) does not mean you must only use corpus linguistics. Indeed, corpus-based CDA has used quantitative analysis to supplement qualitative text description such as with SFG (e.g. Coffin and O'Halloran, 2006). But, as I just showed, critical text analysis which both relies on and is directed by the results of corpus mining can be performed without detailed qualitative metalinguistic description. What might instead be called *corpus-driven CDA* is entirely possible.[16] Indeed, I think that a data-driven approach has the potential to open up participation in CDA to non-linguists and be used in other disciplines in the humanities and social sciences. This is because a data-driven CDA enables a less arbitrary and circular interpretation of a text *without* the labour-intensiveness of comprehensive text description. Learning a metalanguage requires considerable time and effort which students on non-linguistic degree programmes are understandably much less likely to want to invest. In contrast, corpus linguistic tools can be learned straightforwardly (see Chapter 4). You don't need to be a linguist to exploit them. Corpus linguistics is concept-light too relative to other approaches in linguistics. Finally, just so the reader is clear, I am not diminishing the value of metalanguage, such as for explaining in detail how d/Discourse can do ideological work. I *am* saying though that detailed metalinguistic text description in CDA is not always necessary – it depends on your goals.

2.6.4 Other points

Concordance analysis of media texts usefully provides a 'window' on 'big D' Discourse – but the window may not always provide the most panoramic view, especially for pervasive 'big D' Discourse such as types of religious discourse. After all, such 'big D' Discourse will circulate not only in newspaper texts (which are easy to aggregate into a corpus), but in conversations in homes and places of worship, where the data is harder to access. One other thing to bear in mind is that a 'big D' Discourse may be plural and intersecting. For example, the anti-Eastern European Discourse in *The*

Sun could also be linked to a Discourse of British national identity. In other words, when one is being anti-Eastern European in the UK, one might be affirming one's national identity also.

Another point. Henry Widdowson's criticisms of CDA, in particular, have influenced my thinking about CDA. While he didn't pull his punches, I read him as trying to get CDA to raise its game rather than decimate it. Besides, you can't decimate CDA. It's not, or shouldn't be, a political movement but an intellectual space for the study and reflection of how language use can contribute to the sustaining of social and economic inequality. Figures will come and go, the methods, concepts and theories may change, the name may change, but the focus will remain so long as there are scholars interested in the relationship between language, power and ideology. This is how I see CDA at least. Reflecting Christopher Hitchens' dictum that 'there can be no progress without head-on confrontation' (Hitchens, 2004:173), and given the quality of Widdowson's contestation, it was clear these were criticisms worth thinking about.

2.7 Woulds and would-nots

In this chapter, I have outlined some key aspects of critical thinking and pedagogical CDA (as well as CDA more generally). I have also flagged a number of issues and challenges with these traditions. Later, I respond to these digitally which, in turn, leads to some deterritorialisation of these traditions and the emergence of a supplementary/alternative critical strategy for analysis of public sphere arguments. Below is a list of what this strategy would and would not be, or do, based on the issues and challenges highlighted in this chapter:

   IT WOULD:

- be a form of critical thinking in using corpora to gain:
  a) knowledge of how a public sphere argument's topic is habitually discussed regardless of how the argument is evaluated. This would enable the analyst to judge relevant absences from how the argument discusses the topic;
  b) knowledge of how the standpoint being criticised in a public sphere argument is habitually discussed by its adherents. This would enable the analyst to judge relevant absences from how the argument frames that standpoint and thus help them to evaluate whether or not the standpoint is distorted or obfuscated.
- be also a form of CDA in exposing distortion/obfuscation of a socially/economically relatively powerless Other who is criticised, characterised

or potentially affected for the worse by the standpoint of a public sphere argument.

- in using corpus linguistic method, help reduce substantially charges of arbitrariness and circularity in analysis of a public sphere argument and thus continue to respond to criticisms of pre-digital CDA.
- by being a data-driven CDA, keep text descriptive metalanguage to an absolute minimum, and thus be accessible to non-linguists.
- be a form of CDA which could be used by students whose political outlook is not yet so crystallised.

IT WOULD NOT:

- break up the text of a public sphere argument – the argument's cohesion would remain intact.[17]
- be a reconstructive approach, thus avoiding challenges detailed in 2.3 such as recovering implicit premises and deciding on irrelevance in the argument.

Since I would be avoiding a reconstructive approach with this 'shopping list', the possibilities of a reverse evaluative strategy seemed like it might be worth exploring – a deconstructive approach. And, since I would be engaging with the original text of the argument, this led me to pose the following question: what might a critical deconstructive approach to an argument's *cohesion* look like? Given the emphasis on reconstruction in critical thinking, the importance of an argument's text structure is underplayed in this tradition. But it is certainly highlighted in CDA where reconstruction of an argument's logical structure has been traditionally much less salient. For example, Norman Fairclough flags cohesion as relevant to a text's '. . . structuring as a mode of argumentation' (Fairclough, 1992: 235).

Cohesion in a text depends on lexical and grammatical repetition as well as repetition of lexis from the same 'semantic field' (Definition Box 2.1). For a public sphere argument, these repetitions help to *frame* how it treats the topic and the standpoint it criticises. In my use of 'frame', I echo Robert Entman's well-known definition:

> Framing essentially involves selection and salience. To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described. Typically frames diagnose, evaluate, and prescribe . . .
>
> (Entman, 1993: 52)

Since framing involves selection, by the same token it may involve significant exclusion. The latter might involve omissions which are deliberate and/or inadvertent.

What if a public sphere argument only appeared cohesive on the page and coherent in our reading because of what it excluded? On my initial reckoning, if you could show rigorously that an argument's framing – its cohesion and/or coherence – cracks because of relevant absences from its discussion of the topic or the standpoint it attacks, this could affect the credibility of the argument. Not only would we have revealed the argument to be a straw man, but we would have an exacting appreciation of its straw man status. Moreover, identifying an argument's cohesion is conceptually straightforward and 'metalinguistic-lite' too.

Definition Box 2.1 Grammatical and lexical words; semantic field

Grammatical words:
Non-content based words such as *auxiliary* verbs ('is' in 'he is wanted for murder'), *conjunctions* ('if'), *determiners* ('the'), *prepositions* '(in'), *pronouns* ('she').

Lexical words:
Words that carry the main information content of a text and belong to four classes: *nouns* ('dictionary'); *lexical verbs* ('walk'); *adjectives* ('hot'); *adverbs* ('beautifully').

Semantic field:
Words that can be grouped together through similar meaning. For example, 'army', 'tank', 'soldier' can be grouped under the semantic field of 'war'.

The following section shows some initial results of playing with these ideas.

2.8 Towards a critical deconstructive approach to a public sphere's argument's cohesion/coherence

2.8.1 Framing and cohesion/coherence

Let me go back to the Tony Blair speech fragment in 2.5.3 and the argument he was making for a third way in politics. By tracing its cohesion, the analyst gets to see clearly how an author repeatedly frames their argument.

Figure 2.4 shows different cohesive chains via different types of annotation. Bolded text shows repetition of the lexical words 'change(s)'. In highlighter are grammatical words expressing the second person plural ('we'; 'our') which links to 'Britain'. Underlined are the repetition of 'world' and 'global', both words being part of the same semantic field. Words in italics form part of a different semantic field – business and wealth creation. As the cohesive chains show, Blair promotes a link between the globe, the UK, change and business/economy. Whether or not one agrees with the rea-soning of the speech, the argument seems to have coherence – we can make unified sense of it. But from a green political perspective, one could argue that Blair has omitted to mention one major global 'dramatic change', especially as it is exacerbated by the econo-politics he espouses – *climate change*.[18] Once we include 'climate change' as one of the global changes listed in the speech, the cohesion, and thus the framing of the speech, is less effective. After all, the repeated 'change' that Blair refers to is mainly economic change rather than major change in weather patterns. Once the cohesion of the argument is altered in this way, its coherence is disturbed. It is now hard to make unified sense of the speech. The argument's credibility is reduced.

2.8.2 Relevant absences from an argument

Or is it? How convincing really is this deconstruction? Blair was giving a speech at a British Industry Annual Dinner. He could always counter that

We all know this is a world of dramatic **change**. In technology; in *trade*; in media and communications; in the new global *economy* refashioning our *industries and capital markets*. In society; in family structure; in communities; in lifestyles.

 Add to this **change** that sweeps the world, the **changes** that Britain itself has seen in the 20th century – the end of Empire, the toil of two world wars, the reshaping of our *business and employment* with the decline of *traditional industries* – and it is easy to see why national renewal is so important. Talk of a modern Britain is not about disowning our past. We are proud of our history. This is simply a recognition of the challenge the modern world poses.

 The choice is: to let **change** overwhelm us, to resist it or equip ourselves to survive and prosper in it. The first leads to a fragmented society. The second is pointless and futile, trying to keep the clock from turning. The only way is surely to analyse the challenge of **change** and to meet it. When I talk of a third way – between the old-style intervention of the old left and the laissez-faire of the new right – I do not mean a soggy compromise in the middle. I mean avowing there is a role for Government, for the teamwork and partnership. But it must be a role for today's world. Not about picking winners, state subsidies, heavy regulation; but about education, infrastructure, *promoting investment, helping small business and entrepreneurs* and fairness. To make Britain *more competitive, better at generating wealth*, but do it on a basis that serves the needs of the whole nation – one nation.

Figure 2.4 Cohesive chains in the Tony Blair speech fragment

mentioning climate change at such an event would be *irrelevant* – even if he had wanted to. Blair might also retort something like, 'You would say I neglected to mention climate change – your politics biases you to see this absence.' We are back, then, to Widdowson's critique of CDA: my political subjectivity necessarily prompts me to notice this absence. Others might not.

How then do we establish what constitutes a *relevant absence* from an argument regardless of political subjectivity? As I will show in Parts II and III, corpus linguistic method is very useful for helping to ascertain relevant absences from public sphere arguments, especially because it comes with the methodological advantages I have already detailed. And, once we can show relevant absences, we are in a more credible position to highlight how an argument's cohesive structure is negatively affected with ensuing loss of coherence and thus credibility.

2.8.3 Rhizomatically engaging with Derrida

I needed help to extend methodologically and theoretically this initial phase of development. I cast around for possible bedfellows. A potentially fruitful point of theoretical and methodological contact – merely because of its name – I thought might be 'deconstruction'. From what I knew (or what I thought I knew), it was a set of 'strategies' for critical reading initiated by the philosopher, Jacques Derrida; it showed, amongst a number of many things, how the structure of a text gives the impression of semantic stability but is actually precarious; 'absence' is important within deconstruction (all to be revealed). Given my interest in producing a deconstructive analysis of the cohesive structure of a public sphere argument based on absences, Derridean deconstruction thus seemed, on the surface at least, like it might be a useful linkup.

Submersing into Derrida's philosophy of language, I found that certain core elements failed to convince. I couldn't 'apply' all of Derrida's language philosophy exactly, but I thought I might be able to use it in another way. To try to produce an alternative approach to the critical analysis of public sphere arguments which involved corpus linguistic method and the 'shopping list' of 2.7, what I actually needed was a jolt out of the familiar. By crossing from the empirical fields of corpus linguistics /corpus-based CDA into the very different field of Continental philosophy, I would engage rhizomatically with Derrida and see what ideas this interaction might give me. In Chapter 3, I lay out the Derridean conceptions of language that I have played with. Some I 'threw away', but others I ended up using as productive stimuli for creating the critical reading strategies of this book.

Notes

1 Sometimes critical thinking is understood in a broader sense to capture critical evaluation not just of arguments but of other intellectual products such as explanations, hypotheses, information, theories and so on (see Johnson, 1992).

2 I lay out the logic-rhetoric-dialectic tripartite perspective on argumentation because of its classic status and because it is still commonly employed in argumentation studies and critical thinking for guiding analysis of argument. Discussion of the tripartite perspective in Wenzel (1990) is a common reference in argumentation studies. I should flag that the three perspectives are not rigid separations. Not only can they intersect in an argument, the distinctions between logic/rhetoric/dialectic can become blurred. See Johnson (2009), Kock (2009), Blair (2012) and Jørgensen (2014) for discussion and debate of where distinctions can become fuzzy.

3 Deduction is not the only form of logical thinking. What is known as 'induction' is another. When reasoning is based on the repeated confirmation of observation, it is said to be inductive (Bowell and Kemp, 2015: 103–111).

4 See van Eemeren and Grootendorst (2004: 190–196) for all ten rules.

5 This book is oriented to the critical consumption of arguments. Because of this, I keep mention of Aristotle to a minimum. In the light of his huge influence on rhetoric, this may seem odd. But 'The Art of Rhetoric' and a book on critical thinking have different goals. Aristotle's book is not only a theorising of rhetoric, but a manual for orators. This means that it is more focused on the *production* of rhetoric for persuading a particular audience than on *consumption* of rhetoric, i.e. a major focus of critical thinking. In the light of these differences, the more coverage of Aristotle's approach to rhetoric I would provide, the more space would be needed to clear up possible confusions vis-à-vis my use of Bowell and Kemp's take on rhetoric. One possible source of confusion is the double meaning of 'rhetoric': i) the study / theorising of persuasive communication (Aristotle's meaning – let's call it meaning 1) and ii) the non-rational persuasive resources of language (Bowell and Kemp's meaning – let's call it meaning 2). Things are not so simple, however, since these meanings are not completely distinct. Aristotle would include non-rational persuasive techniques (meaning 2) under rhetoric (meaning 1) along with rationally persuasive techniques. The latter he refers to as *logos* – how an author has used reasons and evidence to persuade their particular audience. A key aspect of logos or 'rhetorical reason' is the orator's use of enthymemes – arguments with deliberately missing premises for the audience to generate. Should the audience 'take the bait' in this way, there is the prospect that they might acquiesce with the orator's point of view. Bowell and Kemp do not get into logos or enthymemes in their discussion of rhetoric.

6 It is also referred to as 'standardisation', e.g. Govier (2012).

7 On the 'over-interpretation' and 'under-interpretation' of texts, see also O'Halloran and Coffin (2004); O'Halloran (2009).

8 For more information, see Simon Buckingham-Shum's 'argument mapping overview' at http://www.slideshare.net/sbs/argument-mapping-overview [accessed July 2016] and Tim van Gelder's website, especially http://timvangelder.com/2009/02/17/what-is-argument-mapping/ [accessed July 2016]. See also: http://www.argunet.org/ [accessed July 2016].

9 I thought perhaps that this was a dated example, until I watched the highest grossing musical for adults at time of writing, *Mamma Mia* (2008), which is also very popular with girls. Spoiler alert – it finishes with the Meryl Streep and Pierce Brosnan characters being pronounced 'man and wife'. Moreover, multiple

newspapers used the expression 'man and wife' when reporting celebrity weddings, e.g. http://www.dailymail.co.uk/tvshowbiz/article-2772608/George-Clooney-Amal-Alamuddin-wedding-bands-make-appearance-man-wife.html [accessed July 2016].

10 Increasingly, the trend is to refer to 'Critical Discourse Analysis' by the broader expression 'Critical Discourse Studies' (CDS) (e.g. Hart and Cap, 2014; Flowerdew and Richardson, forthcoming). This reflects the fact that CDA not only involves the practical analysis of texts, but may also involve other things such as political theorising. The increasing use of 'CDS' seems a reasonable move. That said, I would argue it is useful to retain the term CDA where the focus is the practical analysis of text data, which much of CDS still involves – CDA, then, as a focus in CDS. And, given my own practical pedagogical focus on text analysis, and that this book seeks to deterritorialise pedagogical CDA, this is why I retain the term CDA (while I am happy to see the approach, more broadly, as a form of CDS).

11 Tony Blair (1998) Speech at the Confederation of British Industry Annual Dinner 27 May (reprinted in Fairclough, 2000: 25–26).

12 See Fairclough (2015: 129–30) for a 'linguistic check-list' for conducting the text description part of a critical discourse analysis.

13 Consider for example the following from Fowler (1991: 67): '. . . critical linguistics was devised in response to . . . problems of fixed, invisible ideology permeating language . . . Critical linguistics seeks, by studying the minute details of linguistic structure in the light of the social and historical situation of the text, to display to consciousness the patterns of belief and value which are encoded in the language – and which are below the threshold of notice for anyone who accepts the discourse as "natural".'

14 '. . . I write as a socialist with a generally low opinion of the social relationships in my society and a commitment to the emancipation of the people who are oppressed by them' (Fairclough, 1989: 5).

15 For an interesting take on the link between CDA and North American rhetoric/ composition pedagogy, see Huckin, Andrus and Clary-Lemon (2012).

16 I appropriate here the well-known distinction between 'corpus-based' and 'corpus-driven' linguistics found in Tognini-Bonelli (2001). A corpus-based approach uses evidence from the corpus to show how pre-existing linguistic categories (nouns, verbs etc.) are used. In contrast, a corpus-driven approach does not impose ready-made linguistic categories on the data, allowing the investigator to better appreciate new linguistic species that may emerge.

17 This is not an original preference. For some time, the argumentation scholar Scott Jacobs has held the view that we should seek to understand the full 'message' of the argumentative text which would include simultaneously its non-logical elements (see Jacobs, 2000; 2009).

18 Blair's speech was delivered in 1998. In 1995, 'The Intergovernmental Panel on Climate Change' had produced its second major report warning of the dangers of build-up of greenhouse gases: available at http://www.ipcc.ch/pdf/climate-changes-1995/ipcc-2nd-assessment/2nd-assessment-en.pdf [accessed July 2016].

Deconstruction and Jacques Derrida's philosophy of language

3.1 Meaning in surplus of the text's structure

A good place to begin in outlining Derrida's ideas about language is one of his fundamental premises – meaning is never stable. We may suppose the meanings in texts that we read are solid and reliable, but Derrida claims this is an illusion. Meaning is always escaping from the text's structure:

> There is a continual flickering, spilling and defusing of meaning – what Derrida calls 'dissemination' – which cannot be easily contained with the categories of the text's structure, or within the categories of a conventional critical approach to it . . . All language, for Derrida, displays this 'surplus' over exact meaning, is always threatening to outrun and escape the sense which tries to contain it.
>
> (Eagleton, 1996: 116)

The reason meanings are in *surplus* of the text's structure, the reason an author is wrong to think that the text they generate is unified, consistent and stable, is the natural condition of meaning – *undecidability*. For Derrida, 'no meaning can be fixed or decided upon' (Derrida, 2004a[1979]: 64). If all conceptual terms have undecidable meanings, then there is more meaning in a text than it can cope with. An assumption of deconstruction is that close reading will show this. One key aspect of a deconstructive reading is to shine a light on meanings which are in surplus of the text and how they adversely affect the stability of the text structure. Here is the deconstruction scholar Julian Wolfreys providing a synopsis of what Derrida does when he reads:

> Derrida alights upon a single theme, term, word, concept. In so doing, he transforms the structure of the text — concept, institution, theme — through examining how that single figure operates in the structure as a whole, in excess of the structure . . . The figure in question, far from calming down the production of a single meaning in the overall economy

of the text, troubles that logic, making the univocal meaning undecidable . . . Derrida's discussion performs in other words the textual oscillation always already within the structure.

<div align="right">(Wolfreys, 2001: 119)</div>

To avoid the risk that this sounds all rather abstract, I go straight to a demonstration of a Derridean deconstructive reading, which relies on the assumption that word meanings are ultimately undecidable.

3.2 A demonstration of deconstructive reading

3.2.1 Plato's Pharmacy

There are numerous instances of deconstructive readings to use as illustration – from Derrida and from other scholars who work in deconstruction. I have chosen one demonstration from an essay of Derrida's – 'Plato's Pharmacy' (1981a[1968]). This is because it is one of his best known essays, and it is reasonably accessible (though long) should the reader wish to follow this up.

   The essay concerns itself with Plato's *Phaedrus*.[1] This is a conversation between Socrates and a young Athenian man, Phaedrus. One part of *Phaedrus* that Derrida focuses on comes near the end. At this point, Socrates is arguing that writing is bad and speech is good. As support for this position, Socrates invokes the Egyptian myth of the invention of writing. In this myth, a character called Theuth invents writing. He presents his creation to the king of Upper Egypt, reckoning his invention to have major benefits. This is what he says to the king (as reported by Socrates):

> my King, [writing] will make the Egyptians wiser and will improve their memories: my invention is a recipe (*pharmakon*) for both memory and wisdom.

<div align="right">(quoted in Derrida, 1981a[1968]: 81)</div>

But the king is not a fan of writing:

> this invention will produce forgetfulness in the souls of those who have learned it because they will not need to exercise their memories, being able to rely on what is written, using the stimulus of external marks that are alien to themselves rather than, from within, their own unaided powers to call things to mind. So it's not a remedy (*pharmakon*) for memory, but for reminding, that you have discovered. And as for wisdom, you're equipping your pupils with only a semblance of it, not with truth. Thanks to you and your invention, your pupils will be widely read without benefit of a teacher's instruction; in consequence,

> they'll entertain the delusion that they have wide knowledge, while they are, in fact, for the most part incapable of real judgement.
>
> (quoted in Derrida, 1981a[1968: 104–5])

In a nutshell, for the king writing is bad because it does nothing to improve the ability to remember. Socrates aligns himself with the king's response.

Derrida notices that the king's response is based on a particular structure – the structure of pairs of terms which are in opposition to one another. Such terms are known as *binary oppositions*. The binary oppositions that Derrida (1981a[1968]: 105–6) isolates in the king's response to Theuth are as follows:

speech: good; inside the mind; true; reality; memory;
writing: bad; outside the mind; false; delusion; forgetfulness.

3.2.2 Undecidability of 'pharmakon' leads to deconstruction of binary pairs

Once Derrida has isolated the binary structure in the king's response, he goes on to show how this structure falls apart. This is due to surplus meaning in the king's response which is all too easily overlooked. If you go back to the dialogue between Theuth and the king, you will see the word *pharmakon* in brackets. This is the Romanised version of the Ancient Greek word that Plato used. You will also see it has been translated as 'recipe' in Theuth's assessment of his invention:

> [writing] is a recipe (*pharmakon*) for both memory and wisdom

and translated as 'remedy' in the King's understanding of writing:

> [writing] is not a remedy (*pharmakon*) for memory, but for reminding, that you have discovered.

Derrida points out that, in Ancient Greek, *pharmakon* had several meanings, not just 'remedy' and 'recipe'. Oddly, while *pharmakon* could mean something positive – 'remedy' – it also could mean something negative – 'poison'. How can this be? How can something have both a positive and negative meaning at the same time? This ambiguity is a troubling state of affairs for Derrida. It is why he calls *pharmakon* an *undecidable*.

The translator, faced with a word which has different meanings, will use co-text to guide their choice of which word to choose in their translation. By 'co-text', I refer to the surrounding text or 'linguistic context'. But just because a translator chooses not to acknowledge the possibility that *pharmakon* could, instead, have been translated as 'poison' in the above

passages, it does not follow that this meaning is not lurking. A crucial assumption for Derrida is that words retain all their senses regardless of the sense the translator has chosen for their translation. Since the meaning of 'poison' is still in *pharmakon* in *Phaedrus* even if translators ignore it, for Derrida it acts inadvertently in excess of the binary structure of the king's response to Theuth:

> If the *pharmakon* is "ambivalent", it is because it constitutes the medium in which opposites are opposed, the movement and the play that links them among themselves, reverses them or makes one side cross over into the other (soul/body, good/evil, inside/outside, memory/forgetfulness, speech/writing, etc.).
>
> (Derrida, 1981a[1968]: 130)

So, when Theuth says that writing is 'a recipe (*pharmakon*) for memory', Plato is unaware that his text, in fact, spills an alternative meaning that writing is also a poison for memory. And, when the king says that writing '. . . is not a remedy (*pharmakon*) for memory', Plato is equally unaware that another meaning is leaked: writing is not a poison for memory. Writing is simultaneously good and bad as well as not good and not bad. The result of this leaking text is the following: Socrates' argument that writing is good and speech is bad falls apart. Much as he tries, he cannot segregate *speech as good* from *writing as bad* in his thesis. Summarising Derrida's reading, here is the deconstruction scholar Michael Naas:

> beneath this philosophical logic of the either-or (*pharmakon* as *either* remedy *or* poison depending on the context), beneath the sovereign rule of this logic of non-contradiction, there are the traces of a fundamental ambivalence or undecidability (*pharmakon* as *both* remedy *and* poison, *neither* remedy *nor* poison) that disrupts the meaning and order and even the boundaries and limits of Plato's texts.
>
> (Naas, 2014: 234)

I have provided an example of Derridean deconstruction. Let me pull out some assumptions in this way of reading.

3.3 Textual blind spots

3.3.1 Texts can mean something other than intended

As should be clear in Derrida's analysis of *Phaedrus*, Plato is unaware that the text he wrote is spilling alternative meaning. *Pharmakon* is for Plato what Derrida calls a 'blind spot'. This means that, for Derrida, the text of *Phaedrus* is beyond the control of its author:

> Deconstruction is something which happens and which happens inside; there is a deconstruction at work within Plato's work, for instance.
>
> (Derrida, 1997: 9)

Indeed, for Derrida, any text can be shown to mean something other than intended. This is why a deconstructive reading:

> must always aim at a certain relationship, unperceived by the writer, between what he commands and what he does not command of the patterns of the language that he uses.
>
> (Derrida, 1976[1967]: 158)

In so doing, the reading:

> attempts to make the not-seen accessible to sight . . .
>
> (Derrida, 1976[1967]: 163)

This does not mean, though, that the deconstructive reader can make a text mean anything s/he likes since the analyst cannot ignore "that which the text imposes on you or the structures which determine the singularity of the text" (Wolfreys 2001: 119). Derrida stresses that any deconstructive reading must first be 'faithful' to the text; it must recover as far as possible the intentions of the author before it goes on to show how the text might exceed these intentions, leading to crumbling of its structure. This is why Derrida speaks of deconstruction as a *double-reading*.

3.3.2 Metaphors as stray signifiers

One blind spot that Derrida fixes on in texts – something that a reader may have a tendency to pass by – is casual metaphor. The author may have produced a particular image without thinking too much about it. Derrida, however, shows how metaphors may actually be stray signifiers in exceeding an author's intended meaning. Let me illustrate the point by returning to his deconstructive reading of Plato's *Phaedrus*. Socrates is conventionally understood to be Plato's mouthpiece. So, when Socrates argues that writing is bad and speech is good, this is usually taken to be Plato's view. But strangely, as Derrida (1981a[1968]) points out, Plato is unable to sustain this argument without employing metaphors drawn from inferior writing. For example, Phaedrus asks Socrates to define the type of wisdom that is superior to anything that can be found in written texts. Socrates replies as follows:

> The sort that goes together with knowledge and is written in the soul of the learner.
>
> (quoted in Derrida, 1981a[1968]: 148)

Socrates is alluding to one of Plato's central ideas that wisdom and know-ledge are internal, rather than in writing which is external to the mind. One purpose of education for Plato is to draw out our already extant internal wisdom. But Socrates falls back on a writing metaphor ('written in the soul of the learner') to describe something which is superior to writing! Or as Derrida (1981a[1968]: 149) puts it:

> a metaphor [is] borrowed from the order of the very thing one is trying to exclude from it.

This metaphor is yet another example of stray signification in a text which the author is seemingly unaware of, disturbing their intentions.[2]

3.3.3 Reading the text from outside-inside

Many forms of text analysis use a linguistic descriptive system or metalan-guage to trace the text, to describe its constituents. Metalanguage is imposed from the outside onto the text as we saw with use of systemic functional grammar (see Chapter 2). These metalinguistic tracings do not seek to deform the text, to change it. In contrast, when Derrida claims to show that a text deconstructs itself, he is not coming at the text from the outside only. He conducts an 'inside-outside' reading. On the one hand, he is outside the text as a reader looking in – just like a systemic functional grammarian or a critical discourse analyst – in fact, any reader. But as he does in his reading of *Phaedrus*, he also brings out of the shadows the surplus meaning of a text. He comes from the outside to highlight how a text is already decon-structing itself on the inside. As Derrida says:

> deconstruction is not an operation that supervenes *afterwards*, from the outside, one fine day; it is always already at work in the work . . .
>
> (Derrida, 1989[1988]: 73)

3.4 The marginal and the excluded

3.4.1 General points

> I do not 'concentrate', in my reading . . . either exclusively or primarily on those points that appear to be the most 'important', 'central', 'crucial'. Rather, I deconcentrate, and it is the secondary, eccentric, lateral, marginal, parasitic, borderline cases which are 'important' to me and are a source of many things, such as pleasure, but also insight into the general functioning of a textual system.
>
> (Derrida, 1988a[1977]: 44)

As reflected in the quotation above, Derrida's readings of philosophical texts often advance not by focusing on the centre of the work but its margins. Something at the margins is less visible than something at the centre, and thus could be a blind spot for a reader. In turn, the reader is less likely to be aware that a stray signifier at the margins is snagging at the structure of the text, troubling its intended meaning. One premise of deconstruction is that it is through the marginalisation of terms, concepts or ideas that the impression of unity and stability in a text can be created. But not just marginalisation. This impression can be created through exclusion too. As Bennington (1993: 284) says:

> The reading work carried out by Derrida consists in the location of these excluded terms or these remains that command the excluding discourse . . .

The overall purpose of a deconstructive reading flows from this basic premise – to show how the impression of a text's semantic stability is dependent on pushing certain elements to the margins or suppressing them altogether. Conversely, once the deconstructive critic brings marginal or excluded elements to the centre of the text, it can be shown to be unstable.

3.4.2 The footnote

One margin that Derrida has fastened onto are footnotes. He has shown in a number of readings how a footnote can trouble the centre of the work. Let me illustrate this using a deconstructive reading which relates to visual art. One focus of Derrida (1987a[1978]) is Immanuel Kant's *Critique of Judgement*, first published in 1790, where the great Enlightenment philosopher sets out his aesthetic theory. In this book, Kant refers to a work of art as an *ergon* (Ancient Greek for 'work'). But there are things that Kant wishes to limit in aesthetic judgement of an ergon. If an ergon is a painting, then it would not include the frame. If the ergon is a building then it would not include columns. These elements are, for Kant, examples of *parerga* (singular *parergon*) – what is beyond the ergon. Kant mentions the idea of the parergon in a footnote in *Critique of Judgement*. It is not something that is important to his aesthetic focus on the ergon, but he feels it should be mentioned all the same. The idea of the parergon thus gets tucked away in a footnote – ironically, a kind of parergon all of its own.

Sweeping dust under the carpet makes it disappear from view only. For Derrida, this footnote parergon is, in fact, a hidden deconstructive agent in Kant's text, contaminating his desire for ergonomic purity in the art work. Kant's delimiting of the ergon from the parergon is a delusion. This is because parerga are always affecting how we view an ergon, just as the content of a footnote can affect how we read the main body of the text. For

example, how we view a painting can be affected by *where* it is framed, lit and hung (in a gallery, in our living room, in an outside public space, etc.) as well as *how* it is framed, hung, lit (e.g. electric light, candle light, sunlight). Indeed, parerga may exist in the centre of artworks. *Making Columns for the Tower of Babel* by Stanley Spencer is a good example.[3] In this painting, three men are each constructing a column. There is no sign of the rest of the Tower of Babel. While columns are parerga for Kant, here they are at the centre of the ergon. With examples in this vein, Derrida complicates Kant's division of ergon and parergon.[4]

3.4.3 'Either/or' versus 'both/and'

More generally, Derrida's deconstruction of Kant's desire for ergonomic purity is in line with his antithetical attitude to 'either/or' logic. This is a logic that he sees as being a key component of 'western metaphysics' – the way people in the West, allegedly, think about the world around them, thinking something must be one thing and thus not another. Derrida, instead, follows a logic of 'both/and'. Things do not have to be one thing or the other – they could be both or perhaps many things simultaneously. For instance, we do not have to look at the central elements of a painting whilst ignoring the marginal elements, and vice versa. We can enjoy, as Derrida does, looking at a work of art by exploring the complications – whether intended or not – between its 'central' elements *and* its 'marginal' elements. We can look at *both* simultaneously.

3.5 Reading a text while allowing the Other to speak

3.5.1 Why deconstruction is not a method

Discussing what Derrida and others do in their deconstructive readings is, perhaps, the easiest way into deconstruction. Things get trickier when we try to create a definition of deconstruction. If all meaning is undecidable, there is no stable definition of anything. This is why it is a lot easier to say what deconstruction is *not* rather than what it is (Derrida, 1991[1983]). And one thing that Derrida tirelessly repeated that deconstruction is *not* is a method:

> I am wary of the idea of methods of reading. The laws of reading are determined by the particular text that is being read. This does not mean that we should simply abandon ourselves to the text, or represent and repeat it in a purely passive manner. It means that we must remain faithful . . . to the injunctions of the text. These injunctions will differ from one text to the next so that one cannot prescribe

one general method of reading. In this sense, deconstruction is not a
method.

(Derrida, 2004b[1981]: 155)

To come up with a method of reading would be, by the lights of Derridean
deconstruction, to create something determinate, something stable. But this
would be completely against the spirit of undecidability. Deconstruction
should never conform to a fixed set of procedures. We saw in 3.2.2 how
Derrida shows the binary categories of Socrates' argument to be in a state of
deconstruction. Due to binary oppositions in texts being one focus of the
early Derrida, a common perception of what deconstruction does is that it
highlights instability in binary categories in texts. In reality, this is only one
procedure amongst many, and one procedure amongst many to come since
deconstruction cannot be fixed. As Miller (1991: 231) says, deconstruction
'can only be exemplified, and the examples will of course all differ'.

3.5.2 The only 'rule' of deconstruction

But while deconstruction cannot be formalised, there is one thing all decon-
structive readings have in common. Martin McQuillan (2001: 6) boils this
down nicely:

> Deconstruction only has one rule: allow the other (what is different, the
> not-me) to speak.

Allow what is not so obviously present in the text a voice. This 'Other'
might be a suppressed or ignored meaning such as the poison meaning of
pharmakon. As Derrida says:

> Deconstruction is always deeply concerned with the *other* of language.
> (Derrida, 2004b[1981]: 154)

But otherness does not have to be linguistic. Deconstruction asks that we
recognise what is different, left out, or 'queer' in politics, culture. Indeed,
the Other does not have to exist. It could be an 'Other-to-come' (see 3.10).

I have given some idea of how deconstruction works and how the
'undecidability of meaning' thesis is important to it. Let me now pro-
vide an explanation of why Derrida thinks 'undecidability' of meaning is the
natural state of affairs. To appreciate this, we need to go back to a crucial
starting point for Derrida's thinking – the Swiss linguist, Ferdinand de
Saussure (1857–1913). Measured by his impact, which he never lived to
see, Saussure is possibly the most important linguist of the last 100 years.
His ideas have been taken up in several disciplines such as anthropology,
cultural studies, sociology as well as linguistics.

3.6 Ferdinand de Saussure

3.6.1 'Course in General Linguistics'

The book with which Saussure is most famously associated is the *Course in General Linguistics* (*Cours de linguistique générale*). This was published in 1916, three years after Saussure died. This is not a conventionally authored monograph. It is, in fact, a writing-up of Saussure's lectures at the University of Geneva given between 1906 and 1911. It was compiled by two of Saussure's former students, Charles Bally and Albert Sechehaye.

3.6.2 Difference

Key to understanding Saussure's approach to language and meaning is the idea of *difference* in meaning between words. When we look at a word such as 'palace', we might ordinarily understand it as the dwelling of very rich people, possibly aristocrats. This is not how Saussure would understand 'palace'. The meaning of 'palace' would be how it *differs* from other types of abode such as 'mansion', 'detached house', 'flat', 'tent, etc. For Saussure (1974: 120):

> in language there are only differences *without positive terms*.

Meaning is created not in the sign, but through the differences between signs.

3.6.3 Langue and parole

Saussure divides language up into two key domains. *Langue* encompasses its abstract, systematic rules and conventions; it is independent of individual users. Actual utterances, usage of the language system, he refers to as *parole*. For Saussure, *parole* is messy. It is produced by individual speakers and thus idiosyncratic. This does not make it amenable to study. *Langue*, on the other hand, is systematic since it is a set of rules shared by a community. So, it is not individual but social. Since it is systematic, this facilitates its exploration. It is important to understand that, for Saussure, the study of *langue* takes priority over the study of *parole*.[5] His 'differential' theory of meaning relates to the language system, to *langue* only.

3.6.4 Syntagms and paradigms

The study of *langue* is twofold for Saussure. There are the rules for the combination of words in a clause or sentence or what Saussure referred to as a syntagm. So, one of the reasons we grasp 'the lion bit the man' is our

knowledge of a fundamental of English clause structure: the order of subject-verb-object. But all manner of animals might bite a man – a snake, a tiger and so on. The 'lion' slot could potentially be replaced with numerous other animate skin perforators. For Saussure, we select options for slots in a sentence from a set of possibilities – in this example the set of animals which bite. He used the expression 'associative relations' for this set of possibilities (Saussure, 1974[1916]: 125–127), but this has become known as a *paradigm*. It is visualised as a vertical dimension of choice to contrast with the horizontal dimension of choice in the syntagm – both of which alter meaning. Given that the paradigm is vertical and the syntagm is horizontal, they are also conceived as axes – the syntagmatic axis and paradigmatic axis respectively. All of the above is reflected in Figure 3.1.
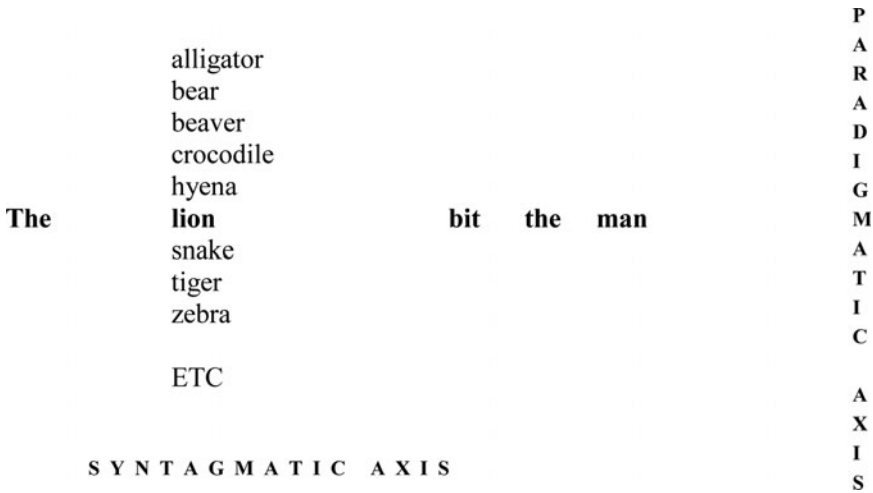
Figure 3.1 The paradigm for animate skin perforators ('X') in relation to the syntagm 'The X bit the man'.

3.6.5 The sign

Saussure's basic linguistic object is the sign. He defines a sign as being composed of a 'signifier' – the form which the sign takes – and the 'signified' – the concept it represents. So the word 'apple' is a signifier with the signified being the concept of apple. Furthermore, when Saussure refers to 'sign', usually he refers to a single word. Lastly, Saussure stresses the arbitrary nature of signifiers. To denote the roundish, often green fruit, English uses 'apple' as a signifier, whereas Finnish uses 'omena' and Vietnamese uses táo, and so on. There is nothing 'appley' about the signifier 'apple'. If it were desirable, all manner of words – 'cronsh', 'splamph', etc. – could be used instead.

Having laid out some fundamental ideas from Saussure, I move on to highlighting how Derrida engages with these ideas in the concoction of his language philosophy.

3.7 Derrida's engagement with Saussure

3.7.1 Meaning deficit

Derrida agrees with Saussure that meaning is generated through differences:

> words and concepts receive meaning only in sequences of differences . . .
>
> (Derrida, 1976[1967]: 70)

He also agrees that signs are arbitrary (Derrida, 1982c[1968]: 11). But if the meaning of 'hovel' is the meaning of not-palace, not-flat, not-detached house, etc., then the meaning of hovel is not completely there. Put another way, Saussure's distinction between signifier and signified does not hold since there cannot be a pure, graspable signified:

> the signified concept is never present in and of itself, in a sufficient presence that would refer only to itself. Essentially and lawfully, every concept is inscribed in a chain or in a system within which it refers to the other, to other concepts, by means of the systematic play of differences.
>
> (Derrida, 1982c[1968]: 11)

It follows that there is always a deficit of meaning in the sign's make-up. And these are not just signs in *langue*. For Derrida, this happens in *parole* too. Indeed the *parole-langue* distinction is blurred for Derrida (Bennington, 1993: 72–73).

3.7.2 The trace

While Derrida accords with Saussure's differential approach to meaning, he goes further than Saussure with his idea of the *trace*. Since every sign can only obtain meaning in itself by differing from other signs in the linguistic system, this must mean that every sign retains the traces of the signs that it is not. All signs are thus caught up in a network of other signs:

> Nothing, neither among the elements nor within the system, is anywhere ever simply present or absent. There are only, everywhere, differences and traces of traces.
>
> (Derrida, 1981b[1972]: 24)

For a sign to mean, it must carry a trace of other signs in the system against which it is defined. And this does not just apply to the linguistic system. A sign in a sentence (i.e. in parole) carries traces of other signs in the sentence's chain of signs (Derrida, 1981b[1972]: 24; 28–29). With exemplary lucidity, Madan Sarup explains how the trace operates sententially:

> When I read a sentence the meaning of it is always somehow suspended, somehow deferred. One signifier relays me to another; earlier meanings are modified by later ones. In each sign, there are traces of other words which that sign has excluded in order to be itself. And words contain the trace of the ones which have gone before. Each sign in the chain of meaning is somehow scored over or traced through with all the others, to form a complex tissue which is never exhaustible.
>
> (Sarup, 1988: 36)

Again, we see the focus on the sign as word. Lastly, the trace is thus another way of explaining the instability of meaning. There cannot ever be pure, self-contained, stable meaning if a sign is 'contaminated' by traces of other meanings. For example, in *Phaedrus*, the remedy translation of *pharmakon* is contaminated by the trace meaning of poison. Derrida's reading strategy here is to open up the text of *Phaedrus* to the trace meaning of poison. This strategy is, in fact, a general one in deconstruction:

> The text is to be read not as a series of signs, but of traces . . .
>
> (Powell, 2006: 59)

3.7.3 Spectral meanings

Since the trace is both present and absent, it is not really something that you can see or hear. It is not part of our habitual experience of the material world (Derrida, 1976[1967]: 62; 75). It is spectral. As Royle (2000: 7) says:

> Deconstruction has to do with traces . . . [a] ghostly conception of language.

If you 'see' a ghost, what indeed do you see? Your eyes evolved to register sensations from the material world – the world of presence. A ghost is somewhere between presence and absence, the apparition being between the living world and the dead world. The ghost is thus an undecidable. And it is its ghostly nature, the neither-one-thing-nor-the-other character of the trace, that contributes to instability of meaning in the sign. Returning to *Plato's Pharmacy* (Derrida, 1981a[1968]): though the 'poison' meaning in

pharmakon is not conventionally taken into account in translating the section of *Phaedrus* I highlighted, it still haunts the text. Like a ghost, the poison meaning in *pharmakon* is there and not there. In fact, Derrida invokes ghost metaphors in his work, seeing his approach to reading as a 'hauntological' process, a search for spectral meanings which elude the casual reader.

3.7.4 Deferral

By arguing that we never grasp fully present meaning because the meaning of a word is what it is not, Derrida is making an argument about *where* the meaning of a word is in a linguistic system, i.e. distributed across it. Put more abstractly, it is an argument related to meaning in *space*. Another argument that he makes, and one that goes beyond Saussure, relates to meaning in *time*. Derrida argues that the meaning of a signifier never reaches its destination – the signified. Meaning is continually deferred:

> In the system of differences that language is, every signifier functions by referring to other signifiers, without one ever arriving at a signified.
> (Bennington, 1993: 33)

This is different from Saussure who is clear that reaching a signified is achievable from engagement with a signifier.

3.7.5 Difference and deferral → différance

In French, the verb *différer* has two senses: 'to differ' and 'to defer'. Derrida (1982c[1968]) coins the term '*différance*' – a combination of *difference* and *deferral* – to suggest how meaning is both differential and deferred and thus never fully present on two counts. *Différance* does not name what Saussure refers to as differences between terms in *langue*. It is a more abstract idea. Aside from indicating the continuous deferral of meaning, *différance* names the capacity for signs and concepts to be different from one another in the first place which, in turn, facilitates the generation of meaning through difference. Or, as Bennington (1993: 71) puts it, *différance* names '. . . the differentiality or being-different of those differences'. Concepts, words, phrases, texts, and so on are inherently unstable if their meaning is (spatially) differential – dependent on what is not there – and (temporally) continually out of reach. Lastly, since *différance* allows for concepts to be different from one another, Derrida holds that it cannot be a concept itself. This is why he refers to *différance* as a 'non-concept'. Indeed, the trace, *pharmakon*, supplement (3.8) and archi-writing (3.10.2) are also non-concepts for Derrida.

3.8 The supplement

3.8.1 Orientation

Derrida continually rearticulates his vision of undecidability. Another way he does this is through his understanding of supplementation. When we think of a supplement, it is common to think of it as an add-on, as something extra. For example, a vitamin supplement is an add-on to our diet. We know this since our dinner guests would think it odd if we were to put a vitamin pill on our dinner plate along with our meat and two veg. Derrida would agree that a supplement such as a vitamin pill is indeed a dietary add-on. Nevertheless, for him, the idea of a supplement is more subtle and, indeed, undecidable. Derrida writes that every supplement:

> harbors within itself two significations whose cohabitation is as strange as it is necessary. The supplement adds itself, it is a surplus . . . But the supplement supplements. It adds only to replace. It intervenes or insinuates itself *in-the-place-of*.
>
> (Derrida, 1976[1967]: 144–145)

For Derrida, then, the 'logic of supplementation' is an undecideable inside-outside relation (Derrida, 1976[1967]: 215). To understand this idea of 'inside-outside' relation, let me regurgitate the vitamin example. On the one hand, the vitamin pill adds extra nutrients to the diet from outside as we have seen; the vitamins can be said to be in surplus of the normal diet. As a result, the diet increases from 'normal diet' to 'normal diet + vitamin supplement'. On the other hand, from inside the diet, the supplement replaces vitamins which are lacking. After all, why would we take a vitamin supplement unless we had, or thought we had, a deficiency? From this other perspective, the vitamin supplement does not increase the diet because it completes it in filling up the deficiency. In a nutshell, for Derrida, a supplement is both simultaneously:

- outside what is supplemented and thus in surplus of it;
- inside what is supplemented and thus not in surplus of it.

Figure 3.2 visualises these two ways of understanding supplementation.

3.8.2 The supplement and simultaneous absence/presence and surplus/deficit of signification

With it being inside and outside at the same time, Derrida holds that 'the supplement is maddening because it is neither presence nor absence . . .' (Derrida 1976[1967]: 154). Ruminating on vitamins one more time, when

A: the supplement adds to and grows that which is supplemented

B: the supplement replaces a deficit; it does not grow that which is supplemented, but completes it
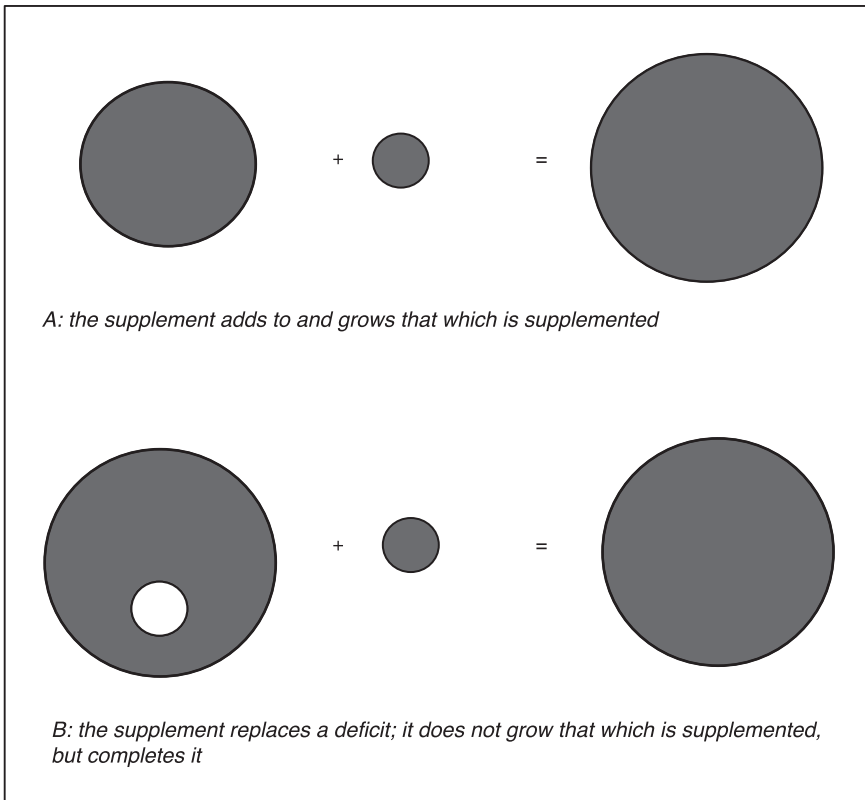
Figure 3.2 Two ways of understanding the supplement.

the vitamin tablet is added to the diet from outside, it is not part of the normal diet; in supplementing the normal diet, in being an add-on to it, it is still *absent* from the normal diet. Yet, from the other perspective, in completing the diet the vitamin tablet must be a part of it, *present* within the diet. The supplement is just like the trace and *différance* in exhibiting a simultaneous state of presence and absence.

The supplement is another way of appreciating Derrida's surplus/deficit vision of language and meaning. He sees the strange inside/outside relation of the supplement as the condition of the sign. As Arthur Bradley, says, explaining Derrida's philosophy of language:

> language works through a process of infinite supplementation where the job of completing or fulfilling meaning is always devolved onto the *next* sign along in space and time . . .

(Bradley, 2008: 71)

As we try to understand a sign using other signs, we are supplementing that sign from *outside*, adding on extra or surplus dimensions to meaning. But simultaneously, we are trying to replace the deficiency of meaning *inside* the sign. Since signification is a simultaneous supplementary process of instituting insideness/outsideness which is equivalent to a simultaneous process of instituting surplus/deficit, it follows, for yet another reason, that any sign is undecidable. That is to say, it is the undecidable inside-outside nature of signification which contributes to instability in the signifier.

3.8.3 Reading a text via its supplement

Another way of looking at deconstructive reading is to see it as reading a text via its supplement. For instance, when Derrida deconstructs Kant's *Critique of Judgement*, it is a reading which is conducted from a supplementary piece of information – the footnote containing Kant's ideas on the parergon. This footnote – like any footnote – supplements the main text body from the outside. But from Derrida's perspective, it also illuminates and complicates a deficit on the inside. In his deconstruction of Kant, the deficit is in Kant's idea that a work of art can exist in a state of purity separate from how it is framed, lit, hung or how it is looked at from the cultural perspective of the viewer – the viewer is yet another supplement to a text or artwork after all.

I have been talking mainly about how Derrida understands the sign. Let me move to highlighting how Derrida treats (what is usually understood as) a bigger semiotic object – 'text'.[6]

3.9 Text and context

3.9.1 Looking beyond borders

For Derrida, if all signs are marked by the traces of other signs, this must mean:

> the presumed interiority of meaning is already worked upon by its own exteriority. It is always already carried outside itself. It already differs (from itself) before any act of expression. And only on this condition can it constitute a syntagm or text. Only on this condition can it 'signify'.
>
> (Derrida, 1981b[1972]: 28–29)

To understand a text, then, we need to appreciate that each of its syntagms will bear traces of meanings which are not present in the text, but not absent either. We should not only approach a text in terms of the meanings in it, in terms of its presences. To understand a text, paradoxically we need to look beyond its borders.

Or 'borders' in inverted commas. Given the presence/absence nature of signification, the spillage of *différance*, the ghostly *trace*, and the troubled inside/outside relation of the *supplement*, it should be clear that, from Derrida's vantage, borders are unsettled, e.g. the border between a sign and what it is not, the border between terms in a binary opposition. And this is very true of how he conceives of 'text':

> all those boundaries that form the running border of what used to be called a text, of what we once thought this word could identify, i.e. the supposed end and beginning of a work, the unity of a corpus, the title, the margins, the signatures, the referential realm outside the frame, and so forth. What has happened . . . is a sort of overrun that spoils all these boundaries and divisions and forces us to extend the accredited concept, the dominant notion of a 'text' . . .
>
> (Derrida, 2004a[1979]: 69)

The border of a text is thus an illusion since the outside cannot be shut out:

> the limit of the frame or the border of the context always entails a clause of nonclosure. The outside penetrates and thus determines the inside.
>
> (Derrida, 1988b[1988]: 152–153)

Here, it is important to understand that Derrida is both including and going beyond the concept of *intertextuality* (Kristeva, 1980). This notion conventionally describes those links in a text to other texts and contexts that an author has inserted into their work. For example, Samuel Beckett has the character Winnie say in his play *Happy Days* 'Oh fleeting joys – oh something lasting woe', a deliberately imperfect recall of a line from John Milton's *Paradise Lost*. In other words, Winnie's utterance is an intertextual echo of *Paradise Lost*. Given what I have written, it should be easy to see how Derrida embraces the idea of intertextuality. But intertextuality is just one phenomenon associated with the borderless text.

3.9.2 No final context, no final reading

And since there are no borders to a text, there can be no final reading – the 'final' reading of any text is perpetually deferred. Fresh contexts will continually lead to new interpretations of the text. We may read a text today and come to it again in ten years. We would find new resonances in it because the context has changed – *us*. In Derridean terms, this experience can be said to supplement our old reading of the text, being both outside it and inside it simultaneously. And if there is no final reading to a text, then there can be no final deconstructive reading either. If any text is in a state of deconstruction

that must apply to the text that demonstrates the deconstructive reading too. And that deconstructive reading of a deconstructive reading can be deconstructed, and so on. We are never in a position to put a fortress around any text protecting it from the possibility that it can be read differently in a different context. As Derrida says:

> no meaning can be determined out of context, but no context permits saturation.
>
> (Derrida, 2004a[1979]: 67)

A closed system of textual meaning is an impossibility for Derrida; it is not possible to fix the meaning of a text in a final way.[7]

3.10 The creative transformative basis of deconstruction

3.10.1 Opening up to suppressed or forgotten difference

What I have written about deconstruction so far may sound as if this set of reading strategies is rather negative. Doesn't it just amount to showing how texts are not in control of themselves? This is a common misperception. Despite the perhaps rather negative sounding name, 'deconstruction' is *transformative*. Deconstruction denaturalises the centre because it is:

> an openness to reading which responds to the possibilities of difference.
>
> (McQuillan, 2000a: xv)

By opening up a concept, binary pair or text to 'suppressed' or 'forgotten' difference not only does deconstruction take place, but the 'natural' order of things is transformed through appreciating plurality and difference. Let me illustrate via one of Derrida's late deconstructions. Derrida (2002a) deconstructs the category of 'the animal'. This absurdly groups, and in so doing obscures, the significant differences between a super-diverse, non-homogenisable array of species (think of the differences between an amoeba and a wolf, or a whale and a tapeworm). In deconstructing 'animal', Derrida also deconstructs the human/animal binary pair which naturalises human experience as 'non-animal' when we have biological commonalities with great apes, primates, and mammals as well as, more generally with other animals, shared vulnerability, suffering and mortality. Consider too the numerous species of bacteria and other microbes that are found in the human digestive system (the 'human microbiome'). Rather than mere parasites, they facilitate digestion and support the immune system. In what sense then are we completely 'human' given a mutually beneficial relationship with billions of tiny animals inside us? Derrida substitutes the human/animal

binary with his neologism *animot* (in French, 'animaux' means 'animals', 'mot' means 'word'; 'animaux' and 'animot' have the same sound.). *Animot* promotes the idea that the relationship of other animals to humans is dependent to a large degree on how we *name* them/us. In doing so, Derrida decentres the human, producing in effect a posthumanist reading (see Part IV).

Derrida refers to a binary opposition such as 'human/animal' as a 'violent hierarchy' (Derrida, 1981b[1972]: 39) because one term is privileged in the pair at the expense of the marginal term. But if the stability of the privileged term is dependent on exclusion of the less privileged term, then how stable really is the centre? There is only stability to the extent that we have forgotten about the excluded or the marginal. By making visible how the centre's stability is dependent on exclusion, the centre if subverted and reform of the political, cultural and economic space can ensue.

3.10.2 Deconstruction and invention

The move to bring the margins to the centre in deconstruction is just one step in transforming the text. This is because, while the 'violent hierarchy' is addressed in reversing the centre term for the marginal term, we are still left with the same binary terms – just in reverse order of privilege. The aim of deconstruction is more radical: not only overturning the hierarchy but introducing *new concepts* which go beyond the structure of the original binary opposition of 'western metaphysics' (Derrida, 1981b[1972]: 38). For Derrida, to deconstruct a binary pair is to bring:

> low what was high, and the irruptive emergence of a new 'concept', a concept that can no longer be, and never could be, included in the previous regime
>
> (Derrida, 1981b[1972]: 39)

Deconstruction is then as much a creative process as a process of desedimentation of structures. Indeed, Derrida is explicit about this:

> Deconstruction is inventive or it is nothing at all.
>
> (Derrida, 1992: 337)

Derrida invents a number of terms which go beyond current binary pairs and their violent hierarchy such as 'animot'. Another of his neologisms is *archi-writing* (*arche-écriture*). Derrida (1976[1967]) argues against the viewpoint of Saussure that speech should be prioritised over writing. Indeed, he makes the bold claim that speech has been privileged over writing throughout the history of Western philosophy. (Derrida's reading of *Phaedrus* is strongly related to this outlook). When we listen to someone's speech, we think we are more in touch with their meaning than if they had written it down.

Writing is cut-off from the presence of its author so how can we trust writing as much as we can speech? But as the reader will know by now, Derrida critiques the idea that there can ever be self-present meaning – in writing or speech. There are just traces of signs in a network of endless differences. Derrida invents the term archi-writing to name this phenomenon – what he regards as the true condition of *both* speech and writing. Through this invention, he not only reverses what he perceives as the 'violent hierarchy' of Western thinking, of speech (privileged) / writing (non-privileged), he also subsumes the reversed hierarchy by the new concept.

3.10.3 Non-predestined, transformative reading via opening the text out to the Other

Derrida's conception of philosophy is oriented towards an alternative future which can be facilitated via deconstruction of the current order:

> deconstructive inventiveness can consist only in opening, uncloseting, destabilizing foreclusionary structures so as to allow for the passage toward the other.
>
> (Derrida, 1992: 341)

From opening up a passage to the Other, current understanding and manner of doing things is transformed:

> everything in deconstruction is turned toward opening, exposure, expansion, and complexification, toward releasing unheard-of, undreamt-of possibilities *to come* . . .
>
> (Caputo, 1997: 31)

Importantly, this future, if it is to contain new possibilities, must be understood as non-teleological, as open and not determined. And the same applies to the reading process itself:

> it is bad to predestine one's reading . . .
>
> (Derrida, 1987b[1980]: 4)

Not to allow a reading to take unpredictable turns through the encounter with the Other is the antithesis of deconstruction since transformative understanding of the text, and the experience of a new future are stifled.

3.11 Two broad types of deconstruction

In this sketch, I have given examples of two broad types of deconstruction. One type is alleged to happen already in a concept, binary pair, text and so

on because of the inherent undecidability of language. This type of decon-
struction is illustrated by Derrida's analysis of pharmakon in Plato's
Phaedrus (Derrida, 1981a[1968]). In the second type, it is Derrida who is
actively performing the deconstruction, not language. This second type of
deconstruction is illustrated by Derrida's analysis of 'animal' and the
'human/animal' binary (Derrida, 2002a). In Chapter 4, I will show that
Derrida's philosophy of language is suspect. In turn, this problematises the
first broad type of deconstruction. The second type – which I regard as both
sound and important – is not problematised because it does not depend on
Derrida's philosophy of language. (In fact, once key elements of Derrida's
philosophy of language collapse, this must mean he is the agent of all of his
deconstructions.)

3.12 What I haven't done in this sketch

I have come to the end of my sketch of deconstruction where I have had a
large focus on Derrida's philosophy of language. But there is much more to
Derrida than his language philosophy, something which was fairly settled by
the early 1970s. He was a prolific and wide-ranging scholar who engaged
with numerous other thinkers such as Austin, Freud, Hegel, Heidegger,
Husserl, Levinas, Lévi-Strauss, Marx, Nietzsche and Rousseau as well as
literary (critical) figures such as Artaud, Blanchot, Joyce, Kafka, Mallarmé,
Ponge and Shakespeare. His panoramic gaze took in topics such as architec-
ture, art, decision-making, ethics, law, politics, psychoanalysis, religion and
translation. Staggeringly, he wrote around 70 books as well as multiple
contributions to edited volumes (Attridge, 2008: 12). I hope it is clear then
that what I have outlined in this chapter is a slice – albeit a significant one –
of Derrida's thinking.

   Since my inclusion of this chapter on Derrida is ultimately for utilitarian
reasons, I have had to shear a good deal of philosophical context for the
generation of his ideas. All of Derrida's 'non-concepts' are, in fact, attached
to the text whose reading led to their invention (e.g. 'archi-writing' from
engagement with Saussure's *Cours*) or to a complication of an existing
notion (e.g. 'supplement' from engagement with Jean-Jacques Rousseau's
Essay on the Origin of Languages). It is also important to flag that Martin
Heidegger's work looms over Derrida's. To properly appreciate deconstruc-
tion, it needs to be understood in relation to phenomenology, generally, and
specifically to Heidegger's notions of *Abbau* or *Destruktion*. 'Deconstruction'
is, in fact, a translation into French from these German philosophical terms.
And while I have mentioned 'deconstruction' promiscuously in the chapter,
Derrida did not initially privilege this term, using it only infrequently.
'Deconstruction' became a kind of 'master' term for Derrida's followers in
the 1970s and 1980s, which was nothing to do with the wishes of *le maître*
himself. But since the word gained a life of its own, Derrida came to terms

with what he couldn't control and started to use 'deconstruction' in a more sustained manner. It is important also to understand the structuralism of Claude Lévi-Strauss in order to situate Derrida's early research – I have not gone into this, merely flagging some key ideas of Saussure whose ideas were fundamental for structuralism. For all of the things I have not done, I apologise. But to provide such extensive coverage would slow things when the point of the rhizomatic engagement with Derrida is to force a 'productive collision'.[8] Perhaps to 'Derrideans' – who would hate the term as well as my use of the expression 'Derridean Deconstruction' – I should perhaps also apologise for the opportunistic ransack and appropriation of Derrida's ideas that is coming.

In Section 3.13, I lay out ideas from Derrida which I regard as productive for stimulating an alternative strategy for the critical evaluation of public sphere arguments (see Parts II and III). Some of these ideas will be straightforward lifts; other ideas from Derrida I appropriate for my own ends while rejecting some key elements of his philosophy of language.[9]

3.13 Derridean ideas and themes that I recontextualise in Parts II and III

Background assumptions for why texts deconstruct:

- the text overruns its 'natural' borders – the meaning of a sign in a text is, in part, what is not there;
- deconstruction in a text depends on difference and ghostly traces of meaning;
- the impression of unity or stability at the centre of a text's structure is dependent on meanings which are pushed to the margins – and thus not so readily apparent – and/or excluded – and thus not apparent at all for many readers;
- texts contain stray signifiers – blind spots – which the author may well not notice such as casual metaphor;
- stray signifiers are surpluses in the text;
- one surplus meaning, anywhere in the text, can have a marked effect on the stability of a text's structure;
- supplementary meaning is both outside and inside the text.

Deconstructive reading procedure. To engage with a text is:

- to describe and then complicate/transform that text;
- to produce a double-reading – understanding the text in its own terms, trying to ascertain the intentions of the author, before showing where the text exceeds these intentions;
- to allow the Other (what is different, the not-me) to speak;

- to be concerned with 'the Other of language', appreciating the text's 'spectral' meanings and making them visible;
- to explore the implications for the text's structure from reading it via its traces;
- to read from 'outside' of the text using a supplement such as a footnote;
- to show how a supplement to a text illuminates meaning deficit within that text;
- to go to a text's margins and/or to look beyond them;
- to appreciate simultaneously a text's absences as much as its presences, showing how these absences affect the text's presences;
- to intervene in a text both from the outside and the inside;
- to respond to possibilities of suppressed difference in a text;
- not to predestine a reading, i.e. a deconstructive reading should not be predictable.

The deconstructive approach of this book draws on the method called 'corpus linguistics'. Chapter 4 outlines this method. In Parts II and III, the reader will also see the above Derridean ideas appropriated for different ends via corpus linguistic insights.

Notes

1 Pronounced *FEEDrus*.
2 See also Derrida (1982a).
3 Available at http://www.wikiart.org/en/stanley-spencer/making-columns-for-the-tower-of-babel-1933 [accessed July 2016].
4 See Derrida (1982b) for another well-known deconstruction of a text using one of its footnotes. The text here is Martin Heidegger's *Being and Time*.
5 '. . . to say that we cannot understand the internal linguistic organism without studying external phenomena is wrong' (Saussure, 1974: 22).
6 Though see Widdowson (1995) where he points out there are, in fact, many single word texts (e.g. 'Exit' in a theatre) or even single letter texts ('F' on a public toilet).
7 Word meaning is not just unstable for Derrida because undecidability is a natural state of affairs. It is also because words constantly shift their meanings in different co-texts and in different contexts. For Derrida, inserting signs into new co-texts and contexts continually produces new meanings which are both partly different from and partly similar to previous understandings. This paradoxical condition of sameness / difference, Derrida calls *iterability* (Derrida, 1982d).
8 For readers looking for a clear, extensive overview of deconstruction, see McQuillan (2000b).
9 'Since Derrida claimed that language, by its very nature, undermined any meaning it attempted to promote, Madeleine wondered how Derrida expected her to get his meaning' (Eugenides, 2011: 47). In the interests of scholarly rigour, I have done my best to render accurately core theses in Derrida's thinking around language. All the same, if his undecidability thesis was correct, an accurate rendering of Derrida would be impossible (see Section 4.6).

Chapter 4

Corpus linguistics and digital text analysis

4.1 Introduction

The main purpose of this chapter is to outline key concepts, principles and methodological advantages of corpus linguistics which are crucial to the approach of this book. 'Corpus linguistics' sounds rather specialist. To non-linguists, it may sound forbidding. There are plenty of analytical frameworks in linguistics which are complex, requiring substantial intellectual investment to learn and apply effectively. But this is not so for corpus linguistics. Compared to many other approaches in linguistics, it is light on concepts and terminology and straightforward to pick up. This is because it is much more of a set of methods and principles for the analysis of digitised language data than an elaborate theoretical angle on language. You don't need to be a linguist to use, in a productive way, software designed by corpus linguists. And yet it would be wrong to just see corpus linguistics only as a method. It has generated important insights into the nature of language use, which I shall detail in this chapter. These insights have consequences not just for linguists but for anybody interested in language study. They inform Parts II and III.

Corpus linguistics can be seen as part of the digital humanities. Or, if this is too controversial a statement for some, certainly analytical techniques in corpus linguistics can be used by digital humanists. Since the critical reading strategies of this book draw on corpus linguistics, rather than specialist areas of linguistics, this is why I see the strategies of this book as fitting within the digital humanities (or more properly the 'digital *post*humanities' – see Part IV). In other words, I see the approaches of this book as usable not just on modules in critical thinking and / or Critical Discourse Studies, but on a range of humanities courses where public sphere argument is a focus. To help appreciate this, I provide a sketch of the digital humanities and its core commitments, and then highlight similar commitments in corpus linguistics.

In Parts II and III, I will appropriate the Derridean ideas outlined in Chapter 3 for conjuring a critical deconstructive approach to the analysis of public sphere arguments. Some of this appropriation will involve

straightforward lifting. But where Derridean ideas conflict with a corpus linguistic perspective, straightforward lifting naturally is not possible. Towards the end of the chapter, I highlight these conflicts. This helps clear the way for using Derridean ideas as a productive stimulus.

4.2 Digital (post)humanities

4.2.1 Orientation

The term 'digital humanities' refers to humanities research, teaching, and creation which takes place at the junction of computing and the disciplines of the humanities (such as history, philosophy, linguistics, literature, art, archaeology, music, and cultural studies), as well as social sciences. Digital humanities used to be known as 'humanities computing', with its roots going back to just after the Second World War. Commonly accorded the status of father of digital humanities was a real-life 'father' – the Italian priest, Roberto de Busa. In 1946, he spawned the idea of an index to enable searching through the complete works of the theologian St Thomas Aquinas. The project was sponsored by IBM. In 2005, the web-based version of this index became available.[1]

After the publication, in 2004, of the online anthology, *A Companion to Digital Humanities*,[2] the term 'Digital Humanities' caught on quickly as an umbrella term to describe the application of computational methods in the arts and humanities. Humanities computing was commonly seen as using computers to *assist* humanities scholarship. In contrast, digital humanities not only expresses a commitment to this viewpoint, but exploits digital resources for the *transformation* of the humanities (Berry, 2012: 5). The affordances of new technologies are animating swathes of scholars to explore the transformative possibilities of doing humanities research. Projects range from digitising historical sources to enabling ready searches of these archives to the use of software for 'data visualisation', rendering complex numerical data in striking visual representations not only to engage with but to ease understanding. The landscape of the digital humanities is boundless as new software continually comes on stream and new applications are imagined. Such is the speed and take-up of new technologies in the humanities that it is hardly crystal-ball gazing to say that eventually all humanities research will be digitised in some way or other.

It is not crystal-ball gazing either to see that what we understand as 'educating the human' will look very different in the future. Intelligent technology is not a mere human prosthesis but becoming integral to the human. With the line between human and non-human intelligent machines becoming blurred, the condition of our lives is increasingly '*post*human' (Braidotti, 2013). In turn, this is leading to a reconfiguring of the underpinning assumptions of the humanities and what education means (Snaza *et al*., 2014; Snaza

and Weaver, 2015; Taylor and Hughes, 2016). Put another way, while the humanities are digitising, they are also undergoing mutation into *post*humanities (see Part IV). It is early days in this process; mutation is scattered and partial. The embryonic posthumanities are unavoidably imbricated with humanism. This book is enmeshed in this change, inevitably reflecting the current hybridity.

4.2.2 Core commitments

Scholarship in the digital humanities is growing at a pace (e.g. Arthur and Bode, 2014; Meyer, E. and Schroeder, R., 2015; Terras, Nyhan and Vanhoutte, 2013; Warwick, Terras and Nyhan, 2012). Given the range and speed of the digital humanities, coming up with a tidy definition is not straightforward. It is probably easier to sketch research in the digital humanities in terms of a number of core commitments. Below are some that are fairly obvious to me:

- Automation reduces manual labour and human error: these are key advantages of working with software since human beings tire over long stretches of data, being prone to errors of data identification and counting.
- Big data: the bigger the dataset we work with, the more surprising, and thus interesting, our findings; the more robust our generalisations from our findings too.
- Critical making: engaging with technology to make a material product which in turn enables critical thinking and reflection on the world.
- Datafication: reconstituting the world as quantified data for a particular value.
- Data mining: software can extract illuminating information from a large set of data.
- Data annotation makes investigation more targeted: software investigation becomes more efficient when we can target particular types of data that are of interest to us. This means preparing the dataset by labelling the things that we wish to focus on. For some things, this can be done automatically, e.g. labelling all nouns in a collection of texts. This kind of labelling is referred to as data annotation.
- 'Distant reading': e.g., analysing language use in all of Shakespeare's comedies may shed light on a single Shakespearean comedy.
- Empirical study: a commitment to evidence-based study of authentic data rather than speculative research.
- Facilitating understanding and interpretation of texts: having data in digitised format does not just facilitate its quantitative investigation. Challenging texts can also be made easier to understand and interpret.

- Quantitative analysis: data extraction habitually has a quantitative basis. Yet, qualitative analysis is never far away – quantitative data will need to be interpreted.
- Quantitative findings are objectively generated: the results of the software analysis are objective – the software generated them, not the human analyst.
- Quantitative results provide a non-arbitrary rationale for qualitative analysis: qualitative exploration of a dataset does not have an arbitrary starting point if it targets the most, or least, frequent phenomena in the dataset.
- Pattern recognition: data mining can render the invisible visible. Information that seemed previously diarrhoeal may in fact contain regular patterns.
- Subjective interpretation is grounded: interpretation is unavoidably subjective. But it can carry more conviction when it is grounded empirically in lots of objectively generated data.
- Visualisation: data can be presented in often striking, easy to understand ways and ones which can assist interpretation.

4.2.3 Digital text analysis

The commitments of 4.2.2 are usually in evidence in software-based analysis of digitised texts. This sub-discipline of digital humanities is often called 'text analysis' (e.g. Argamon, 2009). 'Digital text analysis' is, to my mind, a better expression since this removes misunderstanding that 'text analysis' might refer to the non-software-based analysis of texts. Let me flag the power of a simple digital text analysis for assisting with the understanding and interpretation of a challenging text, James Joyce's *Ulysses* (1992[1922]), in particular one of its most demanding chapters – chapter 18. This final chapter is written from the perspective of one of the central characters of the book, Molly Bloom. We have a torrent of Molly's thoughts while she lies in bed next to her husband, Leopold; she is thinking of her lover Blazes Boylan as well as Leopold. The chapter uses a stream-of-consciousness technique reflected in its sparing use of punctuation, which places demands on the reader. Worse still it is a chapter of 24,196 words! *Ulysses* is freely available in digital format,[3] which means this 'big data' can be analysed with software, thus helping a reader make sense of it.

Consider Figure 4.1, a graphic representation generated with the freely available tool *Voyant*, designed by Stefan Sinclair and Geoffrey Rockwell (Sinclair and Rockwell, 2015). Voyant has a number of functions. One thing it can do is calculate the most frequent words in a text or corpus and visualise them in a word cloud. In the word cloud (Figure 4.1 and magnified in Figure 4.2), the size of the word correlates with its frequency in the chapter. One of the most frequent words in the chapter is 'yes', occurring 91

Figure 4.1 Voyant graphic representations of 'yes' in chapter 18 of *Ulysses* using Sinclair and Rockwell (2015).

Duke street and the fowl market all clucking outside Larby Sharons and the poor donkeys slipping half asleep and the vague fellows in the cloaks asleep in the shade on the steps and the big wheels of the carts of the bulls and the old castle thousands of years old yes and those handsome Moors all in white and turbans like kings asking you to sit down in their little bit of a shop and Ronda with the old windows of the posadas 2 glancing eyes a lattice hid for her lover to kiss the iron and the wineshops half open at night and the castanets and the night we missed the boat at Algeciras the watchman going about serene with his lamp and O that awful deepdown torrent O and the sea the sea crimson sometimes like fire and the glorious sunsets and the figtrees in the Alameda gardens yes and all the queer little streets and the pink and blue and yellow houses and the rosegardens and the jessamine and geraniums and cactuses and Gibraltar as a girl where I was a Flower of the mountain yes when I put the rose in my hair like the Andalusian girls used or shall I wear a red yes and how he kissed me under the Moorish wall and I thought well as well him as another and then I asked him with my eyes to ask again yes and then he asked me would I yes to say yes my mountain flower and first I put my arms around him yes and drew him down to me so he could feel my breasts all perfume yes and his heart was going like mad and yes I said yes I will Yes.

Summary

There is 1 document in this corpus with a total of 24,203 words and 3,618 unique words.
Most frequent words in the corpus: the (1,199), I (783), and (662), to (596), a (557). More...

Relative ▾ Segments ▾ Search

Keywords in Context

Left	Keyword	Right
he asked me to say	yes	and I wouldnt answer first
castle thousands of years old	yes	and those handsome Moors all
figtrees in theAlameda gardens	yes	and all the queer little
a Flower of the mountain	yes	when I put the rose
shall I wear a red	yes	and how he kissed me
my eyes to ask again	yes	and then he asked me
he asked me would I	yes	to say yes my mountain
would I yes to say	yes	my mountain flower and first
put my arms around hm	yes	andrew him down to
feel my breasts all perfume	yes	and hisheart was going
was going like mad and	yes	I said yes I will
mad and yes I said	yes	I will Yes
I said yes I will	Yes	

Figure 4.2 Magnified word cloud for chapter 18 of *Ulysses* using Sinclair and Rockwell (2015).

times. The quantity of 'yes' seems to suggest it is part of the design of the chapter. We have a reason, then, for inspecting this word further to see how it is used in chapter 18. In other words, examining 'yes' qualitatively in chapter 18 would not be an arbitrary choice (see also 4.5.3). One interpretation of the use of 'yes' in the last chapter is that Joyce is simulating Molly's auto-revelry and its hastening to apogetic rapture. This is not so explicit in the chapter – so it remains an interpretation and thus unavoidably subjective. Still, this interpretation can be made more convincing by grounding it in objectively generated data. Look at the graphic at the top right of Figure 4.1. This indicates how 'yes' becomes more frequent towards the end of the chapter; that is to say, becoming more frequent relative to other words. The quantitative climax lends support for the above interpretation.

Another advantage of text analysis software is that it creates a representation of the text which is 'foreign' to the actual data. As Stephen Ramsay says:

> It is one thing to notice patterns of vocabulary, variations in line length, or images of darkness and light; it is another thing to employ a machine that can unerringly discover every instance of such features across a massive corpus of literary texts and then present those features in a visual format entirely foreign to the original organization in which these features appear.
>
> (Ramsay, 2011: 16–17)

It is this estranging of the original text which is particularly fruitful for the interpretative process. The objectively generated 'foreign' representation places brakes on our natural human propensity to move quickly to interpretation. When we are faced with a challenging and unfamiliar text, there is a danger that we try to make sense by making it fit habitual frames. In so doing, we may miss key aspects of its textuality. Dealing with an objectively generated foreign representation of the text not only provides a mechanism for reining in this human propensity. It can also lead to what Ramsay calls a 'heightened subjectivity' in our response to the text (Ramsay, 2011: x). The software-generated representation gives us pause and helps us to raise our interpretative game. Having to engage with an intermediary representation, we are jolted out of the familiar, and pushed to think harder about the qualities of text behind it which led to this representation.

I now move to outlining corpus linguistics. As the reader will see, the core commitments of digital humanities that I flagged in 4.2.2 apply to corpus linguistics too.

4.3 Corpus linguistics: Introduction

4.3.1 Orientation

The reader will know by now that corpus linguistics (henceforth 'CL') is the software-based, quantitative investigation of a collection of electronic texts; such a collection is referred to as a "corpus" – a body of texts which is usually compiled in a principled manner.[4] There has never been a time when so much English language data has been readily available for investigation. The World Wide Web contains billions of words of English usage and is increasingly being trawled for corpus construction. Advances in computational memory and search software mean that big corpora consisting of billions of words, derived from the web and elsewhere, can readily be stored and swiftly explored. With these technological developments, linguists in the twenty-first century are in an exciting position to investigate English use on a massive scale. It is no exaggeration to claim that the use of corpora has revolutionised English language description.

The investigation of large amounts of language data in electronic form brings significant advantages. First, linguists are able to discover things about language use which may otherwise remain invisible. As one of the chief architects of corpus linguistics says:

> the language looks rather different when you look at a lot of it at once.
> (Sinclair, 1991: 100)

Second, investigation of a corpus provides a quantitative, and thus robust, basis for confirming or falsifying intuitions about language use. This means

that linguists no longer have to speculate about how people generally use a language, something which is obviously prone to error. Third, the labour, time-drain and tedium of manual analysis of large quantities of language use data have been substantially shrivelled.

4.3.2 John Sinclair

Many of the ideas from corpus linguistics that I flag in this chapter emanate from the research of John Sinclair (1933–2007). Here is another corpus linguist, Michael Stubbs, on Sinclair's achievement:

> Sinclair is one of the very few linguists who has discovered many things which people had simply not noticed, despite thousands of years of textual study – because they are observable only with the help of computer techniques which he helped to invent.
>
> (Stubbs, 2009: 116)

Sinclair prioritised methods for the analysis of digitally stored, naturally occurring language data rather than a theory (Hunston and Francis, 2000: 14–15). By definition, CL deals with observable data and is thus within the philosophical tradition of empiricism. The salient word for Sinclair is 'evidence'. Sinclair was an uncompromising empiricist and his understanding of language use is based on countless observations of it at scale. With corpora in the millions and increasingly in the billions of words, we have access to evidence that is beyond the dreams of linguists living before the latter part of the twentieth century.

The first electronic corpus (Brown Corpus) was compiled in 1964 at Brown University by Nelson Francis and Henry Kučera. It contained a million words of American English from documents which had been published in 1961. In the UK at around the same time, Sinclair produced the first electronically searchable spoken corpus at the University of Edinburgh (1963–1965). It contained 166,000 words of informal conversation in English. In 1970, he co-wrote the first report on research into corpora and many of the seeds for later ideas were contained in this report (Sinclair *et al.* 2004). Then he took a step back from corpus research because of hardware and software limitations. In 1980, when the technology had developed sufficiently to enable extensive study of corpora, Sinclair organised a contract with the publishers Harper Collins for the production of a new kind of dictionary – one based on large corpora of written and spoken language. The corpus is known as COBUILD (Collins Birmingham University International Language Database). The groundbreaking Collins Cobuild dictionary was published in 1987.

In a short time, the COBUILD dictionary's visionary use of digitised corpora transmuted lexicography. Today, most authoritative dictionaries

are grounded in large electronic corpora. The *Oxford English Dictionary*, for example, is now based on a very large electronic corpus – the Oxford English Corpus (OEC). At the time of writing, it consisted of around 2.5 billion words from texts across a wide number of genres such as news, magazine articles and message board postings in UK, US, Australian and other national varieties of English.[5] The OEC is predominantly a web-based corpus – that is, a corpus derived from a language on the web. Given its range and balance of genres, as well as its size, it is regarded as one of the most authoritative bases for judgements about contemporary language use. Corpus linguistics, then, has revolutionised lexicography. This is 'sexier' than first appears. Every literate person uses a dictionary.

4.3.3 Big is beautiful

A fundamental principle of corpus linguistics is that we should not rely on our intuition of language use as to what is frequent and what is not. We may be able to work out from intuition alone that the grammatical word 'the', say, is usually very frequent in most texts. But this guessing game becomes harder, and error-prone, when we start to reflect on what might be the tenth, eleventh, twelfth, etc., most common lexical word in standard US English usage or its most common five-word expressions. We do not memorise information in this way. Even if we are proficient speakers with decades of using a language, we cannot readily access this information in our mind. Because it is committed to looking at language at scale, the great power of corpus linguistics – just like any branch of the digital humanities – is that it can render the invisible visible. Language use is always under our nose, but until corpus linguistics we did not know what was under a lot of noses.

A good example of this is provided by Michael Stubbs. Stubbs (2007) discovered that *world* is one of the top ten nouns in the British National Corpus, a corpus of 100 million words. He found through concordance searches that one reason it is so common is it occurs in frequent expressions such as 'the most natural thing in the world', 'one of the world's most gifted scientists'. Expressions such as these in which superlatives are used, or rankings are employed, are very frequent in English, but it is difficult without large corpora to intuit this so clearly. Once the evidence is presented, it is common for the cynic in some of us to say 'well, it's obvious that use of 'world' is so frequent'. With hindsight, corpus linguistic findings may seem self-evident to proficient speakers. All the same, we are kidding ourselves that we would have been able to intuit, with complete confidence, quantitative-based *phrasal* facts about language without use of corpora.

Having sketched corpus linguistics, I move on to flagging some key concepts and insights that emerge from looking at 'a lot of language data at

once'. I draw on the 1.5 billion words UKWaC corpus to illustrate some key corpus linguistic insights. UKWaC is accessed via the software, Sketchengine.[6]

4.4 Key concepts and insights from corpus research

4.4.1 Word patterns

A key insight from thousands upon thousands of observations of corpora is that language use is patterned – words commonly associate with one or more other words. Where there is regular co-occurrence of lexical words, this is referred to as **collocation**. Consider the word 'rife'.[7] In UKWaC, there are 2857 instances of 'rife'. A common collocate of 'rife' is 'speculation', which co-occurs 141 times. Figure 4.3 is a randomly generated sample concordance of 'rife' collocating with 'speculation' consisting of 30 lines. Words immediately to the right of 'rife' are in alphabetical order. This enables the spotting of word patterns. Concordancing – the process where concordance lines are produced – is a key tool for the corpus linguist.

Concordances highlight not only how lexical words commonly co-occur but also how lexis and grammar do so. Again, one can see this with the 'rife' examples in Figure 4.3. 'Rife' associates also with the grammatical word,

```
       the transaction, and  speculation  was < rife > about the buyer, their intentions
  speculation  and anticipation are very < rife > about what Apple will announce at
 in her personal life,  speculation  is < rife > about what it means for her
 development. Last year speculation was < rife > about whether Cloudera,
          and  speculation  continues to be < rife > as to what each report actually
         We realise that  speculation  is < rife > as to whether 2012 represents the
 we were headed, so  speculation  was < rife > as we toured the sights of London.
 the problem, currency  speculation  is < rife > due to sanctions affecting
  shipment. Rumor and  speculation  are < rife > in eastern Democratic Republic of
 be coming soon. Such  speculation  is < rife > in Israel, where the editors of
        at the moment with  speculation  < rife > in many areas of the globe
   death. Rumour and  speculation  were < rife > in the locality. They felt
 be among them, but  speculation  was < rife > on social media websites about who
          Nineveh region,  speculation  is < rife > that Duaa's murder was really a
     have cratered, and  speculation  is < rife > that GM will declare bankruptcy,
 on Rafa Benitez. With  speculation   < rife > that Rafa's exit could be sooner
Charkhari Assembly seat, speculation is < rife > that she is also among the
       Among the NGOs,  speculation  was < rife > that the "latinos" had come up
   "a long time ago",  speculation  is < rife > that the minister in fact wished
 suicide is unknown but speculation is < rife > that the pair had been pressured
     reasons, although  speculation  is < rife > that the situation was similar to
   Cup of Nations and  speculation  is < rife > that the Super Eagles could be
 Anil, at a time when  speculation  is < rife > that the two, who have been bitter
     barrels. However,  speculation  is < rife > that this amount is not reflective
the new regulations, speculation is now < rife > that this might not be the case,
     came after the online community was < rife > with rumors and  speculation.
   up to the meeting were exciting and < rife > with  speculation. Not so for
    the print and electronic media was < rife > with  speculation  (what's new)
      $100 million. Wall Street has been < rife > with  speculation  as analysts
After reading months of Internet blogs < rife > with  speculation  over the
```

Figure 4.3 Thirty randomly generated concordance lines showing collocation between 'rife' and 'speculation' from the UKWaC corpus.

'that', such as in 'speculation is rife that . . .'. Where there is a common association between a lexical word and a grammatical word, this is known as **colligation**. Just like collocation, exploration of large corpora shows that colligation is a fundamental fact of language usage.

The word we investigate in a corpus is called the 'node' word. Another concept in corpus linguistics, 'word span', refers to the number of words either side of the node word which determines the scope of the investigation. In line with the advice of Jones and Sinclair (1974), I used above a $n\pm4$ word span where n is the node word. In Figure 4.3, 'rife' is the node word. When I generated the concordance, I instructed Sketchengine to find only collocates in the texts of UKWaC four places to the left of 'rife' and four places to the right of 'rife'.

4.4.2 Language use consists of semi-fixed, semi-abstract word patterns

Collocation and colligation describe local associations between two words. But frequently repeated word patterns commonly consist of several words. One longer pattern in Figure 4.3 is as follows:

speculation + BE + rife + that + clause

Longer patterns, consisting of lexical and grammatical words, are known as **phraseologies**. Prototypical phraseologies, just like prototypical collocation and colligation, tell us what regular everyday language use is like.

It is important to appreciate that phraseologies are semi-fixed. For instance, you can add adverbs to a phraseology such as in 'speculation is *already* rife that . . .' or 'speculation is *now* rife that' and so on. And you don't have to use 'speculation'. You could use 'rumours', 'reports', 'gossip' – corpus evidence shows that these are common collocates of 'rife' too. Though phraseologies are pliable, there are limits to this. For example, you will be unlikely to find much evidence in an American English corpus for use of 'speculation' in the plural with 'rife' such as 'speculations have been rife that . . .'.

Given that 'rumours', 'speculation', 'gossip' are from the same semantic field, a more abstract perspective on the phraseology 'speculation + BE + rife + that + clause' is to say that it has a preference for collocation with 'conjecture' words. When a word pattern carries a preference for a particular semantic group of words, Sinclair refers to this as a **semantic preference** (Sinclair, 2004: 142). This must mean that phraseologies are not just semi-fixed. They are semi-abstract also as reflected in the following representation of the above phraseology:

[CONJECTURE WORD] + BE + rife + that + clause.

'CONJECTURE WORD' is an abstraction, a slot that needs to be filled.

The semi-fixed, semi-abstract phraseological nature of language use is a key finding of corpus linguistics. It is not as if linguists prior to corpus linguistics had failed to notice fixed phraseologies – or idioms – such as 'a stitch in time saves nine'. Yet, fixed expressions were traditionally seen as atypical language use. That language use *primarily* consists of semi-fixed, semi-abstract patterns of variable size is hard to know without copious evidence.[8]

4.4.3 Idiom principle

From abundant evidence that language use is habitually patterned in semi-fixed and semi-abstract phraseologies, Sinclair coined his idiom principle:

> The principle of idiom is that a language user has available to him or her a large number of semi-preconstructed phrases that constitute single choices, even though they might appear to be analysable into segments.
> (Sinclair, 1991: 110)

There are three fundamental entailments of the idiom principle. The first is that:

> The idea of a word carrying meaning on its own would be relegated to the margins of linguistic interest, in the enumeration of flora and fauna for example.
> (Sinclair, 2004: 30)

The second is that:

> There is ultimately no distinction between form and meaning.
> (Sinclair, 1991: 7)

If we want to understand the meaning of a word, we need to understand not only its common collocates but its common colligates. Drawing from corpus evidence, over and over Sinclair illustrated how misleading it is to decouple lexis and grammar. The third entailment is that we only engage with words individually when we have to (what Sinclair calls the 'open choice' principle).

4.4.4 Traditional dictionary meaning can be misleading

Let me return to the word 'world'. If you went to an old, pre-corpus dictionary, you would probably find one of its salient meanings is 'the earth and its inhabitants'. This is the definition I found in the *Chambers Student Dictionary* published in 1976. Now consider 'world' in the following text fragment:

> It's a Friday evening at one of Bangalore's most happening hip-hop dives, TGIF. The place is cramped with the weekend party crowd; everyone's downing ultimates, generous servings of cocktails that come in huge goblets; and the music never stops. Ah, the music – this evening it's a live band that seems caught in engineering-school limbo. You know the kind; earnest sorts who think the **world** of Floyd, Dire Straits, and The Doors. And yes, they do play Hotel C . . . [my bold[9]].

The meaning of 'world' in this text is very different from the above dictionary meaning. In fact, 'world' in the above cannot be replaced with 'earth'. This marked discrepancy between traditional dictionary meaning and textual meaning of a word is very common. And not only is this state of affairs habitual, but it is very common for the meaning of a word to vary greatly in different texts. For example, the meaning of 'world' in the following text extract from John Kennedy Toole's novel, *A Confederacy of Dunces*,

> In this film she was a bright young secretary whom an aged man of the **world** was trying to seduce [my bold].[10]

is different again.

For Sinclair, the two issues I have drawn attention to are problems. But they only exist as problems if one's analytical object is the single word rather than the phraseology. To return to the first example, corpus evidence tells us that 'world' commonly collocates with 'think' in the following phraseology:

> 'SOMEONE(S) (+ who) think(s) the world of SOMETHING(S) / SOMEONE(S)'.

This is a semi-abstract pattern since obviously we need to specify the someone(s) and the something(s). The pattern is also semi-fixed. We could also choose to use a relative pronoun such as 'who' and so on. With this phraseology as our starting point, we can see that there is no marked discrepancy between 'SOMEONE(S) (+ who) think(s) the world of SOMETHING(S) / SOMEONE(S)' and 'earnest sorts who think the world of Floyd, Dire Straits, and The Doors'. This is because 'earnest sorts who think the world of Floyd, Dire Straits, and The Doors' is a concrete instantiation of a pre-existing semi-fixed, semi-abstract pattern. The online version of the *Oxford English Dictionary* provides the 'SOMEONE(S) (+ who) think(s) the world of SOMETHING(S) / SOMEONE(S)' phraseology.[11]

It is becoming clear, I hope, that the reason there is a discrepancy between traditional dictionary meaning and text meaning is that traditional dictionaries were not based on corpus evidence. In making their focus largely the meaning of single words, lexicographers were unaware of the semi-abstract, semi-fixed patterned nature of almost all word meaning. In contrast, modern

dictionaries based on a big corpus provide a good deal of phraseological information for words.

4.4.5 Lemmas and patterns

When we refer generally to words, we use what linguists call the **lemma** – the simplest form of a word, morphologically speaking. The singular 'eye' and the plural 'eyes' are word forms of the lemma EYE (lemmas are indicated conventionally by small capitals). An interesting finding in corpus research is that different word forms of the same lemma can have different collocations, colligations and phraseologies. For instance, corpus evidence shows that the plural 'eyes' regularly collocates with colours such as 'in 'blue eyes' and 'brown eyes'. Yet, the singular 'eye' collocates with colours much less commonly. It is found instead in recurrent expressions such as 'it is too faint to see with the naked eye', 'the eye of the hurricane', 'an eye for an eye', and so on (Stubbs, 1996: 38). The upshot of all of this is that it can be restricting, and perhaps potentially misleading, to look at a lexical word in a phraseology only in terms of its lemma.

4.4.6 Lexical priming

Building on Sinclair's insights, the discourse analyst Michael Hoey argues that corpus evidence illuminates the kind of expectations we have about how particular words fit into particular language structures and these expectations are 'genre, domain, and situationally-specific' (Hoey, 2005: 165). For example, when we are reading a newspaper, our expectations about collocation would be different from when we are listening to someone while engaged in a conversation. He refers to such expectation as *priming*. As Hoey (2005: 8) asserts:

> We can only account for collocation if we assume that every word is mentally primed for collocational use. As a word is acquired through encounters with it in speech and writing, it becomes cumulatively loaded with the contexts and co-texts in which it is encountered, and our knowledge of it includes the fact that it co-occurs with certain other words in certain kinds of context. The same applies to word sequences built out of these words; these too become loaded with the contexts and co-texts in which they occur.

Like Sinclair, and Hunston and Francis, Hoey stresses that 'all primings . . . are matters of probability not requirement' (Hoey, 2005: 51). The concept of priming works because of the routinised nature of much of existence. But while a fair amount of the time, we are able to predict vocabulary choices by a speaker in particular domains, there will be instances when our expectations are not realised. For instance, a speaker or writer might deliberately play with our collocative expectations in playful language such as a poem,

joke or a newspaper headline. Moreover, it is important to state that corpus linguists are usually limited to investigating corpora consisting of texts from a range of sources and thus produced by many different individuals. This means that:

> the computer corpus cannot tell us what primings are present for any language user, but it can indicate the kinds of data a language user might encounter in the course of being primed.
>
> (Hoey, 2005: 14)

Hoey introduces the contrastive idea of **positive priming** and **negative priming**. Echoing earlier, we are positively primed for the collocation of 'blue' with 'eyes' since the frequency of corpus evidence suggests we will have encountered this collocation many times. In contrast, we are negatively primed to expect language data such as

> it is too faint to see with both naked eyes

since the corpus evidence suggests we are not routinely exposed to the collocation of 'naked' and 'eyes'.

4.4.7 Ambiguity

Something else that corpus evidence illuminates is the relative rarity of non-deliberate ambiguity in language use, as opposed to deliberate ambiguity for purposes of play.[12] To highlight this, Stubbs (2001: 104) provides the example of 'coffee'. Outside of context, the word 'coffee' is ambiguous. Is this word referring to the drink, coffee granules or coffee beans? But usually ambiguity never arises with 'coffee' because collocation and colligation disambiguate meanings:

> Cup of coffee ('drink'); packet of coffee ('granules'); picking coffee ('beans').

We do not add the meaning of 'cup' to the meaning of 'coffee' to generate the meaning of 'cup of coffee'. 'Coffee' in 'cup of coffee' is already affected by its phrasal environment as it is in 'packet of coffee' and 'picking coffee'. The upshot of this corpus-driven phrasal perspective is that if a word is our starting point, then we are more likely to see ambiguity. But if the pattern is our starting point, we will not. As Stubbs (2001: 13) says:

> In isolation, many individual words are ambiguous or indeterminate in meaning, but this hardly ever troubles us in practice, because the phrases in which they occur are not ambiguous.

4.4.8 Delexicalisation

Sinclair would say that the semantic meaning of 'coffee' is *delexicalised* differently in 'cup of coffee', 'packet of coffee' and 'picking coffee':

> The meaning of words chosen together is different from their independent meanings. They are at least partly delexicalised. This is the necessary correlate of co-selection . . . [T]here is a strong tendency to delexicalization in the normal phraseology of modern English.
>
> (Sinclair, 2004: 20)

Delexicalisation entails that the meaning we normally associate with a single word bleaches once that word is in the company of other words. And a consequence of a corpus-driven phraseological perspective is that meaning must be delocalised. Meaning is not in individual words so much as spread over a word pattern. It is the delocalisation of meaning in a phraseology, as a result of delexicalisation, which makes unintentional ambiguity rare.

As a further example of the delocalisation of meaning, this time in relation to antonymy, consider the word 'dry' together with some of its common collocates. If we were explaining the word 'dry', we might say it is the opposite of 'wet'. But what if we consider 'dry' in the collocations 'dry wine', 'dry run' or 'dry humour'? Their opposites are not 'wet wine', 'wet run' or 'wet humour'. In turn, this demonstrates how meaning can be distributed across collocations. In other words, 'dry wine', 'dry run' or 'dry humour' do not consist compositionally of the meaning of 'dry' plus the meaning of 'wine', 'run' or 'humour'.

4.4.9 Patterns have cognitive reality

One retort to Sinclair's idiom principle, or to Hoey's idea of positive and negative priming, is to say that a large digitised corpus may provide abundant evident for collocation, colligation and phraseology, but this does not mean we *think* in chunks of words. However, psychological experiments have provided evidence that suggests this is exactly what takes place. To assess the speed at which patterns are read, Underwood, Schmitt and Galpin (2004) used measurements of eye movements. They found that the last words of a collocation or phraseology (e.g. 'no' in 'oh no') were read more quickly than the same words when used on their own (e.g. 'No', said Jemima). This is taken to indicate that word patterns are processed in reading as a whole. Moreover, Wray (2002) found both pausing and errors to be much less frequent inside linguistic patterns than outside them. Whether or not patterns are actually stored in the brain in a holistic way is a contentious issue (see Schmitt, Grandage and Adolphs, 2004). Nevertheless, the evidence points to language processing being holistic. Mental processing

of language is not a serial adding together of word meanings. Phraseological meaning has cognitive reality (Schmitt, 2013).

In 4.4, I have spotlighted some key concepts and insights from corpus linguistics. I have given a flavour of what can be done with the method of corpus linguistics – producing concordance lines to ascertain frequent collocations, colligations and phraseologies. In Section 4.5, I consider methodological techniques in corpus linguistics in more detail, highlighting their advantages as well as more of the functionality that corpus linguistic software provides. There is convergence in the functionality of tools used by non-linguist digital humanists and corpus linguists. That said, there is powerful functionality in corpus linguistic tools that may be less well known by non-linguists in the digital humanities. The good news is that you don't need to be a linguist to use software developed by corpus linguists; neither does corpus linguistic software take long to learn.

4.5 Corpus linguistic method and software functionality

4.5.1 Corpus as norm

A standard distinction made between types of corpora is *specialised* and *general*. A specialised corpus will normally include text of a particular genre such as a corpus of school biology essays written by 16-year-olds. Specialised corpora are likely to be compiled from scratch in order to facilitate particular research goals. They may not turn out to be particularly large. For example, we may be interested in compiling a corpus of all the posts in one discussion forum which follows an online public sphere argument. I do this in Chapter 8 – the corpus consists of around 70,000 words. In contrast, a general corpus will consist usually of texts from common genres, sampled widely and in a principled and balanced manner. That is to say, it will contain more or less equal amounts of texts from the common genres which make it up (e.g. news reports, informal conversation, academic articles). If a general corpus is sufficiently large, it can be used as a *reference corpus* which is treated as a norm of usage, a representative snapshot of the language. Having a large reference corpus – usually at least in the millions of words – means we can compare the corpus or text we are investigating to see the degree to which its language usage veers from habitual usage. Given their size, and the care and time necessary to ensure balance of genres, individual researchers usually rely on ready-made reference corpora compiled by experts rather than construct their own. (The ready-made reference corpora I use in Part II are in excess of a billion words.)

There are multiple exploitations from having such a norm. One is assisting literary study. Sometimes in poetry, aberrance is self-evident such as in E.E.

Cummings' 'love is more thicker than forget'. However, other lines of poetry may be more subtly deviant. By this I mean, they are not prototypical instances of language use – they are not uniquely aberrant, just unusual. Our intuitions of unusuality may let us down, however. Having a reference corpus enables us to ascertain rigorously when a line of poetry really is non-prototypical (see O'Halloran, 2014).

4.5.2 N-grams

Corpus linguistic software can readily identify recurrent strings of words. Such strings are referred to as *n*-grams – where 'gram' means word and *n* refers to the number of words in the string.[13] Table 4.1 shows the top twenty 3-grams for chapter 18 of *Ulysses*.[14]

I used the freely downloadable program 'AntConc' (Anthony, 2011) to generate these 3-grams, the program I used in Chapter 2. As should be clear, 'when I was' is the most common 3-gram in the entire chapter. Once more, quantitative information such as this is useful for the literary critic. Potentially, there is a qualitative pattern with this 3-gram which could be viewed as part of the chapter's (semi-conscious) design. Without *n*-gram generation software, the labour necessary to find these secrets in the text would exhaust even the most tenacious linguistic sleuth.

Table 4.1 Top twenty 3-grams in chapter 18 of *Ulysses*; all data treated as lower case

Rank	Frequency	3-gram
1	19	when i was
2	13	out of the
3	12	on account of
4	11	i suppose he
5	9	all the time
6	9	id like to
7	9	in the morning
8	8	i had to
9	8	i used to
10	8	he smell of
11	8	used to be
12	7	i could have
13	7	i dont know
14	7	i saw him
15	6	he was a
16	6	i had a
17	6	i told him
18	6	it in the
19	6	must have been
20	6	not going to

It is worth also noting that *n*-grams do not necessarily correspond to complete grammatical units. For instance, 'when I was' is not a complete clause. Of course, the longer the *n*-gram, the more likely they do correspond with complete clauses. But we are likely to experience diminishing returns as we increase the value of *n*. After all, most language use is *semi*-fixed rather than fixed. Because of this, 2-grams or 3-grams are usually about the right length of string to use for revealing phraseological secrets in a long text or corpus.

4.5.3 Keywords

Just because a word is frequent in a text (or corpus), it does not necessarily follow that it is being used any more frequently than normal. For example, 'the' is usually relatively frequent in most texts, but this is fairly normal. To find out if a word is *unusually* frequent, we could start by comparing its frequency in the text or corpus we're examining with its frequency in a reference corpus which we treat as a norm of the language. But on its own, this would be a meaningless comparison unless we also take into account the size of the text (or corpus) being investigated together with the size of the reference corpus. In other words, in order to ascertain if a word is unusually frequent, we really need to know if the word is more concentrated in the text (or corpus) than it is concentrated in a reference corpus. Words in a text (or corpus) which are unusually frequent in this way are known as **keywords** (Scott 1997: 236). The "keyness" of a word in a text (or corpus) is calculated using a statistical metric such as log likelihood (Dunning 1993).

Let me illustrate. Returning to the last chapter of *Ulysses*, we know that there are 91 instances of 'yes'. But the chapter is 24,196 words long. For all I know, 91 instances of 'yes' in 24,196 words is no more frequent than I would ordinarily find in any text of such length. Keyword analysis can be done using a number of corpus linguistic programs. I use a software program called WMatrix (Rayson, 2009) which hooks up to a reference corpus of 1 million words of written English. This reveals 'yes' to have a high keyness value – a log likelihood of 300. A log likelihood of 7 or over indicates statistical significance in WMatrix. So, 'yes' is a keyword. It is in fact the 11th highest keyword in the chapter.

There are some things to bear in mind with keywords:

- 'Keyness' is not an absolute value, but a relative value. It is always relative to the size and composition of the reference corpus as well as the size and composition of the text or corpus being investigated.
- It follows that choice of reference corpus is important. The best reference corpus is as representative as possible of how a language is habitually used, being composed of a balanced selection of texts from many different everyday genres (e.g. conversation, news, political speeches).

Berber Sardinha (2004: 101–103) cited in Scott and Tribble (2006: 64–65) advises that a reference corpus should be (at least) five times as large as the corpus of investigation.

• A word may have keyness because it is very frequent in one or a few texts of a corpus rather than distributed fairly evenly across the texts of that corpus. We cannot just assume that a keyword is dispersed evenly across a corpus. We need to check.

• Unusual words are likely to show up as keywords even if they are relatively infrequent in the text or corpus being investigated. This is because unusual words are less likely to feature commonly in a reference corpus.[15] The corollary is that we must be careful not to build an interpretation around words which have keyness but are relatively *in*frequent. To do this is to ground an interpretation in scant evidence.

4.5.4 Tagging

A standard automated form of data annotation in corpus linguistics is 'tagging'.[16] One common form is part-of-speech tagging or *POS tagging* as it is known for short. This is an automated procedure which labels all words in a text or corpus for word class. For example, the software which does the POS tagging (the 'tagger') would label the words 'hat' and 'gloves' as nouns. With text data POS tagged, one is in a position to see to what extent particular grammatical phenomena feature in a corpus. And with a reference corpus which has been POS tagged, we are in a position to perform a different kind of keyness operation – *key POS* analysis. In other words, it is possible to see in the corpus being investigated whether particular grammatical categories are unusually frequent relative to a reference corpus.

Another form of tagging – one that I will draw on in Part II – is *semantic tagging*. WMatrix extends the method for generating keywords by also running text data through a semantic tagger. This software gathers words into semantic fields, that is, a set of semantically related terms. So, for example, the semantic tagger would label the words 'hat' and 'gloves' with the semantic field, 'Clothes and personal belongings'. Again, if we have a reference corpus which has been tagged for semantic fields, then it is possible to see in the corpus or text being investigated whether particular semantic fields have keyness. In other words, it is possible to ascertain whether the semantic fields in a text are statistically frequent with regard to a reference corpus.

As illustration, consider Figure 4.4. This is a 'key semantic field cloud' for the last chapter of *Ulysses*. The size of the individual semantic field depicted goes hand in hand with keyness value. 'Clothes and personal belongings' is visibly one of the most key semantic fields. There are 213 words under this umbrella term, e.g. 'hat' (x11), 'wear' (x10), 'wore' (x7), 'dress' (x7), 'skirt' (x7), 'blouse' (x6), 'petticoat' (x5), 'garters' (x3). A 'manual' reader of

Alive **Anatomy_and_physiology** Cleaning_and_personal_care **Clothes_and_personal_belongings** Content
Damaging_and_destroying **Darkness Degree** Degree:_Diminishers Degree:_Boosters **Discourse_Bin** Disease Drinks_and_alcohol **Entire;_maximum**
Evaluation:_Good Evaluation_Good Evaluation:_False Evaluation:_Inaccurate **Exceed:_waste** Excessive_drinking **Exclusivizers/particularizers** Failure **Food Foolish Frequent** Frequent
Furniture_and_household_fittings **If** Impolite infrequent **Judgement_of_appearance:_Beautiful** Judgement_of_appearance:_Beautiful Judgement_of_appearance:_Ugly Kin **Knowledgeable** Lean
Light Like Linear_order Location_and_direction **Mental_actions_and_processes** Money:_Lack
Moving,_coming_and_going Music_and_related_activities No_knowledge Objects_generally **People:_Female** People:_Male **Pronouns**
Putting,_pulling,_pushing,_transporting **Relationship:_Intimacy_and_sex** Relationship:_Sexual
Religion_and_the_supernatural Seen Sensory **Sensory:_Smell** Sensory:_Sight Sensory:_Touch Sensory:_Taste Sound:_Loud **Tasty**
Thought:_belief Time **Time:_General Time:_Old;_grown-up** Undeserving Unmatched Without_clothes

Figure 4.4 Key semantic field cloud for chapter 18 of *Ulysses*; generated using WMatrix
(Rayson, 2009).

chapter 18 may take in the number of references to clothing or perhaps not.
Even if they do, 24,196 words is a large amount of data and it would be
understandable if the human reader tired and missed some words which
denote clothing. The value of semantic tagging here is it draws together this
vocabulary comprehensively (at least for lexis that the tagger recognises),
drastically reducing manual labour and error, and throwing into relief the
statistical significance of clothing in the chapter. Generally, key semantic
fields, or just keywords, are useful to know since they help to reveal the
'aboutness' of a text or a corpus (Phillips 1989 cited in Scott and Tribble
2006: 58).

4.5.5 Reducing arbitrariness

Corpus linguistic software functions have considerable advantages for text
mining as I hope I have demonstrated. There is another advantage – a crucial
methodological one. Using corpus linguistic software, or any digital text
analysis software, helps to avoid charges that what we choose to focus on in
a text is merely arbitrary. This is a point I made in Section 2.6. Since it is key
to the critical reading strategies of this book, it is worth repeating and
expanding upon.

   The software will comprehensively sweep a dataset on the instruction we
give it. The technology spawns results which we had no control over. These
findings are thus *objectively generated*. A formidable benefit of this objective
spawning of quantitative data is that the results can be used as non-arbitrary
starting points for qualitative exploration of the dataset. For example,
knowing that the frequency of 'yes' in a text of 24,196 words is very
common relative to its frequency in a reference corpus (in this case, a corpus
of 1 million words of written English) gives the literary critic an even more
robust rationale for selecting instances of 'yes' to examine in chapter 18 of
Ulysses. This is because not only is 'yes' relatively frequent, it is also statist-
ically frequent. Similarly, that the semantic field, 'Clothes and personal

belongings', is statistically significant gives the literary critic a non-arbitrary, and thus rigorous basis, for examining how references to clothing are used in chapter 18.

If we are honest researchers, we are happy to be driven by objectively generated results. If the results are in tension with our intuitions about language use at scale, then we should be prepared to be pink-faced about our intuitions. If the results negate a hypothesis we have started to formulate and which we are getting rather excited about, it is time to invent a new hypothesis, or at the very least refine the one we have. Using corpus-generated data in this way means we can escape the circularity of poor and dishonest scholarship where a researcher creates a hypothesis and cherry-picks data to 'prove' that hypothesis. In Parts II and III, it is the software-generated results which enable judgements of relevant absences from public sphere arguments – not my intuitions. In this way, arbitrariness in what I focus on in the arguments is significantly reduced and method-ological rigour instituted. One last point and one that needs stressing. It is important to realise that while corpus linguistics is commonly under-stood as a quantitative method, there is always a qualitative dimension at work. Concordance lines, *n*-gram tables and the rest will need to be interpreted.

I have come to the end of introducing corpus linguistic method. In Parts II and III, I draw upon corpus linguistic concepts and techniques of analysis I have outlined. Also, in Parts II and III, I appropriate Derridean ideas from Chapter 3 for stimulating a corpus-driven approach to evaluating public sphere arguments. This appropriation is a critical one because some key aspects of Derrida's philosophy of language are problematic from a corpus linguistic perspective. Section 4.6, the last substantive section of this chapter, indicates these problems, helping to clear the way for my appropriation. *The critique of Derrida's philosophy of language below is not absolutely essential for understanding Parts II and III. Should the reader prefer to get to the 'nuts and bolts' now, section 4.6 could be read at a later time.*

4.6 Implications for Derrida's philosophy of language

4.6.1 The langue / parole distinction

Recall that, for Saussure, *langue* – the rules of language – is the proper object of study. *Parole* – or actual language usage – is messy, unsystematic and thus resistant to investigation. A hundred years after Saussure's *Course in General Linguistics* was published, we can study *parole* in digitised form. And, it turns out not to be that untidy since, as I have flagged, it is markedly patterned. In pre-corpus times, it is perhaps understandable that *parole* looked a mess. It is only with a lot of data that we can see that

parole consists of instantiations of semi-abstract, semi-fixed phraseologies. It also turns out that *langue* does not really exist in the sense that Saussure thought it did. Countless concordance studies show that grammatical 'rules' as Saussure understood them are, in fact, semi-fixed, semi-abstract lexico-grammatical regularities.

As the reader will recall, Saussure considers *langue* to pre-exist the individual *parole* utterer. Corpus investigation suggests this is misleading:

> the semantic and grammatical relationships a word or word sequence participates in are particular to that word or word sequence and do not derive from prior self-standing semantic and grammatical systems, though they do contribute to the posterior creation of those systems.
>
> (Hoey, 2005: 62)

It is only by looking at large quantities of *parole* that we are able to perceive *langue* as a set of semi-fixed, semi-abstract phraseological regularities. In other words, from a corpus linguistic perspective our understanding of *langue* follows on from our understanding of *parole*. With the benefit of huge quantities of digitised text, a hundred years later we are able to see that Saussure did not get his priorities right.

For reasons of space and utility, relatively infrequent regularities of language use will not find their way into grammars; language learners, naturally, will want to know the most common phraseological regularities in the first instance. So, grammars are selective. Moreover, even with the most frequently used phraseologies in a language, there will be variation in lexis, grammatical words and length. Thus, a practical, user-friendly grammar could never capture the whole of *langue* – certainly a portable grammar will not. The *langue* of grammar books is not only a set of generalisations then, but a useful distillation of the most regularly used patterns. In sum, *langue* is an idealisation, a posterior and useful approximation of how a multitude of speakers and writers communicate in their language. So, when Saussure (1974[1916]: 125) says that '. . . there is nothing abstract in language [*langue*] . . .', he is mistaken.

4.6.2 The paradigmatic / syntagmatic distinction

And if Saussure's understanding of the *langue/parole* distinction suffers, then so too must his distinction of syntagmatic and paradigmatic relations (or 'associative relations') suffer. This is because corpus evidence shows that paradigmatic choice of lexis is markedly constrained – something Saussure could not really have known:

> A concordance line is a fragment of *parole*, where a single instance of syntagmatic relations can be observed . . . a concordance makes it

possible to observe repeated events: it makes visible, at the same time, what frequently co-occurs syntagmatically, and how much constraint there is on the paradigmatically choices.

(Stubbs, 2001: 240–241)

Earlier, I gave some examples of paradigmatic constraint, e.g. 'eye' does not normally collocate with 'blue' or 'brown' whereas 'eyes' does. On the basis of corpus evidence such as this, the marked interdependency of lexis and lexis, as well as lexis and grammar, means it is misleading to conceive of syntagmatic meaning as simply adding free choices of lexis from paradigms. And yet:

> the tradition of linguistic theory has been massively biased in favour of the *paradigmatic* rather than the *syntagmatic* dimension. Text is essentially perceived as a series of relatively independent choices of one item after another, and the patterns of combination have been seriously undervalued.
>
> (Sinclair, 2004: 140)

Corpus evidence has serious implications for linguistic theory which prioritises the paradigmatic dimension. Derrida's philosophy of language is one such theory. Before I get into these criticisms, I want to be clear that I am certainly not suggesting that Derrida ignores co-text (i.e. linguistic context). I *am* saying that he did not appreciate the actual nature of co-text as illuminated by corpus linguistic study.

4.6.3 Highlighting meaning surplus

When Derrida focuses on a word in a text and shows how it operates in 'excess of the structure', such as he does with *pharmakon*, he is not considering that word as part of an instantiation of a semi-fixed, semi-abstract word pattern. He is not engaging with the habitual collocation, colligation or phraseology involving that word. This means he does not engage with the actual nature of language use/co-text as revealed in countless corpus investigations. Why, then, should we take what he says about meaning surplus seriously? More than twenty years ago, Richard Harland made several criticisms of Derrida's non-syntagmatic approach to meaning (Harland, 1993: 7–9; 15–16; 31–33; 211–216). As should be evident, I accord with this criticism. The 'limitation' of Harland's criticism – and I use this word respectfully since his criticism is sound – is that ultimately it is based on his intuition, rather than copious evidence, that priority should be given to syntagmatic meaning. It is easier to ignore a position which is not based on copious evidence than one which is.

4.6.4 Undecidability in words

For Derrida, the excess meaning which disturbs the structure of the text derives from a sign's undecidability. As I highlighted in Chapter 3, Derrida locates ambiguity in *pharmakon* – but this is hardly surprising given what he does in his analysis. If a single word is extracted from its normal collocation and colligation, then ambiguity arises. I would like to be in a position to analyse *pharmakon* in a corpus of Ancient Greek. That way, I might be able to ascertain the extent to which the different meanings of *pharmakon* are disambiguated by their respective collocations and colligations. However, with almost zero knowledge of Ancient Greek, I shall have to demonstrate through analogy with English usage instead.

Just like *pharmakon*, 'drug' can mean (at least) remedy and poison – something positive and something negative. It looks to be an undecidable, then. However, corpus evidence (from UKWaC) shows that these meanings are distinguished colligationally and collocationally: drug as poison is more likely to occur in verb form and in the passive voice:

e.g. 'a woman claims she was drugged at a night club and then "date raped" '.

while drug as remedy is more likely to feature as a noun in very common collocation with 'treatment':

e.g. 'a new class of drug for the treatment of diabetes'.

'Drug' is easily disambiguated by its habitual collocations and colligations. The corollary is that if we can show without too much bother that an 'undecidable' such as 'drug' is not usually semantically ambiguous, why should we believe *pharmakon* is an undecidable in *Phaedrus*? Reinforcing what I have said already, a corollary is that the idea of surplus meaning in a single word is misleading.

So the reader is clear, I am not suggesting that meanings and definitions are never contested. Debate over what certain terms mean – particularly cultural, political or religious terms – is normal. 'Anarchism', for example, can mean different things to different people, with different voices claiming their understanding of 'anarchism' is the true one. But it does not follow that the *different meanings* of 'anarchism' are unstable just because they are contested.

4.6.5 Semantic meaning versus pragmatic meaning

There is a standard distinction in linguistics that Derrida generally avoids when he sets out his language philosophy. This is between i) semantic meaning, the meaning of words (collocations, colligations and

phraseologies) in (contemporary corpus-based) dictionaries, and ii) prag-matic meaning, how we use semantic meanings in context to do things including how we intend meanings to be inferred. Once we make a separation between semantic and pragmatic meaning, the radicalism of Derrida's outlook disappears. For Derrida, meanings are never fixed but discursively constructed and shift over time. This is much less true for semantic meaning than it is for pragmatic meaning. Here are some simple examples. A couple are staying in an apartment on the 10th floor. Wife says to husband 'the window'. He seeks the relevance of this for their situation. The window is open and their puppy could fall out; his wife wants him to prevent this. This is the intended pragmatic meaning. Another time, when they are watching TV, she says 'the window' – she wants him to shut it because it is raining outside. And so on. 'The window' can support any number of pragmatic meanings as there are different relevant contexts.

As illustrated, pragmatic meanings are 'unstable' since they are context bound. We cannot expect them all to last since there is no one-to-one pragmatic meaning of 'the window' with the semantic denotation of 'the window' (glass encased in a wooden/metal/plastic, etc. frame). New contexts open up the possibility of new pragmatic meanings for the same sign(s). In contrast, semantic meanings are much more stable. By the very process of their codification in dictionaries, semantic meanings are decontextualised and generalised which, in turn, confers stability. Indeed, stability is necessary because it enables us to use semantic meanings as bearings for generating pragmatic meanings in a particular context. Or put another way, unstable pragmatic meanings can't be made without knowledge of fairly stable semantic meanings:

> The meanings which are provided in grammars and dictionaries are records of conventional encodings, as sanctioned by a particular community as their social semiotic. They are the general semantic bearings from which language users can take their particular pragmatic fix. In any use of language, only certain aspects of the semantics of the lexico-grammar are indexically activated by the context. What we mean pragmatically is only in part a function of what the language means semantically.
>
> (Widdowson, 1995: 166)

Semantic denotations change over time. But pervasive change in semantic meaning occurs at a fairly slow rate. We can see it coming. And dictionaries, where we get our semantic bearings from, get updated anyway; rational folk will want to stay in touch with up-to-date meanings. Rational people will also want access to the latest insights into language from its empirical study and so choose a contemporary corpus-based dictionary which shows the

importance of collocation, colligation and phraseology in understanding semantic meaning.

In 3.9, I included the following quotation from Derrida:

> no meaning can be determined out of context, but no context permits saturation.
>
> (Derrida, 2004a[1979]: 67)

I hope it is clear that 'meaning' in this fragment conflates semantic meaning and pragmatic meaning – to my mind unhelpfully so. The above statement from the perspective of pragmatic meaning is certainly correct. From a semantic meaning perspective it is not.

4.6.6 Meaning deficit in the sign does not lead to instability

There is an interesting parallel between Derrida's view that the sign is always in meaning deficit and the concept of delexicalisation. Delexicalisation also means that there is no 'fully present' meaning in a sign. However, unlike Derrida's viewpoint, this does not lead to instability of word meaning. Delexicalisation leads to meaning being spread across the word pattern. The semantic load is shared by all the words of the pattern, thus facilitating reasonable stability of meaning in the phraseology.

4.6.7 The trace

As we have seen, corpus evidence shows that syntagms such as 'I think the world of Pink Floyd' are instantiations of holistic structures, i.e. semi-fixed, semi-abstract phraseologies. The semantic holism of the syntagm thus conflicts with the idea that each individual word in the syntagmatic 'chain' carries a trace of all the other individual words in the syntagm. Furthermore, corpus evidence shows that, when syntagms are constructed, choices of lexis and grammar from the system are constrained. This creates yet another problem for the trace. For example, we cannot say that 'world' in 'I think the world of Pink Floyd' contains a trace of 'not earth' since there is a paradigmatic constraint on using 'earth' in this phraseology.

As should be clear by now, sentences are not constructed by adding individual words together. Sometimes we do use fixed expressions. But the norm is to start the design of our meaning from semi-fixed, semi-abstract phraseologies, and then 'fill in the slots' according to the meaning we wish to broadcast whilst being governed by phraseological constraints. Given this is our starting point in meaning design, if we wanted to save the idea of the trace, we would have to relate it to phraseologies. But this cannot work. Saying that one phraseology carries the trace of another phraseology – when

phraseologies are semi-abstract, semi-fixed expressions whose size is difficult to delimit – is an imponderable.

4.6.8 Différance

Différance can in theory operate at the level of the letter, the word, the phrase, clause, sentence, text. But, as reflected below, words/concepts are a significant focus in Derrida's thinking around *différance*:

> [*différance*] prevents any word, any concept, any major enunciation from coming to summarize and to govern from the theological presence of a center the movement and textual spacing of differences.
>
> (Derrida, 1981b[1972]: 11)

This assumption is compromised by a corpus perspective where the combination of words in phrases is the basic unit of meaning. And, similar to the criticisms I made of the trace, even if we rank-shift from the word to the phrase or to the clause or sentence, there are still problems for *différance*. This is because phrases are concrete instantiations of phraseologies, and clauses/sentences are combinations of instantiated phraseologies. Saying that the meaning of one phraseology is its difference from another phraseology – when phraseologies are semi-abstract, semi-fixed expressions whose size is tricky to place boundaries around – is similarly imponderable.

4.6.9 Différance, relevance and priming

Consider the following from the deconstruction scholar, Martin McQuillan, who is discussing *différance*:

> for Derrida the signified concept 'tree' only exists, *as a concept*, in relation to other concepts expressed by signifiers. This does not mean that trees do not exist but that the idea of a tree (to which sycamores, oaks, poplars, the tree of knowledge, etc., actual and imagined trees, are all related) only makes sense by its differential relation to other concepts.
>
> (McQuillan, 2000b: 17–18)

A problem with such an outlook is its neglect of the preferences readers and listeners make apropos what they deem relevant for their communicative needs in a particular context. Indeed, for the 'relevance theorists' Sperber and Wilson (1995), human evolution has led to a cognition which is geared to the maximisation of relevance for the minimum of processing effort. Why

then would the signified concept 'tree' exist as a concept in relation to other concepts which may have no relevance for a particular context? A botanist may wish to make links between different species of tree. But 'the tree of knowledge' is hardly going to form part of their taxonomy. Indeed, echoing Hoey (2005), botanists will be negatively primed to expect this expression to crop up in their day-to-day plant study. That is to say, we also make relevance in line with our word primings for a particular co-text or context. That *différance* endlessly throws up relations to other words which we do not have immediate primings for, because they are irrelevant to the context or co-text in hand, lacks credibility. Again, here we have neglect of pragmatic meaning – what we *do* with language to create meaning in particular contexts – and how this is different from semantic meaning – the generalised meaning resource we draw upon for our specific communicative purposes.

4.6.10 The 'autonomy of language'

Language has a mind of its own for Derrida. Signifiers *refer* to signifiers; texts deconstruct *themselves* because of their inherent semantic instability. I don't find this animation, if not anthropomorphising, of language believable. Surely until the speaker or reader activates signs into meaning, the text is inert, consisting merely of marks on a page. Moreover, word signifiers known to a listener or reader will be primed for collocation, colligation and phraseology. Signifiers are not 'free' to refer to other signifiers even if this was something they 'wanted to do'.

4.6.11 Taking stock: The analyst is the deconstructor of the text

In making critique of Derrida's assumptions of language and meaning, this certainly does not entail I think everything in Derrida is wrong (see 11.8). He is right that texts – in their reading – can naturalise states of affairs because of what they exclude. I was not arguing against the usefulness of a deconstructive procedure which brings the margins into the centre, or opens the text out to the (excluded) Other or suppressed or forgotten difference, thereby disrupting how we might normally appreciate things. These are useful procedures which I shall appropriate in Parts II and III. But, as the reader will also see, you can use these procedures without buying into *différance*, the trace, the idea that signifiers refer to other signifiers, the idea that a text self-harms, and the idea that all meaning is undecideable. Just because one common understanding of 'human' excludes thinking of ourselves as 'animal', it does not logically or empirically follow that the sign 'human' contains a trace of 'not-animal' which, in turn, destabilises the sign 'human'. Moreover, where Derrida deconstructs a binary pair such as

human/animal, complicating an everyday *differentiating* in discourse of 'human' from 'animal' (Derrida, 2002a), it does not logically follow that we need to accept the notion of différance. Simply put, we can still use certain procedures of deconstruction without acceding to a suspect philosophy of language. Any form of textual deconstruction which opens out to the Other is, to my mind, credible where the analyst accepts that it is *they* who are deconstructing the text by bringing the margins into the centre, by opening out the text to suppressed or forgotten difference. The analyst is always the agent of deconstruction – not the text.

4.7 Conclusion

This chapter has spotlighted the digital humanities and, especially, the value of software for conducting text analysis. It has also had a strong focus on corpus linguistics. When I demonstrate, in Parts II and III, different critical deconstructive analyses of public sphere arguments, the reader will see that these critical strategies are driven by use of corpus linguistic method and, in particular, the concepts, principles and methodological advantages outlined in this chapter.

A final purpose of this chapter has been to highlight the improbability of some key elements of Derrida's philosophy of language. I have done this, in part, through drawing on corpus linguistic method. The reason for doing this is to clear the way for using Derridean ideas as a productive stimulus, for appropriating and adapting these ideas for my own ends in Parts II and III.

Notes

1 Available at http://www.corpusthomisticum.org/it/index.age [accessed July 2016].
2 See: Schreibman, Siemens and Unsworth. (2004). For background on the name change, see http://melissaterras.blogspot.co.uk/2014/05/inaugural-lecture-decade-in-digital.html [accessed July 2016].
3 See 'Project Gutenberg': available at https://www.gutenberg.org/ [accessed July 2016].
4 For overviews of the discipline, see O'Keeffe and McCarthy (2010), McEnery and Hardie (2011).
5 Available at http://www.oxforddictionaries.com/words/the-oxford-english-corpus [accessed July 2016].
6 Available at http://www.sketchengine.co.uk/ [accessed July 2016].
7 This example derives from Hunston and Francis (2000: 68–9).
8 I don't provide coverage of another of Sinclair's well-known innovations – 'semantic prosody' (see Sinclair, 2004). This is because this concept does not bear upon analysis in Parts II and III.
9 http://archives.digitaltoday.in/businesstoday/20010506/managing.html [Accessed July 2016].
10 Toole (2004).

11 Available at http://www.oxforddictionaries.com/definition/english/think-the-world-of?q=think+the+world+of [accessed July 2016].
12 On deliberate ambiguity, see Nerlich and Clarke (2001).
13 *N*-grams may also be referred to as 'clusters' or 'lexical bundles'.
14 'dont' and 'id' are counted as one word by Antconc because, in chapter 18 of *Ulysses*, they appear this way.
15 For a good overview of keyword analysis and important methodological issues to consider, see Rayson (2013).
16 See: http://ucrel.lancs.ac.uk/annotation.html [accessed July 2016]. For an in-depth treatment of corpus linguistic annotation, see Lu (2014).

Part II

Using big ready-made corpora to generate discursive subjectivities

Part II highlights the first strand of the critical deconstructive approach to the analysis of public sphere arguments. In this strand, the analyst uses a large corpus to ascertain relevant absences from how a public sphere argument discusses a topic. On this basis, potential instability in an apparently stable cohesive structure is explored. In essence, Part II shows how we can build *discursive subjectivities* with general corpora, i.e. big ready-made corpora. A discursive subjectivity is familiar with the habitual discourse of a particular topic. By this I mean, how the topic is commonly talked about, the habitual collocation and phraseology used in its discussion, regardless of how the topic is evaluated. Constructing a discursive subjectivity is useful since it puts the analyst in a position to spot relevant absences from how a topic is habitually discussed. In turn, as I show, revelations of relevant absence can affect the stability of an argument's cohesive structure with negative ramifications for its coherence and thus credibility. Alternatively, illumination of relevant absences may have no impact on cohesive structure but still lead to internal conflicts of meaning in the argument with negative repercussions also for coherence and thus credibility. The first strand has general application in that language use in any public sphere argument can be compared with language use in a big corpus.

   The topics of the public sphere arguments examined are genetically modified agriculture (Chapter 5) and the second Iraq War (Chapter 6). Chapter 6, in particular, shows advantages of critically evaluating an argument via deconstructing its cohesive structure rather than reconstructing its logical structure (the norm in critical thinking).

Chapter 5

Discursive subjectivity

5.1 Orientation

In Chapter 4, I showed how rather standard notions in corpus linguistics render problematic a number of Derrida's conceptions of language. However, this does not mean, as I shall show, that Derrida's ideas about language, together with his reading strategies, are not worth appropriating for the following: stimulating an alternative approach to deconstructive analysis – one which can be trained on public sphere arguments. In this chapter, the reader will see most of the Derridean themes and strategies I listed at the end of Chapter 3 recontextualised for different ends. Other Derridean themes and strategies will be recontextualised in later chapters.

The data for this chapter is a public sphere argument which pushes the agenda of genetically modified (GM) agriculture. It criticises anti-GM activists. Let me, in the first instance, provide some orientation where the reader will begin to see Derridean ideas stimulating my use of corpora.

5.2 The first critical deconstructive strand

5.2.1 Large corpora, collocation and topics

From the sixties up until recently, the largest electronic corpora have consisted of no more than millions of words. A corpus such as the 100-million-word British National Corpus completed in 1994[1] is certainly useful for ascertaining habitual language use. With the advent of the World Wide Web, a huge amount of electronic text can be harvested for corpora creation, leading to web-based corpora consisting of more than a billion words such as the UKWaC.[2] The much bigger size of web-based corpora provides even greater insight into normal collocation. But there is another key advantage of having much larger corpora – one that the approach of this book taps. With a billion word corpus, we do not only ascertain normal collocation for language use, but normal collocation for how common contemporary *topics* are discussed.

5.2.2 Collocation surplus

With a very large corpus as a norm of language usage, we can find out what is unusual in how a public sphere argument discusses its topic. Making this comparison can show if the language of the argument exceeds norms of collocation. Recall, from the preface, sentence [1] from the pro-GM argument:

[1] UK farmers must be given the freedom to choose modern, efficient farming methods based on **tried and tested science**.

In the preface, I explained that 'tried and tested science' is an unusual expression. It does not feature in the corpus I used – the 1.5 billion word UKWaC corpus. In corpus linguistic terms, we would say that 'tried and tested science' is an unusual collocation. 'Tried and tested' normally collocates with words such as 'technology', 'technique' or 'method'. We could say then that, in 'tried and tested science', there is collocation surplus relative to collocational norms.

5.2.3 Collocation deficit

While the collocate 'science' is in excess of normal collocation for 'tried and tested', this must mean that at the same time there is a deficit of normal collocation for 'tried and tested'. Since 'tried and tested' normally collocates with 'technology', 'method', 'technique', we can view 'tried and tested science' in sentence [A] in terms of collocation deficit as much as collocation surplus.[3]

5.2.4 Bestowing normal collocation can lead to deconstruction

The focus on surplus meaning above I appropriate from Derrida. The basis of my reading procedure is another appropriation of Derrida. This is the idea that excess meaning disturbs the structure of a text. Here, in contrast to Derrida, excess meaning relates to collocation. If the analyst locates a collocate in a public sphere argument which is in surplus of normal collocation for discussion of a topic, then implementing normal collocation would mean deleting the surplus collocate. For any text to be credible, it needs to hang together (2.3.6). If the cohesive structure is found to unravel as a result of addressing collocation surplus, the credibility of the argument reduces.

As we saw in Chapter 3, meaning 'deficit', the converse of meaning 'surplus', also features in Derrida's perspective. For him, the sign is continually supplemented by other meanings; there is a perpetual deficit of meaning in the sign. I also appropriate Derrida's idea of meaning deficit in relation to

the cohesive stability of an argument. If the analyst finds that there is a deficit of normal collocation in how a public sphere argument discusses its topic, they bestow normal collocation on the argument and examine whether or not this affects the consistency and stability of its cohesive structure. Figure 5.1 shows how bestowal of normal collocation can lead to ensuing deconstruction of cohesive structure. In order to confer normal collocation, the collocate surplus of 'science' is deleted.

[1] UK farmers must be given the freedom to choose modern, efficient farming methods based on tried and tested ~~science~~ **technology**.

[2] We need **science**-based decision-making. The world has moved on, and it's time the anti-**science** activists did too.

Figure 5.1 Deconstruction of cohesive structure due to normal collocation deficit/surplus.

5.2.5 T-score

To ascertain if there is a deficit of normal collocation or the collocation is in surplus of the norm for discussion of topics in the pro-GM argument, I analyse UKWaC via Sketchengine software. In line with Jones and Sinclair (1974), my collocation investigations have an $n\pm4$ word span unless otherwise specified (where n is the node word). Reiterating from Chapter 4, this means that I only investigate collocates up to and including four words to the left of the node word – the word being focused on – and four words to the right of the node word. My collocation investigations are also reliant on a statistical measure known as t-score. This metric indicates the statistical significance of collocation. A t-score of more than two is 'normally taken to be significant' (Hunston, 2002: 72) but a t-score in double figures is very significant (Hunston, 2001: 16).[4]

5.2.6 Analytical starting point

In the first strand of this critical deconstructive approach to the evaluation of public sphere arguments, the analyst seeks out points in an argument which are candidates for potentially troubling the cohesive structure globally. This might be on the basis of an intuition that there exists normal collocation deficit or surplus for discussion of a topic, or on a more trial and error basis. So, in principle, a digital deconstructive analysis – like a

Derridean deconstruction – can begin anywhere in a text. However, if there is no evidence for an analyst's intuition or guess that there is normal collocation deficit/surplus, then the analyst should move on and explore other words/collocation in the argument. A key advantage of using corpus linguistic method is that it reins in the analyst from over-interpreting the text, and thus from forcing the deconstruction of the text rather than demonstrating empirically that the cohesive structure is unstable relative to a corpus norm.

5.2.7 Cohesion versus coherence

I have flagged the impact of showing the instability of cohesion in a public sphere argument – if the argument can't hang together its credibility reduces. Actually, buried within 'its credibility reduces' is absence of another concept within linguistics – *coherence*. This is the experience in reading or listening that the meaning of a text is unified. Coherence is a mental property. In contrast, cohesion is a property of the text.[5]

Let me give some examples to illustrate the difference between cohesion and coherence. It's quite possible to have a cohesive text which lacks coherence. Here's one:

> Cristiano Ronaldo is paid vast sums of money. When I was at school, I could never get my sums right. Can you see that school of whales far in the distance? Far, far away with my head up in the clouds. Give me a heads-up, next time you're in town.

Each sentence above is gummed together through reiteration of vocabulary. But the text as a whole is nonsense. Without ingenuity, it is difficult for readers to make coherence from this text.

Conversely, it is possible to make coherence from a text which lacks cohesion. The applied linguist, Henry Widdowson, provides the following conversation as an example:

> A: That's the telephone.
> B: I'm in the bath.
> A: O.K.

> (Widdowson, 1978: 29)

Here, we have no repetition of lexical or grammatical words (see Definition Box 2.1) and thus no cohesion. But it makes perfect sense to the reader. We understand that speaker B cannot answer the phone because they are indisposed, as did speaker A. We can make this understanding because we are able to activate the relevant everyday scenario from memory.

However, while there is no cohesion in the above conversational fragment, as a text gets longer avoiding cohesive links gets harder if we want it to be straightforward for a reader or listener to make coherence. For texts of reasonable length to make sense – for the reader or hearer to be able make coherence from them – cohesion is needed.

All the public sphere arguments I analyse in this book have cohesion. This means that when I show their cohesion being disrupted, the arguments decrease in credibility because their coherence has reduced also. I show too where arguments can be deconstructed because of internal conflicts of meaning which are not so easy to see without the aid of corpora. These are areas of the argument where it is difficult to make coherence even though these areas might possess cohesion.

A qualification: I said above that coherence is a mental property and cohesion is a text property. If we are being picky, the distinction is not a wholly accurate one. This is because, in reality, cohesion is never just on the page. An author/speaker has inserted cohesive devices in a text which s/he expects the reader or listener to link. In other words, the reader/listener has to *infer* these links. Since inferencing is a mental activity, doesn't that mean that the linking of cohesive devices is a form of coherence making? The waters have muddied over.

Despite this complication, it is still worth preserving the distinction between cohesion and coherence. First, this is because cohesive *devices* are on the page even if their linking is not. Second, the concept of coherence refers to the *overall* unified understanding we make of a text. This can vary according to reading or listener goals, our cultural or political viewpoints, what we deem relevant, and so on. In contrast, when a writer inserts cohesive devices into a text, they are expecting their linking by members of the target audience to be uniform. Since cohesive linking is a form of non-variant coherence making, it would be multiplying beyond necessity to have to think always of cohesion dualistically, that is, in terms of what is on the page and what is going on in a reader's head.[6]

Having set up the first strand, I now come to the analysis proper of the pro-GM argument.

5.3 Data GM text

The opinion piece, reproduced in full below, comes from the UK newspaper *The Guardian* (29 October 2009). It was written by the then chair of the UK Biotechnology Agency, Julian Little, who contends that GM crops are necessary for 'food security', i.e. that there be enough food on the planet to feed everyone. (GM agriculture was previously not a topic I knew very much about).

Our future food security depends on using GM crops

Scaremongers must come to recognise the value of agricultural technology

By Julian Little

Felicity Lawrence, in her article on the Royal Society's science-based study on food security, reported the comments of the anti-GM lobby, which claimed that the research would be "of limited value" and questioned why it was needed. (It is too late to shut the door on GM foods, 17 October).

The research was needed, however, and should be welcomed, because food security is one of the biggest challenges we face, and we must find ways in which to produce more food while continuing to reduce the impact our agricultural practices have on the environment. Britain has a key role to play in helping to deliver this solution; however, as widely acknowledged, our current methods of production will not be sufficient to meet the increasing demand.

Lawrence wrote of the "concentration of corporate power" regarding GM crops. In fact, GM technology has done much to empower small farmers – over 90 per cent of those who choose to use GM crops are small-scale farmers living in developing countries. They grow them because they work contributing to exactly the kind of "sustainable intensification" which the Royal Society called for – producing more food from a lighter environmental footprint.

Additionally, it's worth noting that GM technology is highly accessible to small as well as large companies, and to university and public sector researchers, who have already developed GM crops of great potential value, such as virus-resistant papaya, insect-resistant vegetables for India, and vitamin-enriched "golden" rice.

A recent Belgian study reported that "on average, two-thirds of the global benefits are shared 'downstream', i.e. among domestic and foreign farmers and consumers, while only one-third is extracted 'upstream', i.e. by biotechnology developers and seed suppliers." In addition, a study published by Terri Raney, senior economist of the Food and Agriculture Organisation of the UN, recently pointed out: "The benefits are shared by consumers, technology suppliers and adopting farmers, although non-adopting farmers are penalised as their competitors achieve efficiency gains they are denied."

With that sentiment in mind, Britain should be pursuing a policy that recognises the demonstrable benefits that agricultural technology, including GM, can bring.

If we are serious about allowing UK farmers to produce more food at a fair price to consumers while safeguarding our natural resources, they must be given the freedom to choose modern, efficient farming methods based on tried and tested science.

Sadly, the article gave voice to those scaremongering about GM crops (particularly those who question the crops' safety, even though more than two trillion meals containing GM ingredients have been consumed, without a single substantiated example of harm to health). We need science-based decision-making, something our politicians clearly understand. The world has moved on, and it's time the anti-science activists did too.

(© Guardian News & Media Ltd, 2009)

While a reader may disagree with the content, nonetheless this public sphere argument appears to be unified and consistent; its cohesion structure seems effective. I will reveal how, in fact, parts of the argument's cohesion unravel once normal collocation for topic discussion is revealed. As a result, the argument diminishes in coherence and thus credibility. The latter also occurs when I reveal, using a large corpus, internal semantic conflicts irrespective of cohesion in the argument.

The first thing I need to do, then, is describe major cohesive chains in the text. Careful and comprehensive tracing of major cohesive chains enables us to appreciate systematically, rather than impressionistically, how the argument repeatedly frames the topic. In 2.8.1, I highlighted cohesive chains in the fragment from the Tony Blair speech. This was easy to do manually because I was looking at a short text fragment. But this procedure becomes laborious, and potentially error-prone, once the text consists of hundreds of words. These issues can be attenuated considerably by using a digital text analysis tool. Tracing major cohesive chains across the text with the help of a digital tool is useful not only because it reduces the prospect that we miss where an argument has framed its topic, but because it helps ensure the credibility of any subsequent deconstruction in facilitating accurate tracing of cohesive chains. I employ the same software program I used in 4.5.2 – AntConc (Anthony, 2011) – to ascertain the argument's most frequent words. Table 5.1 shows frequencies for words repeated at least twice, i.e. these could be words contributing to cohesive structure.

Figure 5.2 annotates three different and frequent lexical repetitions and thus cohesive chains in the argument.

- BOLD: 'science'
- ITALICS: 'technology'
- UNDERLINED: 'benefits'.

I show in 5.4 and 5.5 how the cohesive chains of Figure 5.2 unravel. Letters in square brackets immediately below and elsewhere in this chapter refer to paragraphs in Figure 5.2; numbers in square brackets refer to sentences in the same.

Table 5.1 Frequencies for words occurring at least twice in the pro-GM argument

Rank	Freq	Word	Rank	Freq	Word	Rank	Freq	Word
1	21	the	23	3	benefits	45	2	because
2	17	to	24	3	by	46	2	Britain
3	14	of	25	3	consumers	47	2	choose
4	13	and	26	3	has	48	2	for
5	11	GM	27	3	have	49	2	however
6	8	on	28	3	it	50	2	In
7	6	a	29	3	must	51	2	Lawrence
8	6	are	30	3	security	52	2	methods
9	6	crops	31	3	small	53	2	needed
10	6	farmers	32	3	study	54	2	one
11	6	food	33	3	The	55	2	produce
12	6	that	34	3	they	56	2	reported
13	5	as	35	3	those	57	2	research
14	5	be	36	3	value	58	2	resistant
15	5	in	37	3	we	59	2	Royal
16	5	technology	38	3	which	60	2	shared
17	4	is	39	3	while	61	2	should
18	4	more	40	3	who	62	2	Society
19	4	our	41	2	about	63	2	suppliers
20	4	science	42	2	adopting	64	2	too
21	3	agricultural	43	2	anti	65	2	two
22	3	based	44	2	article	66	2	was

I begin by showing, in Section 5.4, how normal collocation absence can lead to disturbance in the cohesion of Little's argument; in Section 5.5 I show how normal collocation surplus can do the same.

5.4 Deconstructive analysis: in deficit of normal collocation

5.4.1 'Global benefits' and 'local beneficiaries'

The quotation 'the concentration of corporate power' [4] comes from Felicity Lawrence's original article. Let me consider the co-text of the quotation:

> **The concentration of corporate power** in commercial seed and agro-chemical production is unprecedented, as is its crossover with the powerful US-based commodity trading corporations Cargill, ADM and Bunge.
>   In the space of less than three decades, intellectual property rights have been applied to 82% of the **global** seed market, according to data collected by campaign group ETC.

Our future food security depends on using GM crops
Scaremongers must come to recognise the value of agricultural *technology*

[A]
[1] Felicity Lawrence, in her article on the Royal Society's **science**-based study on food security, reported the comments of the anti-GM lobby, which claimed that the research would be "of limited value" and questioned why it was needed. (It is too late to shut the door on GM foods, 17 October).

[B]
[2] The research was needed, however, and should be welcomed, because food security is one of the biggest challenges we face, and we must find ways in which to produce more food while continuing to reduce the impact our agricultural practices have on the environment.
[3] Britain has a key role to play in helping to deliver this solution; however, as widely acknowledged, our current methods of production will not be sufficient to meet the increasing demand.

[C]
[4] Lawrence wrote of the "concentration of corporate power" regarding GM crops.
[5] In fact, GM *technology* has done much to empower small farmers – over 90% of those who choose to use GM crops are small-scale farmers living in developing countries.
[6] They grow them because they work contributing to exactly the kind of "sustainable intensification" which the Royal Society called for – producing more food from a lighter environmental footprint.

[D]
[7] Additionally, it's worth noting that GM *technology* is highly accessible to small as well as large companies, and to university and public sector researchers, who have already developed GM crops of great potential value, such as virus-resistant papaya, insect-resistant vegetables for India, and vitamin-enriched "golden" rice.

[E]
[8] A recent Belgian study reported that "on average, two-thirds of the global benefits are shared 'downstream', i.e. among domestic and foreign farmers and consumers, while only one-third is extracted 'upstream', i.e, by *biotechnology* developers and seed suppliers."
[9] In addition, a study published by Terri Raney, senior economist of the Food and Agriculture Organisation of the UN, recently pointed out: "The benefits are shared by consumers, *technology* suppliers and adopting farmers, although non-adopting farmers are penalised as their competitors achieve efficiency gains they are denied."

[F]
[10] With that sentiment in mind, Britain should be pursuing a policy that recognises the demonstrable benefits that agricultural *technology*, including GM, can bring.

[G]
[11] If we are serious about allowing UK farmers to produce more food at a fair price to consumers while safeguarding our natural resources, they must be given the freedom to choose modern, efficient farming methods based on tried and tested **science**.

[H]
[12] Sadly, the article gave voice to those scaremongering about GM crops (particularly those who question the crops' safety, even though more than two trillion meals containing GM ingredients have been consumed, without a single substantiated example of harm to health).
[13] We need **science**-based decision-making, something our politicians clearly understand. The world has moved on, and it's time the anti-**science** activists did too.

Figure 5.2 Tracing of some cohesive chains in the pro-GM argument.

> Three companies now control nearly half of the total **global** market in proprietary seeds, worth \$22bn (£13.5bn) a year. In 2007, the US-based Monsanto accounted for nearly a quarter of the total global market (23%), followed by another American company, DuPont (15%) and Swiss-headquartered Syngenta (9%).
>
> Just six companies – the above three plus Bayer, BASF and Dow AgroSciences – control three-quarters of the **global** agrochemical market [my bold].

The wider point that Lawrence flags – which is not visible in the fragment that Little includes in his argument – is the concentration of 'global' market share of GM and agrochemical technologies in the hands of a few corporations. Given this, the link Little makes between 'corporate power' [3] and 'empowering of small farmers' [3] does not make sense. Whether or not GM technology actually empowers small farmers has nothing to do with the concentration of global market share of GM and agrochemical technologies. Little seems to be pressing into service the superficial cognate link between 'power' and 'empower' for rhetorical purposes.

Let us say, however, that I did not have access to Lawrence's article. For such circumstances, I will show how problems in the cohesion between 'power' and 'empower' in Little's argument can be detected by exploration of UKWaC. I start with collocation for 'corporate power'. Its highest lexical collocate in UKWaC is 'global' (40; t-score 6.3). It would seem 'corporate power' is habitually understood in 'global' terms.[7] Another way of putting this is to say the corpus evidence helps us understand one aspect of recurrent capitalist 'big D' Discourse (see 2.4). In so doing, it enables me to construct a discursive subjectivity, training it on the argument in order to spot potential tensions in meaning. This insight into capitalist Discourse chimes with the main point Lawrence makes above about global market share of GM in relation to corporate power. I endow normal collocation in paragraph [C] below:

[C]

[4] Lawrence wrote of the "concentration of **[global]** corporate power" regarding GM crops.

[5] In fact, GM technology has done much to empower **('local beneficiary' semantic preference)** small farmers – over 90% of those who choose to use GM crops are small-scale farmers living in developing countries.

[. . .]

[E]

[8] A recent Belgian study reported that "on average, two-thirds of the global benefits are shared 'downstream', i.e., among domestic and foreign farmers and consumers, while only one-third is extracted 'upstream', i.e, by biotechnology developers and seed suppliers."

Figure 5.3 Coherence problems around 'benefits' and '(GM) corporate power'.

Analogous to Derrida's approach to reading – though obviously with a very different approach to language and meaning – I have intervened in the text by rendering visible a 'trace' – the collocate 'global'. As a result of the intervention, 'global benefits' [8] now segues with [global] 'corporate power' [3]. One beneficiary of 'global benefits' [8] are domestic and foreign farmers.

Let me now consider collocation around 'empower' [5]. Its fourth highest lexical collocate is 'local' (693; *t*-score 26.0). Salient (local) beneficiaries are 'people' (2149; *t*-score 45.9), 'communities' (715; *t*-score 26.6) 'women' (589; *t*-score 24.1), 'individuals' (386; *t*-score 19.6). In fact, 'people' is the highest lexical collocate of 'empower' and 'communities' the second highest. We can say that 'empower' has a *local beneficiary* semantic preference (4.4.2). The 'empowering of small-scale farmers' [5] chimes with this *local beneficiary* semantic preference. In contrast to 'local', 'global' only occurs as a collocate of 'empower' 32 times (*t*-score, 5.6)).

What can be concluded from all this? There is a semantic tension which becomes easier to see once the above corpus analysis is conducted. As highlighted in Figure 5.3, in paragraph [C], 'global' (GM) corporate power is contiguous with 'local' benefits for farmers but, in paragraph [E], is contiguous with 'global' benefits in relation to farmers. This problem of coherence, unresolved in the article, cuts across Little's lexical link between 'power' and 'empower' in paragraph [C].

5.4.2 'Crops' safety . . . health'

'Scaremongers' is in the sub-headline and 'scaremonger' is used in the text – paragraph [H]. The 'scaremongering' is in relation to GM crops' safety for human consumption:

> [12] Sadly, the article gave voice to those scaremongering about GM crops (particularly those who question the crops' **safety**, even though more than two trillion meals containing GM ingredients have been consumed, without a single substantiated example of **harm to health**) [my bold].

'Harm to health' [12] refers back to 'GM crops' safety' [12]. I examine whether there is co-occurrence between these entities in UKWaC. Given the twenty-word gap between (GM) 'safety' and 'health' in sentence 12, I widened the word span of investigation to $n \pm 20$. I first searched on 'GM' and then filtered concordance lines for 'safety' within $n \pm 20$. Then I generated collocations within $n \pm 20$. I found, indeed, that 'health' is a textual collocate (114; *t*-score 10.6), i.e. a textual collocate of 'GM' where 'GM' collocates with 'safety'.[8] However, I found as well that 'environmental' (83; *t*-score 9.1) and 'environment' (55; *t*-score 7.4) are textual collocates, and commonly co-occur with 'health' too, such as in the following:

> Dr Drinah Nyirenda, executive director of Programme Against Malnutrition, said . . . there are large uncertainties over the **safety** of GM crops for **health** and the **environment** [my bold].

Using the same filtering procedure, I also generated collocations within $n \pm 20$ for the lemma of the adjective SAFE. As with 'safety', I found that 'health' (43; t-score 6.5) and 'environment' (51; t-score 7.1) are textual collocates, both collocates commonly co-occurring with 'safe' such as in the following:

> Whether GM crops are **safe** to human **health** and the **environment** is an overriding issue under EC Directive 90/220.

'GM safe(ty)', 'health' and/or 'environment' commonly co-occur. However, in sentence 12 of Little's argument, while 'health' collocates with 'GM safety', 'environment' is not included as a collocate. We can make the judgement, then, that discussion of 'GM crops' safety' [8] exhibits deficit from normal collocation for the topic of GM. On the evidence of the corpus, one might then accuse Little of the rhetorical strategy of being 'economical with the truth', of ignoring how GM safety is commonly discussed. Then again, the omission of discussion of GM safety and the environment may not have been deliberate. Even so, as I shall show, it can be a hostage to fortune not to discuss a topic in terms of its normal collocation.

What happens to the meaning of the text when we know normal collocation for 'GM safety' includes 'environment'?

'Food' [2] could include GM food; 'agricultural practices' [2] could include GM agricultural practices. With knowledge that normal collocation for

[B]

[2] . . . we must find ways in which to produce more **[GM]** food while continuing to reduce the impact our **[GM]** agricultural practices have on the **environment** [*but this could include potentially unsafe impacts of GM, e.g. the possible cross-fertilisation between GM plants and non-GM plants*] . . .

[. . .]

[H]

[12] Sadly, the article gave voice to those scaremongering about GM crops (particularly those who question the **crops' safety (for health),** even though more than two trillion meals containing GM ingredients have been consumed, without a single substantiated example of **harm to health**). [*But 'environment' is also a common collocate of 'GM safety'*]

[my bold]

Figure 5.4 Coherence problems as a result of the collocate surplus 'environment'.

GM 'safety' includes 'environment', problems are created for the argument's coherence. I say this because Little could be construed in [2] as contending that GM food must be produced in a way which reduces its potentially unsafe impact on the environment! This unsafe impact could take place – as alleged in many source texts I found in UKWaC – through the possible cross-fertilisation between GM plants and non-GM plants. The unity of the argument here is thus disturbed by this knowledge of common collocation (Figure 5.4). And, analogous to Derrida's position – but on a very different model of language – the argument can be read as saying something different from what the author intended once we take account of the *surplus* collocate 'environment'. In turn, 'environment' in [2] can be viewed as a stray signifier not doing Little's argument much good.

  In Section 5.4, via appropriations of Derrida's ideas, I have produced an interventionist reading of a public sphere argument through the 'Other of language', reading the text though 'traces' of collocation for how a topic is habitually discussed. Making these traces visible leads to deconstructions in the argument's coherence. Since these deconstructions would otherwise remain invisible for the reader not *au fait* with the topic, the method can thus be construed as a 'spectral' form of analysis.

5.5 Deconstructive analysis: In surplus of normal collocation

5.5.1 'Demonstrable global benefits'

Consider the use of 'benefits' in paragraphs [E] and [F]:

> [E]
> [8] A recent Belgian study reported that "on average, two-thirds of the global benefits are shared 'downstream', i.e. among domestic and foreign farmers and consumers, while only one-third is extracted 'upstream', i.e, by biotechnology developers and seed suppliers."
> [9] In addition, a study published by Terri Raney, senior economist of the Food and Agriculture Organisation of the UN, recently pointed out: "The benefits are shared by consumers, technology suppliers and adopting farmers, although non-adopting farmers are penalised as their competitors achieve efficiency gains they are denied."
> [F]
> [10] With that sentiment in mind, Britain should be pursuing a policy that recognises the demonstrable benefits that agricultural technology, including GM, can bring.

In [8], no weblink is provided for the 'recent Belgian study', so we cannot check what these global benefits are exactly. The second instance of 'benefits'

[9] in paragraph [E] is from a text written by Terri Raney, an economist for the UN. The weblink unhelpfully does not take us to this study but instead to the 'Food and Agriculture Organisation of the UN' (http://www.fao.org). However, on the basis of the text alone, I assume that Little intends 'benefits' [9] to relate to 'global benefits'. After all, the title and paragraph B have a global focus – the problem of 'food security'. While, in paragraph [F], the focus moves to the policy Britain should be pursuing, given the use of 'with that sentiment in mind' I assume again that 'benefits' are still meant to be understood as 'global' ones. In other words, the cohesion between 'demonstrable benefits' [10] and 'global benefits' [8] works through ellipsis – 'demonstrable benefits' [10] is really 'demonstrable *global* benefits'. Indeed, paragraph [B] is specific about Britain having 'a key role to play in helping' to solve the problem of (global) food security.

Interestingly, in UKWaC, I found that, while there are 78 instances of 'demonstrable' collocating with 'benefits' (*t*-score 8.8) and 50 instances of 'demonstrable' collocating with 'benefit' (*t*-score 7), none of the $n \pm 4$ co-texts for these collocations include 'global'. What can we conclude from all this? There is no evidence that 'demonstrable global benefits' is normal collocation. This helps substantiate an intuition that making the claim – 'agricultural technology including GM' has not just demonstrable benefits but demonstrable global benefits – is hyperbole and thus a rhetorical strategy. This strategy is not so obvious since 'global' is ellipted in Little's use of 'demonstrable benefits' [10]. Thus, what we have in the expression 'demonstrable (global) benefits' is the opposite of a deficit of normal colloc-ation: the collocation is in surplus of the norm.

In order to confer normal collocation, the ellipted 'global' in 'demon-strable benefits' [6] needs to be deleted. This is indicated via crossing out in Figure 5.5. As a result, there is now cohesive deficit between paragraphs [E] and [F]. The lexical chain containing 'global benefits' across these paragraphs unravels (Figure 5.5).

[E]

[8] A recent Belgian study reported that "on average, two-thirds of the global benefits are shared 'downstream', i.e., among domestic and foreign farmers"

"The (global) benefits are shared by . . . adopting farmers . . ."

[F]

[10] With that sentiment in mind, Britain should be pursuing a policy that recognises the demonstrable global benefits that agricultural technology, including GM, can bring.

Figure 5.5 Deconstruction of cohesion due to normal collocation surplus of the ellipted 'global' in 'demonstrable global benefits'.

5.5.2 'Tried and tested science'

A predominant lexical chain in the argument is one which relates *science* to *technology*.

[A] Royal Society's **science**-based study on food security — **anti-GM lobby** — research

[B] research

[C] *GM technology* — Royal Society

[D] *GM technology*

[E] Belgian study — *biotechnology* developers — study — *technology* suppliers

[F] *agricultural technology* including GM

[G] efficient farming methods based on   (tried and tested science)

[H] **science-based** decision-making — **anti-science** activists did too.

Figure 5.6 Cohesion across the argument via 'science' and 'technology'.

The first sentence of paragraph [A] contains the expression, 'science-based study'. 'Science' does not appear again until paragraph [G], in 'tried and tested science', and then again in paragraph [H] where 'science-based' recurs and there is an echo of 'anti-GM lobby' [A] in 'anti-science activists' [H] (Figure 5.6). In using 'science' in this way, the text's first and last paragraphs are lexically symmetrical. This contributes to the rhetorical dimension of the argument – the outro of the argument neatly echoes its intro. In contrast, in most of the paragraphs in which science does not appear, cohesion is instituted through use of '(GM) technology' [C, D, E, F]. In order to achieve lexical cohesive symmetry towards the end of the article – the writer has to change from a cohesive chain involving 'technology' to one involving 'science'. Little accomplishes this using 'tried and tested science' [G] as a bridge from the 'technology' cohesive chain back to the 'science' cohesive chain.

As I have already highlighted, in UKWaC, 'tried and tested' does not, however, collocate with 'science'. In other words 'tried and tested science' is in surplus of normal collocation. In contrast, there is frequency and statistical evidence that 'tried and tested' collocates with words such as 'technology', 'method', 'technique', 'formula', 'format', 'approach'. Given that these words can be grouped under a common meaning of *application and/or procedure*, we can say that 'tried and tested' carries a semantic preference for application/procedure words; 'tried and tested' plus 'technology' is a specific example of this normal collocation (79 instances; *t*-score 8.8).

I already showed in 5.2.4 what happens locally in the argument when I bestow normal collocation. In other words, by deleting the collocation surplus of 'science', 'We need science based decision-making' [H] and 'it's

time the anti-science activists did too' [H] become cohesively adrift from paragraph [G]. The effects of this cohesive deconstruction are not just local, however.

[A] Royal Society's **science**-based study on food security — **anti-GM lobby** — research

[B] research

[C] *GM technology* — Royal Society

[D] *GM technology*

[E] Belgian study — *biotechnology* developers — study — *technology* suppliers

[F] *agricultural technology* including GM

[G] efficient farming methods based on (tried and tested science)

[H] **science-based** decision-making — **anti-science** activists did too.

Figure 5.7 Deconstruction of cohesion across the argument via 'science' and 'technology'.

Once the bridging expression of 'tried and tested science' buckles, there is a negative knock-on for the argument's global cohesion. The cohesive link between 'anti-GM lobby' [A] and 'anti-science activists' [H] comes undone, thus rendering defective the rhetorical intro/outro structuring (Figure 5.7). Analogous to what Derrida does in his brand of deconstruction, the surplus meaning of 'science' in 'tried and tested science' is a *blind spot* in the text, a stray signifier that has a marked effect on the entire, apparently stable cohesive structure.

A possible challenge. Isn't it an arbitrary choice to strike out 'science'? Why not strike out 'tried and tested'? There is a good reason for not doing the latter. Sentence 11 is a summary of previous points that GM is proven to be valuable and beneficial [5], [6], [7], [8], [9], [10], e.g.:

> [C]
> [6] [Small farmers] grow them because they work – producing more food from a lighter environmental footprint.

In the wider co-text of Little's argument, 'tried and tested' [G] is not otiose. It is essential to the point he is making. GM has been tried over and over – and (allegedly) works. This is why I retain 'tried and tested' rather than crossing it out.

The lack of evidence in UKWaC for 'tried and tested science' draws our attention to its strangeness and prompts an explanation for its unusuality. This, I would argue, is due to its tautologous nature. Scientific knowledge is the result of experiment (*'trying* out') as well as *testing* of hypotheses. So,

one does not need to front 'science' with 'tried and tested'. (Besides, scientific method works! It does not need to be continually tested). The issue is different for 'technology' since technologies usually need to be tested to see if they work. This is especially the case for technologies sold to the public which, obviously, need to be tested over and over to ensure safety. In contrast with 'tried and tested science', then, 'tried and tested technology' is not a tautology. Until a technology is tried and tested, we don't know whether it is safe or not. It is also worth saying that since technology is the application of science (Wolpert 1992), GM is a technology and not a science. Being 'anti' the science of GM would actually mean being opposed to the science of genetics. By analogy, being opposed to the technology of nuclear power is not normally to be 'anti' the science of sub-atomic physics. On the importance of using the science/technology distinction accurately in discussion of GM, see Cook (2004: 81–82).

One more possible challenge: what if we gloss 'science' as 'scientific method'? Given that 'method' is a common collocate of 'tried and tested', then wouldn't the above deconstructive analysis be problematised? An obvious counter to this challenge would be that 'science' is not equivalent to 'scientific method'. The latter is just one part of 'science'. But a better counter rests on lack of empirical evidence for the expression 'tried and tested scientific method'. There are no results in UKWaC.

5.5.3 Summary and some methodological issues

I have shown how Little's argument can be deconstructed by illuminating absences from and surpluses to normal collocation as mined from a large corpus.[9] I have in effect looked at the argument through the lenses of different discursive subjectivities. Doing so has led to deconstruction in cohesive structure, and thus to problems for the argument's coherence, or to deconstruction in the argument's coherence irrespective of whether the argument retains cohesion. Echoing Derrida, my procedure has involved a double-reading: I tried to understand the intentions of the author before the deconstructive analytical stage. And also analogous with Derrida's approach, my deconstructive engagement was not predestined. Since I did not know much about the topic of GM, I was building discursive subjectivities largely from scratch. This meant I was viewing the text from a new perspective which, in turn, led to a fresh reading – one different from how I originally engaged with the argument. With the various tensions revealed, the credibility of Little's argument, in relation to how the topic of GM and sub-topics are normally discussed, was thrown into question. Finally, I should be clear that I have not necessarily exhausted all cohesive instability nor those coherence problems which are independent of cohesive stability.

Let me flag a few important things:

- For discussion of a topic, a very large corpus, such as UKWaC, can illuminate *what* the standard collocational terms are across a large number of texts regardless of *how* these collocations are used in a speaker's or writer's evaluation in the texts.
- The analyst needs to be careful that absence from normal collocation may be a case of ellipsis. By this I mean that the author may have omitted a normal collocate because it featured earlier in the argument and so there is no need to repeat it; though a normal collocate is 'missing' in one part of the argument, the reader can supply this information.
- Absence of normal collocation for the topic (or sub-topics) may not be deliberate.
- The reduction of credibility of a public sphere argument is always *relative* to a specific corpus norm which reveals habitual discussion of the topic.

In Chapter 10, I will go into detail on methodological issues which ensue from analyses across Parts II and III.

5.6 Corroborating collocation deficits using world-wide-web search engines

At 1.5 billion words, UKWaC is a very big corpus. But it is small as compared with the biggest electronic 'corpus' of all – the World Wide Web. When we do not find an example of a collocation from a public sphere argument in an aggregated corpus, if this collocation is also not found in the World Wide Web – or exists very infrequently – then we have even firmer grounds for judging that there is deficit from normal collocation in the argument.

On 27 July 2016, the web was estimated to have 5 billion pages.[10] If each page only contained 1,000 words – a highly conservative estimate – this would mean, on that date, it consisted of 5,000 billion words; that is, 3,333 times the size of UKWaC. While the web is not a finite corpus and so cannot be statistically analysed for collocation, all the same, search engines do provide counts of multi-word units. In theory, this ought to help the researcher in appreciating how commonly used a particular expression is. In practice, however, search engine counts are often unreliable (Rayson *et al.*, 2012; Kilgarriff, 2007). When a search engine provides a very large count, it is usually only an estimate. Moreover, different search engines calculate figures in different ways. These represent disadvantages for corpus analysts wishing to tap into many billions of words.

Yet, the converse of the above is that if a search engine returns a zero or very small count, and does this regularly over a reasonable stretch of time, this figure is likely to be meaningful. That is, we can say with some confidence that the expression does not exist or barely exists. In line with Rayson *et al.*'s (2012) recommendations, it is important to use more than one search engine for corroboration and over at least a two week period.

If the results are reasonably stable over this period, then given the vast size of the web, corroborated zero or very low search engine counts for multi-word units would usefully tell us the following: that zero or very low counts for the multi-word units that were absent in the corpus we used are not due to size constraints of this corpus.

The longer the search string, the more likely we will locate, on the web, the exact expression we are interested in. To illustrate the point, by using only 'tried and tested science' as a search expression in Google, unfortunately I received things like: 'Science toys tried and tested: science is creative and good toys reflect that'. To help reduce this kind of 'noise', I increased the search expression to 'based on tried and tested science' – the actual string of words used in Little's text. Table 5.2 shows the average results for 'based on tried and tested science' using three different search engines over a 6 week period (23 December 2010 – 1 February 2011) a little more than a year after Little's article was published (October 2009). Counts were generated at the beginning, middle and end of this period and then an average calculated:

Table 5.2 Average search engine counts for 'based on tried and tested science' for the period 23 December 2010 to 1 February 2011

	Bing	Google	Yahoo
based on tried and tested science	5	45	16
based on tried and tested technology	10, 600	67, 300	10, 500

Interestingly, almost all the instances of 'based on tried and tested science' are versions of Julian Little's article. For example, in the Google search, 43 out of the 45 total hits are from his original article or variants of it. Also, these figures were very stable over a six-week period. We can say with some confidence that the lack of the expression 'tried and tested science' in UKWaC is not due to size constraints of this corpus.

A possible challenge to what I've just done: by fronting 'tried and tested science' with 'based on', how do I really know that I am not preventing the generation of many other six-word, and more than six-word, expressions containing 'tried and tested science'? Just because 'based on tried and tested science' is almost non-existent – other than in mostly versions of Julian Little's text – this still does not mean that 'tried and tested science', in the way Little uses it, is virtually non-existent on the web. There's not much I can do here to rebut this charge directly given the noise that is generated using the string 'tried and tested science' as a search expression. What I can do, though, is provide perspective. I also performed web searches for 'based on tried and tested *technology*' using the same three engines and over the

same period. Table 5.2 also shows the figures for this expression. As the reader can see, there are many more instances of this expression than 'based on tried and tested science'. Whilst one cannot completely rely on these figures in an absolute sense, they are nevertheless useful relatively speaking. In other words, the discrepancy in figures between 'based on tried and tested science' and 'based on tried and tested technology' mirrors the discrepancy found in UKWaC between 'tried and tested science' and 'tried and tested technology'.

Finally let me look at the other expression from Section 5.5 for which there was no hit in UKWaC – *demonstrable global benefits*. Table 5.3 shows the results of web searches for this expression. These results, thus, corroborate the finding from the UKWaC investigation. A similar counter here would be that there needs to be more flexibility in the search expression. The sense of 'demonstrable global benefits' could be expressed differently such as in 'global benefits which are demonstrable' or 'global benefits that are demonstrable'. I searched for these expressions over the same period and the results returned were also zero (Table 5.3). Granted, though, there are other possible expressions that contain this idea which I have not searched for.

Table 5.3 Search engine counts for 'demonstrable global benefits' for the period 23 December 2010 to 1 February 2011

	Bing	Google	Yahoo
demonstrable global benefits	0	1	1
global benefits that are demonstrable	0	0	0
global benefits which are demonstrable	0	0	0

5.7 The corpus as inside-outside supplement

5.7.1 Orientation

In Chapter 4, I rejected, on corpus linguistic grounds, Derrida's non-concepts *trace*, *différance* and *pharmakon*. I did not reject the idea of the supplement, however. Unlike the non-concepts I have just mentioned, the supplement is not an invented idea. With the supplement, Derrida finds an existing notion, but complicates it, highlighting its essential inside-outside nature. I view Derrida's perception that the supplement has an inside-outside nature, as well as a deficit-surplus nature, as a correct and valuable insight.

As I pointed out in Chapter 3, Derrida often deconstructs texts through reading them via a supplement (e.g. a footnote). In this chapter, I too have been reading a text via a supplement – a giant corpus. Let me return to how I used UKWaC in Sections 5.4 and 5.5 to frame understanding of what I did via the logic of supplementation.

5.7.2 Simultaneous deficit and surplus in the argument relative to the supplement

On the one hand, the UKWaC corpus was *outside* the argument, providing extra information about how the argument's topic is normally discussed, e.g. the normal collocation deficit of 'environment' around 'GM safety'. On the other hand, once we know from the corpus that 'environment' commonly collocates with 'GM safety', then on the logic of supplementation *inside* the argument we make up for the collocate deficiency around 'GM safety' by including 'environment'. In supplementing the argument in this way, 'environment' is in effect a surplus meaning.

5.7.3 No borders to the text of an argument

If we treat a corpus as an inside-outside supplement to a public sphere argument, then it follows that we do not see a border to the argument. In reading an argument through its 'traces' of normal collocation for the topics discussed, traces that can be ascertained scrupulously through consulting a large corpus, we are automatically oriented to what is outside the argument. In yet another appropriation from Derrida, then, this crossing of textual borders is based on the 'Other of language', where the 'Other' here refers to habitual collocates.

I have so far referred to cohesion quite generally. In fact, there are different types. Let me now elaborate these to help the reader gain a better perspective on this linguistic phenomenon and, in turn, better appreciate the kinds of cohesive deconstructions I highlight in Parts II and III. Section 5.8 draws mostly on relevant passages from Halliday and Matthiessen (2014) which form a more up-to-date statement of the classic work on cohesion, Halliday and Hasan (1976).

5.8 Types of cohesion

For Halliday and Matthiessen (2014), there are basically two forms of cohesion – lexical and grammatical.

5.8.1 Lexical cohesion

Lexical cohesion as we have seen in the analyses of this chapter takes place when a) lexical words are repeated – *lexical reiteration* – or b) where words from the same *semantic field* are used. Lexical reiteration in Little's text is obvious enough, for instance, in the repeated use of the word 'technology'. Semantic field cohesion is evident, for example, in paragraph [H] where we have the words 'crops', 'meals', 'ingredients', 'consumed'. All of these words relate to the semantic field of food consumption.

5.8.2 Grammatical forms of cohesion

The other broad form of cohesion is grammatical and there are four sub-types.

Reference

Where a grammatical word refers to something or someone that has been or will be mentioned:

> Felicity Lawrence, in her article on the Royal Society's science-based study on food security

'Her' refers to 'Felicity Lawrence'.

Substitution

Where a grammatical word substitutes for a lexical word:

> Parent: This lolly?
> Child: No, I want this one.

This is not grammatical reference since 'one' does not refer to an aforementioned lolly.

Ellipsis

Where one or more words are omitted from a sentence because they have already been mentioned and so can be recovered in reading. I highlighted in Section 5.5 that the cohesion between 'demonstrable benefits' and 'global benefits' works through ellipsis – 'demonstrable benefits' is really 'demonstrable *global* benefits'.

Conjunction

This refers to logical links between clauses or between sentences. Conjunction sub-divides into *additive*, *adversative* and *causal*. I take each in turn. In the fragment below, 'and' adds two clauses together:

> food security is one of the biggest challenges we face, and we must find ways in which to produce more food.

Thus, we have here *additive* conjunction.

   Adversative conjunction is where one clause or sentence provides contrast with or opposition to another:

Lawrence wrote of the "concentration of corporate power" regarding GM crops. **In fact**, GM technology has done much to empower small farmers . . .

'In fact' is a marker of adversative conjunction since it is alleged that GM empowers farmers despite what Felicity Lawrence might think. Other markers of adversative conjunction include 'but', 'nevertheless', 'yet', 'although'.

The final form of conjunction is *causal*. This is where there is a claim that the idea or thing expressed in a clause or sentence leads to another idea or thing. Causal conjunction can be seen in paragraph [G] of Little's text via the conjunction 'if':

[G] **If** we are serious about allowing UK farmers to produce more food at a fair price to consumers while safeguarding our natural resources, they must be given the freedom to choose modern, efficient farming methods based on tried and tested science.

Other causal conjunctions include 'because', 'therefore', 'thus' and 'so'.

5.9 Conclusion

Having rejected Derrida's notions of *différance*, *pharmakon* and *trace* in Chapter 4, in this chapter I have appropriated elements of his vision of language and meaning as stimulus for a data-driven way of showing how texts can be deconstructed – specifically public sphere arguments. I have also borrowed some of Derrida's reading procedures. This approach – the first strand of the critical deconstructive approach to the analysis of public sphere arguments – shows where the credibility of an argument can significantly reduce relative to how the topic (or sub-topics) is habitually discussed, regardless of how the topic is evaluated. Through drawing on corpora and corpus linguistic method, relevant absences from how a topic is normally discussed can be ascertained. To appreciate relevant absences, the analyst creates, in effect, discursive subjectivities. I should stress that bestowal of normal collocation on an argument does not necessarily lead to unravelling of its cohesive structure and thus loss of coherence. It depends on the nature of the argument. Moreover, deconstruction cannot just be assumed; it needs to be demonstrated.

So it is clear how I have appropriated Derrida's ideas about language together with his reading procedures, let me couch what I outlined at the end of Chapter 3 in terms of what I have done in this chapter.

5.9.1   *Background assumptions for why the cohesive structure of a public sphere argument potentially unravels:*

- a public sphere argument may appear cohesive (on the page) and coherent (in reading) because of relevant information which has been excluded (deliberately or inadvertently).
- the text overruns its borders since the analyst looks at 'the Other of language' – norms of collocation, colligation and semantic preference for words relating to the text's topic (or sub-topics) which can only be identified rigorously using a very large corpus; these norms could also go beyond the primings of the analyst should they not know the topic (very well).
- deconstruction in an argument depends on *difference* – the difference between collocation in the argument and the corpus norm.
- stray signification – blind spots of collocation deficit or surplus in a text – which the argument's author and/or analyst may well not notice without access to a very large corpus.
- the whole text structure can fall apart because of one surplus meaning (or deficit meaning) which derives from bestowing normal collocation in the argument.
- supplementary meaning which is simultaneously outside the text and 'inside'.

In chapters 6–9, the reader will continue to see the above themes reflected. In addition, analogous to Derrida's work, they will see that the impression of stability at the centre of a public sphere argument's structure is dependent on meanings which are pushed to the margins (and thus are not so readily apparent). Marginal elements in public sphere arguments that I will explore, again echoing Derrida, include casual metaphor and a supplement to web-based texts – hyperlinks. Moreover, continuing to use Derrida as stimulus, I highlight how the intentions of a public sphere argument can be disturbed where it can be revealed that its categories obscure important difference.

5.9.2   *To engage with a public sphere argument is:*

- to describe its cohesive structure and complicate it, highlighting how it might transform relative to the recurrent content of a corpus supplement.
- to produce a double-reading – understanding the argument in its own terms, trying to ascertain the intentions of the author, before showing where the argument potentially exceeds these intentions relative to a discursive subjectivity.
- to read from 'outside' of the argument using a corpus supplement.
- to show how a corpus supplement to the argument illuminates collocation deficit or surplus within the text.

- to appreciate the argument's 'spectral' meanings.
- to intervene in the argument by reading it via 'traces' of normal collocation for discussion of a topic.
- to create discursive subjectivities which enable illumination in the argument of relevant absences.
- to appreciate how relevant absences from the argument affect its presences.
- to produce a non-predestined deconstructive reading. Ideally, information on habitual collocates for discussion of a topic is new information for the analyst because they are unfamiliar with the topic or do not know it in any depth. The reader is not then treading water but swimming to new shores.

Chapter 6 continues with the first analytical strand. In particular, it shows some advantages of this procedure over the traditional approach of argument reconstruction in critical thinking.

Notes

1 For information on the British National Corpus, see http://www.natcorp.ox.ac.uk/corpus/index.xml [accessed July 2016].
2 The UK Web as Corpus (UKWaC) was built in 2007. From information on the Sketch Engine website, available at http://www.sketchengine.co.uk/ where UKWaC can be accessed. It consists of 1,318,047,961 words and 1,565,274,190 tokens [website accessed July 2016]. UKWaC derives from World Wide Web sites with a UK Internet domain name, and contains a wide variety of topics and registers. Since the aim was to build a corpus of British English, only UK Internet domains were included (see Ferraresi *et al.* 2008).
3 By lack of normal collocation, I am not referring to playful, creative collocation, such as highlighted in Partington's (1998) corpus-assisted study. Playful, creative collocation is usually inappropriate in the serious genre of argument.
4 For more information on t-score, see Barnbrook (1996).
5 On the cohesion / coherence distinction, see de Beaugrande and Dressler (1981); Fairclough (1992: *passim*), Widdowson (2007: 49–51).
6 Here I invoke what is popularly known as 'Occam's razor' associated with the medieval philosopher William of Occam (or Ockham): 'Entities should not be multiplied without necessity'.
7 In the 21st century, given the prevalence and huge economic power of transnational corporations, such as GM companies, the strong association between *corporate power* and *global* in UKWaC is hardly surprising; see, for example: http://www.globalpolicy.org/component/content/article/221/47211.html [accessed July 2016].
8 Hoey (2005) uses the term 'textual collocation' to refer to words in a text which frequently co-occur within a wider word span than $n\pm4$: 'Every word is primed to participate in, or avoid, particular types of cohesive relation in a discourse; these are its textual collocations' (Hoey 2005: 13).
9 Alan Partington makes an important case for the role of corpus linguistic method in disclosing absence. See Partington (2014).
10 Available at http://www.worldwidewebsize.com/ [accessed July 2016].

Chapter 6

Bypassing challenges of reconstruction

6.1 Introduction

6.1.1 Orientation

If we want to assess an argument's logical structure, we have to reconstruct it. This is a standard assumption in critical thinking. Reconstruction can be straightforward if the author has carefully constructed their argument, showing clearly how premises lead to a conclusion. However, as I pointed out in Chapter 2, sometimes authors make it arduous – accidentally or deliberately – for us to rebuild an argument's logical structure. Such difficulties arise for a number of reasons. One may be an author's stylistic clumsiness; another might be deliberate obfuscation since the author perceives their argument as weak. The latter might be achieved, for example, through use of vagueness and irrelevance. Another standard problem with reconstruction of the logical structure is recovering intended implicit premises; this is especially difficult if the reader cannot easily ascertain the relevance of certain information.

As should be clear by now, one evaluative basis of the deconstructive approach I am proposing is the stability of a public sphere argument's cohesion, and thus whether or not the argument is coherent, rather than logically acceptable; identifying the cohesive structure of an argument, as a set of surface features, is usually a much more straightforward business than comprehensively capturing the logical structure of an argument. This means that if critical assessment of an argument's logical structure is hampered by incomplete reconstruction of all premises relevant to a conclusion, this deconstructive strategy can still potentially facilitate an alternative critical engagement with the argument. This is what I will show in this chapter. In order to do this, my attempted reconstruction of an argument will include taking account of its cohesive structure.

6.1.2 Organisation

The data of Chapter 6 is a public sphere argument written by the late political journalist, Christopher Hitchens, which in 2008 sought to justify the

invasion of Iraq in 2003 by the US-led coalition. Echoing 5.3, I need to trace cohesive chains systematically across the text in order to understand accurately how Hitchens frames this topic. To help in their identification, I employ WMatrix, a software tool I used in 4.5.3. As I show, it has advantages over a tool such as AntConc for revealing semantic field cohesive chains, especially where the text is long. For the deconstructive analysis, I draw on a different big corpus from the one I used in Chapter 5. This is a 2-billion word corpus, the Oxford English Corpus. Lastly, after identifying Hitchens' arguments, I discuss some problems I encountered in their reconstruction. I go on to show how a deconstructive analysis of their cohesive structure circumvents these frustrations thus enabling critical engagement with this text.

6.2 Hitchens' argument and the identification of its cohesive structure

6.2.1 Orientation

Hitchens' text is titled 'How did I get Iraq wrong? I didn't'. It appeared in Slate.com, an English language online current affairs and culture magazine, on 17 March 2008, five years after the US-led invasion.[1] Christopher Hitchens, though born in the UK, also held American citizenship (which explains his use of the inclusive 'we' in the text). The text has 1,171 words. There are seven paragraphs in total, which I have labelled A-G. There are 35 sentences; numbers in square brackets below and in the rest of the chapter refer to sentence numbers in Hitchens' text.

> Title: 'How did I get Iraq wrong? I didn't'.
> (A)
> [1] An 'anniversary' of a 'war' is in many ways the least useful occasion on which to take stock of something like the Anglo-American intervention in Iraq, if only because any such formal observance involves the assumption that a) this is, in fact, a war and b) it is by that definition an exception from the rest of our engagement with that country and that region.
> [2] I am one of those who, for example, believes that the global conflict that began in August 1914 did not conclusively end, despite a series of 'fragile truces', until the fall of the Berlin Wall and the collapse of the Soviet Union.
> [3] This is not at all to redefine warfare and still less to contextualize it out of existence.
> [4] But when I wrote the essays that go to make up *A Long Short War: The Postponed Liberation of Iraq*, I was expressing an impatience with those who thought that hostilities had not really 'begun' until George W. Bush gave a certain order in the spring of 2003.

(B)

[5] Anyone with even a glancing acquaintance with Iraq would have to know that a heavy U.S involvement in the affairs of that country began no later than 1968, with the role played by the CIA in the coup that ultimately brought Saddam Hussein's wing of the Baath Party to power.

[6] Not much more than a decade later, we come across persuasive evidence that the United States at the very least acquiesced in the Iraqi invasion of Iran, a decision that helped inflict moral and material damage of an order to dwarf anything that has occurred in either country recently.

[7] In between, we might note minor episodes such as Henry Kissinger's faux support to Kurdish revolutionaries, encouraging them to believe in American support and then abandoning and betraying them in the most brutal and cynical fashion.

(C)

[8] If you can bear to keep watching this flickering newsreel, it will take you all the way up to the moment when Saddam Hussein, too, switches sides and courts Washington, being most in favor in our nation's capital at the precise moment when he is engaged in a campaign of extermination in the northern provinces and retaining this same favor until the very moment when he decides to 'engulf' his small Kuwaiti neighbor.

[9] In every decision taken subsequent to that, from the decision to recover Kuwait and the decision to leave Saddam in power to the decisions to impose international sanctions on Iraq and the decision to pass the Iraq Liberation Act of 1998, stating that long-term coexistence with Saddam's regime was neither possible nor desirable, there was a really quite high level of public participation in our foreign policy.

[10] We were never, if we are honest with ourselves, 'lied into war'.

[11] We became steadily more aware that the option was continued collusion with Saddam Hussein or a decision to have done with him.

[12] The president's speech to the United Nations on Sept. 12, 2002, laying out the considered case that it was time to face the Iraqi tyrant, too, with this choice, was easily the best speech of his two-term tenure and by far the most misunderstood.

(D)

[13] That speech is widely and wrongly believed to have focused on only two aspects of the problem, namely, the refusal of Saddam's regime to come into compliance on the resolutions concerning weapons of mass destruction and the involvement of the Baathists with a whole nexus of nihilist and Islamist terror groups.

[14] Baghdad's outrageous flouting of the resolutions on compliance (if not necessarily the maintenance of blatant, as opposed to latent, WMD capacity) remains a huge and easily demonstrable breach of international law.

[15] The role of Baathist Iraq in forwarding and aiding the merchants of suicide terror actually proves to be deeper and worse, on the latest

professional estimate, than most people had ever believed or than the Bush administration had ever suggested.

(E)

[16] This is all overshadowed by the unarguable hash that was made of the intervention itself.

[17] But I would nonetheless maintain that this incompetence doesn't condemn the enterprise wholesale.

[18] A much-wanted war criminal was put on public trial.

[19] The Kurdish and Shiite majority was rescued from the ever-present threat of a renewed genocide.

[20] A huge, hideous military and party apparatus, directed at internal repression and external aggression, was (perhaps overhastily) dismantled.

[21] The largest wetlands in the region, habitat of the historic Marsh Arabs, have been largely recuperated.

[22] Huge fresh oilfields have been found, including in formerly oil-free Sunni provinces, and some important initial investment in them made.

[23] Elections have been held, and the outline of a federal system has been proposed as the only alternative to a) a sectarian despotism and b) a sectarian partition and fragmentation.

[24] Not unimportantly, a battlefield defeat has been inflicted on al-Qaida and its surrogates, who (not without some Baathist collaboration) had hoped to constitute the successor regime in a failed state and an imploded society.

[25] Further afield, a perfectly defensible case can be made that the Syrian Baathists would not have evacuated Lebanon, nor would the Qaddafi gang have turned over Libya's (much higher than anticipated) stock of WMD if not for the ripple effect of the removal of the region's keystone dictatorship.

(F)

[26] None of these positive developments took place without a good deal of bungling and cruelty and unintended consequences of their own.

[27] I don't know of a satisfactory way of evaluating one against the other any more than I quite know how to balance the disgrace of Abu Ghraib, say, against the digging up of Saddam's immense network of mass graves.

[28] There is, however, one position that nobody can honestly hold but that many people try their best to hold.

[29] And that is what I call the Bishop Berkeley theory of Iraq, whereby if a country collapses and succumbs to trauma, and it's not our immediate fault or direct responsibility, then it doesn't count, and we are not involved.

[30] Nonetheless, the very thing that most repels people when they contemplate Iraq, which is the chaos and misery and fragmentation (and the deliberate intensification and augmentation of all this by the

jihadists), invites the inescapable question: What would post-Saddam Iraq have looked like without a coalition presence?

(G)

[31] The past years have seen us both shamed and threatened by the implications of the Berkeleyan attitude, from Burma to Rwanda to Darfur.

[32] Had we decided to attempt the right thing in those cases (you will notice that I say 'attempt' rather than 'do', which cannot be known in advance), we could as glibly have been accused of embarking on 'a war of choice'.

[33] But the thing to remember about Iraq is that all or most choice had already been forfeited.

[34] We were already deeply involved in the life-and-death struggle of that country, and March 2003 happens to mark the only time that we ever decided to intervene, after a protracted and open public debate, on the right side and for the right reasons.

[35] This must, and still does, count for something.

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6.2.2 Using WMatrix software to help identify cohesive chains in Hitchens' argument

Detecting semantic field cohesion

In Chapter 5, I showed how a corpus tool is useful for establishing cohesive chains in a text. The kind of lexical cohesion that a tool like AntConc is useful for – since it can establish word frequencies – is lexical reiteration (5.8.1). However, lexical cohesion can also operate through use of different lexis from the same semantic field (Definition Box 2.1). AntConc cannot group words from the same semantic field together, so I needed to identify this kind of cohesion by hand in Chapter 5. Usefully, the software tool, WMatrix (Rayson, 2009) can help with this procedure. WMatrix groups semantically similar words together using 'a semantic tagger'.[2] As I explained in Chapter 4, this is a software program which brackets words into semantic fields on the basis of a pre-configured lexicon. So, for example, with the semantic tagger that WMatrix uses, the words, 'tanks', 'military', 'soldier' are tagged with the semantic field 'WARFARE, DEFENCE AND THE ARMY'. That WMatrix groups semantically related words in this way can significantly reduce labour, selection bias and error in identifying semantic field cohesive chains across a text, especially where it is long.

Semantic fields and statistical significance

WMatrix has access to reference corpora (4.5.1). A reference corpus, just like a single text, can be tagged for its semantic fields. The reference corpora

in WMatrix, currently around 1 million words each, have been tagged for semantic information. Since I am focusing on written arguments, I use a reference corpus consisting only of written texts, the BNC written sampler.[3] Using WMatrix to compare semantic fields in a public sphere argument with the semantic fields of a reference corpus illuminates the statistical significance of the former. If a semantic field in an argument is statistically significant – it is a 'key semantic field' (4.5.4) – this can help the analyst see the furthest reaching cohesive chains in a relatively long argument. The statistical metric used in WMatrix is log likelihood (see Dunning 1993). In WMatrix, a log likelihood value of ≥7 is statistically significant (p < 0.01);[4] so if a semantic field in a text is found to have a log likelihood value of ≥7, then it is a key semantic field. The size of the log likelihood value ≥7 is proportional to the statistical significance of the semantic field.

Care in use of quantitative semantic data

It is important to tread cautiously with key semantic fields. This is because it is possible that a key semantic field consists of one word if that word is unusual relative to the reference corpus (4.5.3). Where a key semantic field consists of several words, these are more likely to be worth exploring as contributors to global cohesive structure. Table 6.1 contains all the semantic fields in Hitchens' text which have statistical significance, i.e. log likelihood values ≥ 7, and where the frequency for words subsumed under the semantic fields is greater than 1. Words subsumed under the semantic field DECIDED (log likelihood, 36.5; frequency 12), for example, will be worth investigating for their contribution to the cohesion of Hitchens' text.

Care also needs to be exercised in basing judgements of cohesion on the basis of tagged data. First, the semantic tagger that WMatrix uses has an accuracy of 92 per cent. Second, being a software programme with a pre-configured lexicon, this tagger has little scope for the kind of discerning semantic judgements that a human mind can make. Human judgements of cohesive chaining may be based on co-textual information, something which a tagger is limited in replicating. For example, in the PARTICIPATING semantic field (Table 6.1), the words 'intervention' [1], 'participation' [9], 'intervention' [16] and 'intervene' [34] are part of a cohesive chain in Hitchens' text which relates to US involvement in Iraq, while 'collaboration' [24] is not.

In a nutshell, the tagging facility of WMatrix is very useful because it helps the analyst comprehensively to trace cohesive chains across relatively large texts and in so doing significantly reduce labour, selection bias and error. But it is important to make sure that the software analysis of semantic meaning is corroborated by human judgements of semantic meaning. In Section 6.3, I bear all this in mind when I reconstruct arguments in Hitchens' text in relation to their cohesive structure.

Table 6.1 Statistically significant ('key') semantic fields in Hitchens' text where the total number of words subsumed under the semantic fields is greater than 1; generated using WMatrix (Rayson, 2009)

SEMANTIC FIELD	*Log like-lihood*	*Frequency*	*Words in semantic field potentially feeding into a cohesive chain* *(numbers in curved brackets indicate individual word frequency)*
DECIDED	36.5	12	decision (5), resolutions (2), decided (2), decides (1), decision_taken (1), decisions (1).
TIME GENERAL	18.0	3	ever (3).
SIZE: BIG	13.7	4	huge (3), largest (1).
GEOGRAPHICAL NAMES	9.8	31	Iraq (10), Kurdish (2), Iraqi (2), Washington (1), Northern_provinces (1), Kuwaiti (1), Kuwait (1), nation (1), Baghdad (1), marsh (1), Arabs (1), Syrian (1), Lebanon (1), Libya (1), Burma (1), Rwanda (1), Berlin (1), Soviet (1), Iran (1), American (1).
WARFARE, DEFENCE AND THE ARMY	14.5	13	war (5), WMD (2), war_criminal (1), military (1), weapons (1), battlefield (1), warfare (1), invasion (1).
NEGATIVE	9.3	20	not (11), n't (3), nor (2), neither (1), none (1), not_really (1), no (1).
TIME: NEW and YOUNG	8.3	3	latest (1), recently (1), revolutionaries (1).
PARTICIPATING	7.6	5	intervention (2), participation (1), collaboration (1), intervene (1).
QUANTITIES: MANY / MUCH	7.11	4	most (3), majority (1).

6.3 Reconstructing Hitchens' arguments in relation to cohesive structure

6.3.1 Not 'extracting' propositions, but leaving cohesion intact

I reconstruct Hitchens' text into three sub-arguments, two of which (and possibly all three) are related via a supra-argument; I order my identification of these arguments as they appear in Hitchens' text. Some of the reconstruction I found frustrating; I indicate portions of the reconstruction that I am unsure of with large question marks. The reason I report my attempt to reconstruct Hitchens' text into different sub-arguments is so I can go on to show the advantages of the deconstructive strategies of this book for circumventing reconstructive challenges.

In 6.6 and 6.7, my focus will be exploring whether or not the coherence of arguments in Hitchens' text is stable. Because of this, my identification of premises and conclusions retains the language of the text, and thus its cohesive devices, as far as possible.[5] Moreover, my reconstruction highlights how words from key semantic fields in Table 6.1 provide important cohesion in the arguments.

6.3.2 Sub-argument 1: The 2003 Anglo-American intervention in Iraq was not an exception *from US involvement in Iraq and so not a discrete war*

The essence of sub-argument 1 is that the 2003 intervention is not a separate war. It is, instead, yet one more instance of a long involvement in Iraq for the US. The repetition of words subsumed under the key semantic field DECIDED is a crucial part of the cohesion of sub-argument 1 (bold in Figure 6.1). There are also terms from the key semantic field WARFARE, DEFENCE AND THE ARMY (underlining in Figure 6.1).

Premise:	A <u>war</u> between two countries is by definition an exception in how those two countries engage with one another. [1]
Premise:	Hostilities did not begin in 2003 (though it is unclear in Hitchens' text when they did begin). [4]
Premise:	Heavy US involvement in the affairs of Iraq began no later than 1968. [5]
Premise:	[There was] a **decision** by the US to acquiesce in the Iraqi invasion of Iran. [6]
Premise:	Kissinger [gives] faux support for Kurdish revolutionaries. [7]
Premise:	Saddam Hussein courts Washington. [8]
Premise:	Saddam Hussein **decides** to 'engulf' Kuwait. [8]
Premise:	There was a really quite high level of public participation in US foreign policy in **decisions** taken to recover Kuwait, the **decision** to leave Saddam in power; the **decision** to impose international sanctions on Iraq; the **decision** to pass the 1998 Iraq Liberation Act. [9]
Premise:	Baghdad outrageous[ly] flouted the **resolutions** on <u>WMD</u> compliance. [13,14]
Premise:	We became steadily more aware that the option was continued collusion with Saddam or a **decision** to have done with him. [11]
Conclusion:	We were never . . . 'lied into <u>war</u>' [10], i.e. the 'Anglo-American intervention in Iraq' [1] was not a discrete war but a continuation of US involvement in Iraq since (no later than) 1968.

Figure 6.1 Reconstruction of sub-argument 1.

6.3.3 Sub-argument 2: Though incompetent, the Iraq intervention has positive consequences

This argument is directly relevant to the title of Hitchens' text: 'How did I get Iraq wrong? I didn't'. That is to say, in sub-argument 2, Hitchens provides a series of reasons why, in his opinion, positives flowed from the intervention. Four terms from the key semantic field, WARFARE, DEFENCE AND THE ARMY, are used (underlining in Figure 6.2). Three of the four terms from the key semantic field, SIZE: BIG, feature in sub-argument 2 (italics in Figure 6.2). These provide cohesion across sub-argument 2, perhaps rhetorically, to the extent that the positives of the intervention were sizeably significant.

Premise:	A much-wanted <u>war criminal</u> was put on public trial. [18]
Premise:	The Kurdish and Shiite majority was rescued from the ever-present threat of a renewed genocide. [19]
Premise:	A *huge*, hideous <u>military</u> and party apparatus, directed at internal repression and external aggression was (perhaps overhastily) dismantled. [20]
Premise:	The *largest* wetlands in the region, habitat of the historic Marsh Arabs, have been largely recuperated. [21]
Premise:	*Huge* fresh oilfields have been found, including in formerly oil-free Sunni provinces, and some important initial investment in them made. [22]
Premise:	Elections have been held, and the outline of a federal system has been proposed as the only alternative to a) a sectarian despotism and b) a sectarian partition and fragmentation. [23]
Premise:	Not unimportantly, a <u>battlefield</u> defeat has been inflicted on al-Qaida and its surrogates, who (not without some Baathist collaboration) had hoped to constitute the successor regime in a failed state and an imploded society. [24]
Premise:	Further afield, a perfectly defensible case can be made that the Syrian Baathists would not have evacuated Lebanon, nor would the Qaddafi gang have turned over Libya's (much higher than anticipated) stock of <u>WMD</u> if not for the ripple effect of the removal of the region's keystone dictatorship. [25]
Conclusion:	Although the prosecution of the intervention 'was a hash', the whole enterprise should not be condemned. [16,17]

Figure 6.2 Reconstruction of sub-argument 2.

6.3.4 Sub-argument 3: implication of moral superiority of Iraq intervention

For Hitchens, intervening in Burma, Darfur and Rwanda would have been 'the right thing' to have attempted [32]. Sub-argument 3 appears to make the point that, because the Iraq intervention took place, it is morally superior to the lack of interventions in Burma, Darfur and Rwanda. There is one word from the key semantic field DECIDED (bold in Figure 6.3). There is

Premise:	If a country collapses and succumbs to trauma and it's not our direct responsibility then we are not involved (Bishop Berkeley theory of Iraq). [29]
Premise:	We have been shamed by the implications of the Berkeleyan attitude from Burma to Rwanda to Darfur. [31]
Implicit premise**?**:	Potential interventions into Burma, Rwanda or Darfur would be humanitarian.
Premise:	Had we **decided** to attempt the right thing in Burma, Rwanda, Darfur, we could as glibly have been accused of embarking on a 'war of choice'. [32]
Implicit premise**?**:	Potential humanitarian interventions into Burma, Rwanda or Darfur would have a moral ('right') basis.
Premise:	All choice had been forfeited re Iraq. [33]
Implicit premise**?**:	The intervention into Iraq was humanitarian.

Implied conclusion?:	The intervention into Iraq was morally superior to the absence of humanitarian interventions into Burma, Rwanda and Darfur.

Figure 6.3 Reconstruction of sub-argument 3.

one instance of a term from WARFARE, DEFENCE AND THE ARMY (underlining in Figure 6.3). This instance – 'war' – is in the expression 'war of choice', which Hitchens places in inverted commas. Hitchens' qualification of 'war' here links back to the qualified use of 'war' in sub-argument 1.

6.3.5 Supra-argument and links to the sub-arguments

The last substantive sentence in the argument is [34].[6] This is a significant sentence for the entire argument. Sentence [34] stitches together sub-arguments 1 and 3, and possibly also sub-argument 2, into a supra-argument. This is done, in part, via the key semantic fields of DECIDED and PARTICIPATING:

> [34] We were already deeply **involved** in the life-and death struggle [*cohesive link to sub-argument 1*] of that country, and March 2003 happens to mark the only time that we ever **decided** [*cohesive link to sub-argument 1 and sub-argument 3*] to **intervene** [*cohesive link to sub-argument 1*], after a protracted and open public debate, **on the right side and for the right reasons** [*cohesive link to sub-argument 3*] [*cohesive link to sub-argument 2?*] [my bold]

I attempt an interpretation of the supra-argument in Figure 6.4:

Sub-argument 1

+

Premises: 'Saddam's regime refused to come into compliance on the resolutions concerning weapons of mass destruction'. [13]

'[There was] involvement of the Baathists with a whole nexus of nihilist and Islamist terror groups'. [13]

+

? Other reasons from Bush's speech to the UN which Hitchens does not mention.

+

? Sub-argument 2.

+

Sub-argument 3.

Conclusion: 'The US was already deeply involved in the life-and-death struggle of Iraq, and March 2003 happens to mark the only time the US ever decided to intervene, after a protracted and open public debate, on the [morally] right side and for the [morally] right reasons.' [34]

Moreover, because the US was 'already deeply involved in the life-and-death struggle of that country' [34] it had a 'responsibility' [29] for Iraq.

Figure 6.4 Reconstruction of supra-argument.

Having identified the arguments in relation to their cohesive structure as far as I can, I could just start exploring whether or not there is cohesive instability relative to findings from a large corpus for how the Iraq War was habitually discussed. In Section 6.4, however, I discuss some problems I experienced with my identification of the logical structure of Hitchens' arguments which, in turn, hinder critical assessment of their acceptability. The reason for this discussion is so the reader will appreciate, later in the chapter, how a digital deconstructive analysis of cohesive structure can circumvent such problems by facilitating an alternative form of critical engagement with the argument.

6.4 Problems in identifying Hitchens' arguments

6.4.1 Sub-argument 3 and implication of moral superiority of Iraq intervention

Relevance of the references to Burma, Darfur, Rwanda

I found sub-argument 3 allusive. Interventions in Burma, Darfur (a region of Sudan) and Rwanda – if they had occurred – would have been humanitarian ones for the purposes of preventing (worsening) genocide.[7] Hitchens does

not say outright that the Iraq intervention was humanitarian, presumably because it was not prosecuted on those grounds. But by not modifying 'intervention' [1, 16] and 'intervene' [34] with military/militarily and drawing analogy with Burma, Darfur and Rwanda, he can be read as implying that the Iraq intervention was humanitarian. To facilitate this implication, perhaps this is why Hitchens includes references to Saddam Hussein's genocidal past [8, 19, 27]? Furthermore, by making analogy with Burma, Darfur and Rwanda, he can also be read as implying that the Iraq intervention was morally superior to the absence of humanitarian interventions in those places. Because of some allusiveness in sub-argument 3, this is why I put question marks around my identification of implicit premises and conclusions (see Figure 6.3).

Doctor (US) and patient (Iraq) metaphor and vagueness

In sub-argument 3, Hitchens uses an extended medical metaphor. This metaphor extends into the supra-argument. Via this rhetorical device, the US is constructed as a quasi-doctor who 'intervenes' [34] in 'traumatised' [29] Iraq, the US having had 'responsibility' [29] and 'involvement' [29, 34] for this quasi-patient's 'life and death struggle' [34]. Note, though, the vagueness of the medical metaphor in [29]. In relation to Iraq, what exactly does Hitchens mean by 'if a country . . . succumbs to trauma'? This vagueness is not helpful in understanding sub-argument 3.

Is Sub-argument 3 a smokescreen?

In sum: it is hard to be completely sure of the logical structure of sub-argument 3. Perhaps Hitchens' style is often allusive and thus can accidentally pose problems for argument identification. A more suspicious position is that sub-argument 3 is a smokescreen, a deliberate obfuscatory rhetorical device (Bowell and Kemp 2015: 55). For many, the US-led intervention of Iraq is difficult to support after the event since a key reason given for the intervention – that Iraq had in 2003 an active Weapons of Mass Destruction (WMD) programme – turned out to be wrong. Hitchens needs to deflect attention away from the issue of WMD. One way of doing this is by being allusive. This is why he uses an extended metaphor which is, in part, obscure ('a country . . . succumbs to trauma' [29]). Another way of avoiding reference to the non-existence of WMDs is by alluding to Saddam Hussein's genocidal past. Hitchens cannot, however, explicitly argue that the intervention was humanitarian in order to prevent (worsening) genocide; the intervention was not prosecuted for this reason since there was no genocide in Iraq immediately before the 2003 intervention. I should stress that this is a speculative interpretation.

6.4.2 Supra-argument

Hitchens says that former President Bush's speech was:

> wrongly believed to have focused on only two aspects of the [Iraq] problem, namely the refusal of Saddam's regime to come into compliance on the resolutions concerning weapons of mass destruction and the involvement of the Baathists with a whole nexus of nihilist and Islamist terror groups. (13)

Here, I think Hitchens is engaging in a rebuttal of the commonly held view that the only reasons for the 2003 Iraq intervention were that Saddam had a WMD programme and that he had links with 'Islamist terror groups'. But Hitchens does not specify what the other aspects of the 'Iraq problem' were that Bush mentioned. Determination of the relevance of what Hitchens has written for the identification of (implicit) premises is frustrated.[8] Moreover, Hitchens mentions that the US went into Iraq 'for the right reasons' [34]. Do these reasons include the ones in President Bush's speech which are not specified? It is difficult to know.

   In [32], Hitchens says that 'the right thing' to do in relation to Burma, Darfur and Rwanda 'cannot be known in advance'. Is, then, Hitchens implying that the 'right reasons' [34] for the US intervention in Iraq must include the post hoc ones of sub-argument 2? It is difficult to tell and thus hard to know whether or not sub-argument 2 is part of the supra-argument. Again, comprehensive understanding of the text is impeded. Because of some allusiveness in the supra-argument, this is why I put question marks around my identification of certain premises (see Section 6.3.5).

6.4.3 Summary

I should emphasise that it is possible to isolate into arguments most of Hitchens' text. Sub-argument 1 was time-consuming to identify but this was eventually doable;[9] all of sub-argument 2 is identifiable. As far as the supra-argument goes, I am fairly confident of a good chunk of my reconstruction; this is because Hitchens has provided clear structural links between [34] and sub-argument 1 and sub-argument 3. One could still argue that it would have been more helpful if these links had come much sooner in the text since the reader cannot fully appreciate the overall (Supra-) argument until almost the last sentence. To conclude, I cannot know whether or not Hitchens has a deliberate strategy of obfuscation in parts of his text. I can, however, make the reasonable claim that there are areas in his arguments which are not so straightforward to identify. In turn, this creates impediments for critical assessment of the logic of Hitchens' arguments.

Despite these impediments, in Sections 6.6 and 6.7, I show how the corpus-driven strategy of this book can still afford critical engagement with Hitchens' text. This is because a key evaluative basis of the strategy is the stability or otherwise of the cohesive structure of a public sphere argument. As a set of surface textual features, cohesion is usually much easier to identify than all premises of an argument, particularly where these include implicit premises, it is difficult to ascertain relevance and the argument is long (see 2.3). But before I get on to the deconstructive analysis, let me say a few words about the reference corpus I use.

6.5 The corpus used for digital deconstructive analysis of Hitchens' text

The reference corpus for the deconstructive analysis is the Oxford English Corpus (OEC), mentioned in 4.3.2. Like UKWaC, this is a very large, predominantly web-based corpus. When I conducted the analysis,[10] the OEC consisted of around 2 billion words of texts across a wide number of genres such as news, magazine articles and message board postings in UK, US, Australian and other national varieties of English.[11] All OEC texts are from the year 2000 onwards; new material is continuously collected and added every few months.[12]

The advantage of a corpus in the billions of words for deconstructive analysis is so crucial that it is worth reiterating from Chapter 5, but this time with an example from the public sphere argument of this chapter.[13] The longer the string in a corpus search, the more likely a topic can be designated. For instance, instead of looking for collocates of 'intervention'– a very general notion – we could look for collocates of something much more specific, e.g. the topic 'intervention in Iraq'. For a corpus consisting of only millions of words, a collocate search of longer strings would not produce many if any results. But with corpora consisting of billions of words, there are more likely to be collocate results for longer, and thus topic-designated, search strings. As a result, a corpus like the OEC can illuminate what the standard collocational terms are for discussion of a topic such as 'intervention in Iraq'. And when I say 'what', I mean regardless of how these collocations are used in a speaker's or writer's evaluation. Furthermore, since the OEC consists of material from 2000 onwards, this makes it very useful for investigating collocational norms for discussion of the US-led intervention of Iraq in 2003. For all OEC investigations, I use the same word span $n \pm 4$ as I did in Chapter 5. As before, deconstruction with the most impact will be that which relates to the whole of the argument or at least to significant portions of it. For this reason, I seek out possible deconstruction which affects the cohesive structure of the supra-argument in Hitchens' text as well as its sub-arguments.

6.6 Deconstructing the coherence of sub-argument 1 and the supra-argument

6.6.1 Normal collocation for 'intervention in Iraq'

In sub-argument 1, Hitchens uses the expression 'Anglo-American intervention in Iraq' [1]. In the OEC, 'Anglo-American' occurs only once as a collocate of 'intervention in Iraq' and unsurprisingly with no statistical significance. In contrast, 'military' collocates with 'intervention in Iraq' 126 times (t-score 11.2). In fact, 'military' is the highest lexical collocate of 'intervention in Iraq'. These collocation results tell us that the intervention in Iraq has been discussed much more in 'military' than in 'Anglo-American' terms.

With knowledge that 'military' is the highest collocate of 'intervention of Iraq', I now have quantitative information to construct a discursive subjectivity which I can use as a lens on the text. What happens to sub-argument 1 once we read it via the 'trace' of normal collocation and replace the relatively rare collocate of 'intervention in Iraq', 'Anglo-American', with the most common lexical collocate, 'military'?:

> [1] An 'anniversary' of a 'war' is in many ways the least useful occasion on which to take stock of something like the ~~Anglo-American~~ [**military**] intervention in Iraq, if only because any such formal observance involves the assumption that a) this is, in fact, a war and b) it is by that definition an exception from the rest of our engagement with that country and that region.

This substitution creates tensions for an argument whose coherence depends to a large degree on negating the idea that the 'Anglo-American intervention in Iraq' was a discrete *war* and thus an exception from US involvement in Iraq since 1968. Since 'military' has such strong associations of 'war', it would not help Hitchens to collocate 'military' with 'intervention in Iraq'. Indeed, out of the 391, 873 instances of 'military' in OEC, 'war' collocates 3,913 times (t-score 62.5) and 'War' collocates 2,345 times (t-score 48.4). Combined, at 6,258 instances, this makes 'W/war' the tenth most common collocate of 'military'.

Echoing a point I made at the end of the last section, finding out normal collocation for 'intervention in Iraq' is not the same as finding out an opinion, i.e. how that normal collocation is used in an evaluation. To do that, we would need to go beyond collocation and explore the clauses and sentences in which 'military' collocates with 'intervention in Iraq'. Studying the wider co-text of instances of this collocation in the OEC reveals that sometimes 'military intervention in Iraq' is assented to, sometimes it is disagreed with or sometimes it is described neutrally, e.g. 'the military intervention in Iraq was justified/a disaster/took place in 2003'. Corpus evidence below for other normal collocation, likewise, does not reflect the evaluative nature of opinions expressed.

The normal collocation deficit of 'military' may not, of course, be deliberate. However, if it were a deliberate omission, and if Hitchens had responded to this deconstruction, he might have argued that the reason he did not modify 'intervention in Iraq' with 'military' is he did not want to create the false impression that the intervention was a war. However, the corpus evidence for 'intervention in Iraq' creates difficulty for this kind of retort because Hitchens would also have to demonstrate that common discussion of the intervention in Iraq in military terms is misguided whether people agree or not with the intervention. I shall show later that the fact 'military' is the most common collocate of 'intervention in Iraq' creates further difficulties for the coherence of Hitchens' text.

6.6.2 Normal collocation for 'hostilities'

Hitchens uses 'hostilities' [4] in:

> [4] But when I wrote the essays that go to make up A Long Short War: The Postponed Liberation of Iraq, I was expressing an impatience with those who thought that **hostilities** had not really 'begun' until George W. Bush gave a certain order in the spring of 2003 [my bold].

Sentence [4] forms part of sub-argument 1. Below, I show how 'hostilities' [4] is a blind spot, a stray signifier which inadvertently leads to tensions in both sub-argument 1 and the supra-argument. I achieve this by contrasting Hitchens' use of 'hostilities' with normal collocation for this term. (As in Chapter 5, when two figures appear in brackets below, the first figure is the frequency of a collocate and the second figure is its t-score.)

There are 5,914 instances of 'hostilities' in the OEC. The first, second and third most common lexical collocates are 'end' (615; t-score 24.7), 'cessation' (392; t-score 19.8) and 'outbreak' (230; t-score 15.2). 'Began' (126; t-score 11.1) is the sixth most common lexical collocate and 'ended' (123; t-score 11.1) the seventh. 'War' (134; t-score 11.4) is the fifth most common lexical collocate of 'hostilities'. Conventionally when 'hostilities' is used, the beginning or end of a particular war is communicated, such as in:

> A caravan of Japanese well-wishers and Project A50 boosters will fly to 32 U.S. cities following the official ceremonies, spreading the word that Japan has not forgotten American largesse in the half a century following the **cessation** of **World War II hostilities** . . . . [my bold]

The third most common grammatical collocate of 'hostilities' is 'in' (1638; t-score 38.1); this reflects the fact that 'hostilities' are not just commonly discussed in relation to a particular war and its outbreak or cessation, but in relation to a particular place, such as in:

> He said a lot of trade opportunities would be achieved by Zambia, espe-
> cially in the cement industry following the end of **hostilities** in Burundi
> [my bold].

Indeed, while 'Iraq' is the fourth most common lexical collocate of 'hostil-
ities' (212; t-score 14.5), 'in Iraq' is also a significant collocate (37; t-score
6.0). Furthermore, it is common for 'hostilities' and 'in' to collocate with a
particular time. Commonly a year collocates with 'hostilities', such as in:

> Following the cessation of **'hostilities' in** 1763, Washington began to
> argue for the land grants promised to the veterans in exchange for
> military service [my bold].

In sum, when the word 'hostilities' is used, it is normal for the particular
war to be indicated and/or relevant places and/or beginnings/ends by date to
be included.

   Let me now read sub-argument 1 via the 'trace' of normal collocation for
'hostilities' and explore potential instabilities in the text's coherence. I repro-
duce sub-argument 1 and annotate common collocation around 'hostilities';
I also reproduce [34], a key sentence in the conclusion of the supra-argu-
ment (Figure 6.5). I am thus using, as a lens on the argument, a discursive
subjectivity for how one aspect of the topic of 'war' is normally discussed.
Once we know normal collocation for 'hostilities', two tensions emerge in
making coherence from sub-argument 1 and the supra-argument:

   Coherence problem 1: that 'hostilities' collocates normally with 'war' is
hardly felicitous for Hitchens given his thesis that the situation in Iraq
between 2003 and 2008 is *not* a war.

   Coherence problem 2: a more complex tension also emerges:

Sub-argument 1 frames US involvement in the 'affairs' of Iraq [5] from
      1968 until before the 2003 intervention as a continuity of decisions. In
      the supra-argument's conclusion, the 2003 US 'decision to intervene'
      [34] is constructed as yet another decision in this continuity of decisions.
Although Hitchens does not say explicitly when 'hostilities' with Iraq began,
      a reasonable implication of his use of 'hostilities' [4], and what he says
      in [5], is that for him US 'hostilities' with Iraq began no later than 1968
      (note, this was pre-Saddam Hussein) and continued until at least 2003.
Tension
Normal collocation for 'hostilities' jars with the *continuity* being constructed
      in the argument. Where hostilities have ended, it is normal to flag this
      explicitly and with a specific date. However, Hitchens does not do this.
      For example, when he says that Saddam Hussein was 'in favor' in
      Washington [8], there is no explicit mention that for this to have

Premise: A <u>war</u> between two countries is by definition an exception in how
                  those two countries engage with one another. [1]

Premise: Hostilities did not begin in 2003. [4]

                  **'Hostilities' collocates with 'war', jarring with the framing that the
                  2003 Iraq intervention is *not* a war**

Premise: Heavy US **involvement** in the affairs of (pre-Saddam) Iraq began no
                  later than 1968 with the role played by the CIA [5]

                  **'Hostilities' [4] collocates with *start / end* of wars, jarring with
                  CONTINUITY OF DECISIONS framing**

Premise: A **decision** by the US to acquiesce in the Iraqi invasion of Iran. [6]

Premise: Kissinger [gives] faux support for Kurdish revolutionaries. [7]

Premise: Saddam Hussein **decides** to 'engulf' Kuwait. [8]

Premise: There was a really quite high level of public participation in US foreign
                  policy in **decisions** taken to recover Kuwait, the **decision** to leave
                  Saddam in power; the **decision** to impose international sanctions on
                  Iraq; the **decision** to pass the 1998 Iraq Liberation Act. [9]

Premise: Baghdad outrageous[ly] flouted **resolutions** on WMD compliance.
                  [13–14]

Premise: 'We became steadily more aware that the option was continued collu-
                  sion with Saddam or a **decision** to have done with him'. [11]

Conclusion: We were never . . . 'lied into <u>war</u>' [10], i.e., the 'Anglo-American inter-
                  vention in Iraq' [1] was not a discrete war but a continuation of US
                  involvement in Iraq since (no later than) 1968.

                  [34] The US was already deeply **involved** [*cohesive link to Sub-
                  argument 1*] in the life-and death struggle of Iraq, and March 2003
                  happens to mark the only time that the US ever **decided** [*cohesive link
                  to Sub-argument 1*] to **intervene** [*cohesive link to Sub-argument 1*],
                  [. . .]

Figure 6.5 Coherence problems in sub-argument 1 and the supra-argument.

happened 'hostilities' between the US and Iraq must have *discontinued*. Neither is there explicit mention of when this occurred.

Once again, using a large corpus as a supplement can highlight collocate deficit – in this case, in Hitchens' use of 'hostilities'. When we make up for the deficit on the logic of supplementation, coherence problems in sub-argument 1 and the supra-argument surface.

6.7 Deconstructing the coherence of sub-argument 3 and the supra-argument

6.7.1 Normal collocation for 'intervention in Iraq'

In Section 6.4.1, I highlighted how Hitchens uses, as part of sub-argument 3, an extended medical metaphor. In this rhetorical device, which extends to the supra-argument's conclusion, the US is a quasi-doctor who has been 'involved' [29, 34] in the quasi-patient Iraq's 'life and death struggle' [34] for many years, a patient who has now 'collapsed' [29] and 'succumbed to trauma' [29]. Because of this extended medical metaphor, a reading of 'intervene' [34] as quasi-medical intervention is conditioned. I have flagged cohesion for this extended medical metaphor in Figure 6.6 below in bold:

Premise:	If **a country collapses and succumbs to trauma [MEDICAL]** and it's not our direct responsibility then we are not involved (Bishop Berkeley theory of Iraq). [29]
Premise:	Saddam Hussein was a genocidist. [8, 19, 27]
Premise:	We have been shamed by the implications of the Berkeleyan attitude from Burma to Rwanda to Darfur. [31]
Implicit premise**?**:	Potential interventions into Burma, Rwanda or Darfur would be humanitarian.
Premise:	Had we decided to attempt the right thing in Burma, Rwanda, Darfur, we could as glibly have been accused of embarking on a '*war* of choice'. [32]
Implicit premise**?**:	Potential (humanitarian) interventions into Burma, Rwanda or Darfur would have a moral basis.
Premise:	All choice had been forfeited re Iraq. [33]

Conclusion of Supra-argument:

We were already deeply involved in the **life-and-death struggle [MEDICAL]** of that country, and March 2003 happens to mark the only time the US ever decided to **intervene [*MILITARILY*]**, after a protracted and open public debate, on the right side and for the right reasons. [34]

Figure 6.6 Coherence problems in sub-argument 3 and supra-argument around the extended medical metaphor

In [34], Hitchens uses the expression 'we decided to intervene' where 'we' links back to 'Anglo-American' [1]. But we know from Section 6.6.1 that 'military' is the highest lexical collocate of 'intervention in Iraq'. That is to say, 'military intervention in Iraq' is normal collocation. Modifying 'intervene' [34] with 'militarily' (Figure 6.6) conflicts with the medical-related cohesive chain. Cohesion in sub-argument 3, and the supra-argument, is destabilised with negative knock-on effect on their coherence and thus credibility. In turn, the rhetorical device of the extended medical metaphor is rendered defective.

6.7.2 Normal collocation for hypothetical and actual humanitarian interventions

In Section 6.3.4, I contended that sub-argument 3 can be seen as implying that the Iraq intervention was humanitarian and thus morally superior to the lack of interventions in Burma, Darfur and Rwanda. On the basis of information in the UN weblink in footnote 7, humanitarian interventions, particularly where genocide is involved, will usually require military intervention. This information leads me to formulate a hypothesis: it is likely that 'humanitarian interventions' are discussed commonly in 'military' terms. If this *is* the case, it would contaminate Hitchens' argument for the same reason given in 6.7.1.

   I explore collocates of the multi-word units, 'humanitarian intervention in' and 'military intervention in' to be consistent with the search expression and result in 6.6.1. There were no results for Burma or Rwanda, but there were for Darfur/Sudan: 'humanitarian intervention in' + 'Darfur' (4; t-score 4); 'military intervention in' + 'Sudan' (14; t-score 3.7). Moreover, the OEC provides evidence of collocation with actual humanitarian interventions in the Balkans and Somalia. For 'humanitarian intervention in', we have: Bosnia (7; t-score 2.6) and Somalia (7; t-score 2.6); and for 'military intervention in' we have: Balkans (15; t-score 3.9), Kosovo (21; t-score 4.6) and Somalia (17; t-score 4.1).

   The corpus analysis suggests that humanitarian interventions are, indeed, also discussed in military terms. What this means is that for Hitchens to create credibly, in sub-argument 3, the seeming implication that the Iraq invasion was some kind of humanitarian intervention, it would be unusual if this were not also discussed as a military intervention. However, as already mentioned, collocating 'intervene' [34] with 'militarily' would conflict with the medical-related cohesive chain. Again, once we bring an absence from habitual discourse into the argument, problems are created for its coherence. Moreover, a key aspect of this deconstructive analysis is that I am able to show problems with sub-argument 3 irrespective of being unsure I have recovered implicit premises accurately.

Lastly, in case the reader was wondering why I do not follow up with web engine searches for the expressions above, this is because there is clear evidence that these expressions have been used. As I highlighted in Chapter 5, search engines are useful for establishing whether the *absence* of an expression in a corpus is not down to the size of that corpus.

6.7.3 Normal collocation for 'a country collapses'

In another appropriation of Derrida, I show below how use of a seemingly innocuous metaphor troubles the coherence of the text. In isolation, the metaphorical 'a country collapses' [29] is somewhat vague. All the same, it appears to sit reasonably well with the extended medical metaphor of Iraq as patient and US as doctor. In other words, it can be said to be part of a larger rhetorical device in the argument (though this does not make its meaning that much clearer to me at least). Below, I show how normal collocation for 'a country collapses' unsettles the felicity of this rhetorical device.

In the OEC, there are 87, 462 instances of the broadly conceived lemma, COLLAPSE (i.e., the lemma contains both noun and verb instances of COLLAPSE). Using Sketchengine software, I filtered all these instances on the lemma COUNTRY (for an $n \pm 4$ span) given that Hitchens uses the expression 'a country collapses' [29]. This left me with 676 instances of COLLAPSE collocating with COUNTRY in texts in the OEC. I then calculated collocates for $n \pm 4$ span. The most common lexical collocates are 'economic' (63; t-score 7.9) and 'economy' (28; t-score 5.3); other related collocates are 'banking', 'banks' and 'financial' (see Table 6.2). Here is an example from the OEC:

> hundreds of thousands of Argentines clamour to escape their country's slide towards **economic collapse** [my bold].

Table 6.2 The ten highest lexical collocates for the broadly conceived lemma, COLLAPSE, filtered for COUNTRY

Lexical collocate	Frequency	T-score
economic	63	7.9
economy	28	5.3
Soviet	22	4.7
system	19	4.3
Union	18	4.2
system	39	6.2
following	16	3.9
banking	12	3.5
banks	12	3.5
regime	30	3.4
developing	30	3.4
financial	30	5.4

Even for other common collocates, such as 'Soviet Union', it is common for there to be economic/financial contexts, such as in:

> Russia and other East European countries, whose **economies collapsed** along with the Soviet Union, now emit far less carbon dioxide than in the 1990 baseline year . . . [my bold].

This is not surprising since economic factors played a highly significant role in the collapse of the Soviet Union.

Prototypically, if a country is said to collapse, the OEC informs us that this is related to economic reasons. Put another way, the OEC tells us that default understanding of 'a country collapses' is likely to treat 'collapse' as a dead metaphor, a convenient shorthand description for huge deterioration in a country's economy. But if we read the argument here via the 'trace' of normal collocation for 'a country collapses', a tension is created in the rhetorical device of the extended medical metaphor.[14] That *economic/financial* usage of 'a country collapses', that is to say, conventional usage, does not sit well with an extended *medical* metaphor inadvertently leads to further deconstruction of coherence in sub-argument 3, and the conclusion of the supra-argument. 'A country collapses' is yet another stray signifier in Hitchens' argument. For Hitchens to prevent this deconstruction, he could just be clearer about what he means by 'a country collapses and succumbs to trauma' [29].

6.8 Endpoints

6.8.1 Summing up Chapter 6

In order to assess the logical acceptability of arguments, comprehensive reconstruction of premises and conclusions is usually regarded as necessary. This is a standard assumption of critical thinking. However, there may be parts of an argument where reconstruction is frustrated. This may be, for instance, because the author has been stylistically clumsy, vague or irrelevant without being aware of it, or perhaps the author deliberately obfuscates their arguments because they know they are weak. An advantage of the strategies of this book is that, despite such impediments, they can facilitate a critical engagement with a public sphere argument. This is because a key aspect of their evaluative focus is the argument's cohesive structure, something which is usually easier to identify – as a set of surface textual features – than an argument's logical structure, particularly where the latter includes implicit premises and it is difficult to ascertain relevance. To demonstrate this advantage, I highlighted challenges with reconstructing the public sphere argument data of this chapter. Having now made the point, I don't attempt reconstruction of arguments in Part III.

6.8.2 Reflection on Part II

In chapters 5 and 6, I have critically appropriated a number of ideas and reading strategies from Derrida in producing the first strand of this digitally based deconstructive approach to public sphere arguments. In effect, I showed how discursive subjectivities can be generated for use as critical lenses on a public sphere argument. In turn, I showed the hostage to fortune of not discussing a topic (or sub-topic) using its normal collocation – regardless of how the topic is evaluated.

To be clear, I am certainly *not* suggesting that arguers are obligated to use normal collocation for a topic at all times. This wouldn't be proper since absence from normal collocation for a topic may, in fact, have no negative effect on the coherence of an argument – it all depends on the argument. For instance, Hitchens may have used the expression 'Anglo-American intervention in Iraq' in a completely different argument where he does not negate that the Iraq intervention was a war. Because of this, bestowal of the normal collocate 'military' may have no effect at all on the coherence of this hypothetical argument. Relatedly, corpus-driven explorations of sub-argument 2 in this chapter had little effect on its coherence, which is why there is no report of its deconstructive analysis.

If an argument uses normal collocation for discussion of a particular topic, then the first analytical strand of this book cannot operate. But that can be seen as a good thing! The coherence of the argument is not potentially weak relative to normal collocation. In other words, the argument could be said to pass one test of quality. Lastly, a word or two about choice of public sphere argument for training discursive subjectivities on. The analyst could, I suppose, decide to select an argument whose topic they are already very familiar with. If so, their corpus analysis may ground intuitions they already have of normal collocation. But this would be a lost opportunity for learning about new domains of debate and spurring cognitive growth more generally. Better if, instead, the analyst chooses a public sphere argument on an unfamiliar topic or one they do not know in any depth. Corpus analysis would, then, reveal new information for them about 'big D' Discourse which, in turn, reduces the prospect that the analyst's deconstructive reading is predestined. They have extended their horizons. Another reason I favour the latter orientation is this book subscribes to a 'nomadic ethics of deterritorialisation' (see Chapter 9).

Notes

1 See http://www.slate.com/articles/news_and_politics/politics/2008/03/how_did_i
_get_iraq_wrong_11.html [accessed July 2016].
2 The semantic tagger is called USAS (UCREL Semantic Analysis System).
Available at http://ucrel.lancs.ac.uk/usas/ [accessed July 2016].

3 'BNC' stands for British National Corpus. The 1 million words of the 'BNC Written Sampler' are a sample of the 90 million written words of the BNC.

4 p <0.01 indicates a 1 in 100 likelihood that the result could occur purely by chance.

5 In keeping as much of the original language as possible so as to retain the text's cohesive devices, I echo 2.3.6. But, also echoing 2.3.6, there may be areas of Hitchens' argument where repeated rhetorical lexis does *not* intersect with its logical structure. In other words, my filleting of logical structure runs the risk that I lose important aspects to the argument's cohesion which carry non-rational persuasive force.

6 I do not discuss [35] since it just serves to reinforce the message of [34].

7 On the language of 'humanitarian intervention' and genocide from a United Nations perspective, both generally and specifically in relation to Rwanda, see: http://www.un.org/en/preventgenocide/rwanda/about/bgresponsibility.shtml [accessed July 2016].

8 Sending the reader to the speech via a hyperlink in [12] (see online version of Hitchens' argument) to work out the other reasons on their own is not helpful. Former President George Bush Jr's speech is no longer available.

9 I found reconstruction of sub-argument 1 initially difficult. This is because of the inclusion of the title of Hitchens' book in [4]. The title refers explicitly to the 2003 Iraq intervention as a war [4] – 'A Long Short War'. But wasn't Hitchens arguing the Iraq intervention was *not* a war? To resolve the seeming contradiction, I conjectured the following: Hitchens must be arguing that the 2003 intervention in Iraq is not a discrete war because the US had been *continuously at war* with Iraq since (no later than) 1968 up until 2003, and possibly until 2008 since Hitchens does not say when the book was published (in fact, it was in 2003). But it became obvious that Hitchens was not arguing this. To conclude: the inclusion of the book title retarded my processing. Whether retardation is a deliberate strategy, Hitchens making it difficult for the reader to understand a weak argument, who knows.

10 September 2012.

11 For more information on the OEC, see http://www.oxforddictionaries.com/page/552 [accessed July 2016].

12 All frequencies and t-scores in the analyses of Section 6.6 and 6.7 were checked August 2012.

13 The OEC is made available through Sketchengine (http://www.sketchengine.co.uk/).

14 See O'Halloran (2007a) on the value of using corpus linguistic method for helping differentiate between 'dead' and 'live' metaphor.

Part III

Making corpora to generate ethical subjectivities

Part III highlights the second strand of the critical deconstructive approach to the analysis of public sphere arguments. This strand applies to public sphere arguments with two sides. In contrast with Part II, the analyst evaluates the argument from the standpoint that it criticises. I call this perspective the *standpoint subjectivity*. The analyst uses a corpus of relevant texts to ascertain key concerns in a particular standpoint. Having established these key concerns, the analyst is able to spot any important absences from how a public sphere argument frames this standpoint which, in turn, could lead to problems in the cohesion/coherence of the public sphere argument.

The techniques demonstrated in Part III could enable the analyst to look, in principle, at any public sphere argument from the standpoint of the other side to highlight where this has been misrepresented. However, since this book is also situated within Critical Discourse Analysis (CDA), and not just critical thinking, Part III focuses on a particular form of public sphere argument with two sides. This is one which criticises the standpoint of a socially/economically relatively powerless group. Should the argument distort or obfuscate this group's standpoint – deliberately or inadvertently – this could help reinforce a status quo of social and economic inequality. In Part III, I criticise public sphere arguments via the standpoints of the socially/economically relatively powerless groups who are criticised or characterised in the arguments, or are potentially affected for the worse by the perspective asserted in the arguments. I refer to such standpoint subjectivities as *ethical subjectivities*.

Part of the aim of this book is to deterritorialise pedagogical CDA so as to include a pronounced focus on the ethical alongside the political. This is best done by drawing on a number of related philosophers rather than just one. I get the formulation of 'ethical subjectivity' from the philosopher, Emmanuel Levinas. His ethical outlook had a large influence on Derrida's ethical orientation towards the Other. In Chapter 7, I provide accounts of the ethical outlooks of Levinas and Derrida. In Chapter 9, I outline the related ethical outlook of Gilles Deleuze and Félix Guattari of 'becoming-Other'.

The topics of the public sphere arguments examined in Part III include a campaign to discontinue a topless model page in a national newspaper

(Chapter 7) and the 'new atheism' of intellectuals such as Richard Dawkins and Daniel Dennett (Chapter 8). Chapter 9 returns to the pro-GM argument of Chapter 6 taking the perspective of the 'anti-GM lobby' that the argument criticises. It also shows how both types of deconstructions – drawing on *discursive and ethical subjectivities* – can be combined via ideas of Deleuze and Guattari. As with Part II, the reader will also see that there is methodological variation across Part III. Chapter 7 grows an ethical subjectivity using lemmas. Chapter 8 does this using keywords. Chapter 9 also uses keywords for this purpose, but takes a 'rhizomatic' approach. There is also variation in the type of digital supplements used across Part III.

Chapter 7

Ethical subjectivity generated with lemmas

7.1 A CDA refresher

7.1.1 Orientation to the relatively powerless Other

As the second strand is situated within Critical Discourse Analysis (CDA), and CDA was last discussed a while back in Chapter 2, I provide a brief refresher. CDA investigates how language use may be affirming and indeed reproducing the perspectives, values and ways of talking of the socially/ economically relatively powerful, which may not be in the interests of the relatively powerless. In CDA, 'critical' is usually taken to mean studying and taking issue with how dominance and inequality are reproduced through language use:

> CDA research combines what perhaps somewhat pompously used to be called 'solidarity with the oppressed' with an attitude of opposition and dissent against those who abuse text and talk in order to establish, confirm or legitimate their abuse of power. Unlike much other scholar-ship, CDA does not deny but explicitly defines and defends its own socio-political position. That is, CDA is biased – and proud of it.
>
> (van Dijk, 2001: 96)

The aim of CDA is *political* – to ameliorate discourse which contributes to the reproduction of social/economic inequality (Fairclough, Mulderrig, and Wodak, 2011). And while CDA is concerned with how the socially/ economically relatively powerless Other is represented, critique of text in CDA is ultimately guided by the analyst's *own* political subjectivity, usually left-liberal ('CDA is politically biased – and proud of it'.)

7.1.2 Corpus-based CDA

One of the major innovations in recent years within CDA is its use of corpora. In a short space of time, usage of corpora within CDA has become

fairly commonplace (see Baker *et al.* 2008; Hidalgo Tenorio, 2009; Mautner, 2016; O'Halloran, 2009). This has happened for a number of reasons. First, use of corpora and text analysis software is essential given there is an abundance of electronic media data available and investigation of media representations is such a prime focus in CDA. Second, corpus linguistic software – and digital text analysis software generally – are not so difficult to use. Third, usage of corpora carries some significant methodological advantages, which I detail below.

A key advantage of what is often referred to as 'corpus-based CDA' is that analysts can go beyond single texts and conveniently explore, in a quantitative manner, patterns of ideological meaning in a large number of texts. Another important advantage of corpus-based CDA is that it is the software which suggests what is significant in the texts for the analyst to examine – not the analyst. Corpus-based critical discourse analysts are thus content to let their political subjectivities be suspended while the software finds recurrent patterns of language use in relevant corpora for them to follow up. This methodological procedure helps analysts to avoid charges of arbitrariness and circularity (see 2.6). Following on from software analysis, however, their interpretation and explanation of these findings will involve their political subjectivities just like other critical discourse analysts.

7.1.3 Where the second strand differs from (corpus-based) CDA

The use of corpora in CDA has facilitated extensive investigation of how the media represents the socially/economically relatively powerless.[1] My focus/interests are different. In Part III, I model the second strand to the digital deconstructive analysis of public sphere arguments by doing the following:

- I exploit the affordances of digital media and corpus linguistic method to ascertain rigorously how different socially/economically relatively powerless Others recurrently represent *their own* standpoint.
- In each chapter of Part III, I use this information as a critical lens on a public sphere argument which attacks the standpoint of a relatively powerless Other and/or its supporters. In other words, I take on the perspective of a relatively powerless group in order to evaluate an argument, as far as possible, from their frame of reference.

With this focus, I am not then looking at a text from my own pre-existing political subjectivity. I am, in fact, looking at arguments from the perspective of an *ethical subjectivity*. Why this expression, 'ethical subjectivity'? In developing this pedagogical approach, I realised it would be a departure from (corpus-based) CDA. I thought it productive, then, to seek support from a theoretical source outside CDA. One candidate was Jacques Derrida.

In my rhizomatic engagement with his thinking, I learned that responsiveness to the Other is important in his oeuvre. It is the foundation of his ethics and, indeed, through contact with Derrida, I realised that the second analytical approach of this book would have an ethical emphasis. Derrida's ethical outlook owes much to that of the philosopher Emmanuel Levinas. The concept of 'ethical subjectivity' comes from Levinas.

In 7.2, I give an account of Levinas' ethics and then do the same for Derrida's ethics indicating convergence (and some divergence) between the two. I then use their thinking to guide, in this chapter, how I use an ethical subjectivity – constructed from mining an appropriate corpus – for evaluating a public sphere argument.

7.2 Levinas' ethics

7.2.1 Philosophical autonomy

For Levinas, a dominant tendency in Western philosophy had been *philosophical autonomy* – philosophical orientation from Self.[2] As illustration, let me take two giants of Western philosophy: Immanuel Kant and Martin Heidegger. I begin with Kant and, in particular, his ethical outlook. For Kant, *I* am the source of moral authority. The maxims on which I operate are ones I will myself to act on. A Kantian does not accept moral authority outside himself or herself – the authority of a monarch, an employer, a God, etc. To subscribe to moral authority outside the individual is not to act autonomously. Kant assumes humans are capable of reasoning out their own moral course of action. And if humans can do that for themselves, then they are capable of reasoning out a moral course of action which has wider application. Kant's view is that the maxims that I reason are acceptable for me to act on should be those which I would be happy to see as general maxims of moral duty. Thus, autonomy in Kantian ethics leads to universality. I have just outlined what is known as Kant's *categorical imperative* as described in *Groundwork for the Metaphysics of Morals* (Kant, 2003[1785]).

Autonomy prevails in Heidegger's vision too. His best known work is *Being and Time* (Heidegger, 1978[1927]). In this book, Heidegger seeks to answer the question 'What is being?'. Heidegger's book is concerned with ontology – the branch of philosophy that deals with questions about the nature of existence. Heidegger's question 'What is being?' is thus an ontological question. Much of *Being and Time* is a deconstruction, what Heidegger refers to as 'Destruktion', of traditional philosophical vocabulary which he holds impedes authentic understanding of being. Following this deconstruction, in order to better access 'being' Heidegger invents an alternative ontological vocabulary which exploits the linguistic potentia of German, his native tongue. An example: for Heidegger, being aware of the inevitability of our death is a positive experience. He calls this *Sein-zum-Tode* (literally

'being-towards-death'). This awareness helps us to accept our mortal limits. We are all going to die and then there is nothing – you are deluding yourself if you think there is a heaven, a God, 72 virgins to reward your martyrdom, etc. Keeping this thought uppermost in our minds does not reflect some kind of morbid impulse. Very much the opposite because, with this constant awareness, the possibilities for living an authentic life – living who we really are rather than what external forces tell us we should be – are freed up. In Heidegger's thinking, affirming our inevitable death can lead us to authentic experience of autonomy.

7.2.2 The responsibility to the Other

The fundamental of philosophical autonomy is the freedom of the subject. Kantians cannot execute categorical imperatives unless they have freed themselves to act in ways which they would be happy to see become universal law. Heideggerians, in taking seriously *Sein-zum-Tode*, can become liberated from an inauthentic life, thus becoming freer subjects. Levinas claims, in contrast, that there is something which precedes freedom of Self – responsibility for the Other. For Levinas, our subjectivity is located within this responsibility. In taking this position, Levinas emphasises not philosophical autonomy but *philosophical heteronomy*.

   Our face-to-face encounters are key to Levinas' philosophical orientation. In these encounters, the Other places a demand on us. Levinas doesn't mean that the Other explicitly asks us to do something for them. By 'demand', he means that their very presence impinges on us in some way which, in turn, will lead to a response from us – even if that response is us merely registering the Other in front of us. But since the Other orbiting us demands a response, then our self-consciousness is affected. It is this relation which is the basis of Levinas' ethical outlook. As he says, ethics is the:

> calling into question of my spontaneity by the presence of the Other . . .
> (Levinas, 1969[1961]: 43)

For Levinas, the demand of the Other leaves us with a responsibility about how to respond.

7.2.3 Ethical subjectivity

Since our very subjectivity is located within our responsiveness to / responsibility for the Other, Levinas holds that this makes subjectivity by its very nature an *ethical subjectivity*:

> Ethical subjectivity dispenses with the idealizing subjectivity of ontology which reduces everything to itself. The ethical 'I' is subjectivity

precisely insofar as it kneels before the other, sacrificing its own liberty to the more primordial call of the other. For me, the freedom of the subject is not the highest or primary value. The heteronomy of our response to the human other, or to God as the absolutely Other, precedes the autonomy of our subjective freedom. As soon as I acknowledge that it is 'I who am responsible, I accept that my freedom is anteceded by an obligation to the other. Ethics redefines subjectivity as this heteronomous responsibility in contrast to autonomous freedom. Even if I deny my primordial responsibility to the other by affirming my own freedom as primary, I can never escape the fact that the other has demanded a response from me *before* I affirm my freedom not to respond to his demand.

(Levinas, 2004[1981]: 78)

A corollary of this position is that 'being' is not *the* philosophical primitive. The ethical relation to the Other must precede ontology or, as Levinas puts it, 'ethics is first philosophy' (Levinas, 1989).[3]

7.2.4 The Other and the Same

Echoing Plato, Levinas refers to our sense of Self, the way we experience consciousness and the way the Self projects into the world as *the Same*. The Other is the opposite of the Same. In philosophical autonomy, the Same relates to the Other by reducing the opposition between the two, bringing the Other into the ambit of the Same. Put another way, philosophical autonomy either excludes, reduces or totalises the Other – what Levinas calls the 'imperialism of the Same' (Levinas, 1969[1961]: 39; 87). To act ethically, in contrast, is to engage in a non-totalisable manner with the Other which, in turn, places into question our ego and experience of consciousness. It follows that to meet the Other is to have the idea of Infinity. Every attempt we make to know the Other will thus only have partial success since there will always be Otherness which slips free of the Sameness of our grasp. Another corollary is that we only acquire our sense of subjectivity through a feeling of being indebted or responsible to an Other that *exceeds* any idea we might have of it. This makes Levinas' ethics both a possibility and an impossibility.

7.3 Derrida's ethics

7.3.1 Derrida's relationship to Levinas

Derrida's ethical outlook is fundamentally shaped by that of Levinas:

Faced with a thinking like that of Levinas, I never have an objection. I am ready to subscribe to everything that he says. That does not mean

that I think the same thing in the same way, but in this respect the diffi-
culties are very difficult to determine; in this case what do differences of
idiom, language or writing mean?

<div align="right">(quoted in Critchley, 2004: 129)</div>

Derrida agrees with Levinas that Western philosophy had been based on
exclusion of 'alterity' or otherness and thus had been biased towards
autonomy. Derrida's outlook is philosophically heteronomous like that of
Levinas. For Derrida too, the ethical relation between the Same and the
Other should be predicated on avoiding the totalising of the Other (Roffe,
2004: 41).

Ethically speaking, where Derrida differs from Levinas is in his decon-
struction of the relation between Self and Other. Levinas not only makes a
distinct separation between Other and Self, but sees an asymmetrical rela-
tionship between the two. In other words, Levinas prioritises the Other over
Self. For Derrida, however, there never is pure 'Selfness' and there never is
pure 'Otherness' (Roffe, 2004: 42). There can be no pure identity since Self
is dependent on the Other and its differentiation from it. Every identify
is haunted by a 'not-other'. For instance, part of the identity of a fervent
Barcelona soccer supporter, especially if they support the secession of
Catalonia, is that they are *not* a Real Madrid supporter. Part of the 'little d'
discourse produced by this Barcelona supporter during a Real Madrid
versus Barcelona soccer game will involve active identity differentiation
from the identity of Real Madrid supporters.[4] Self and Other are inter-
related – 'the other is in me before me' (Derrida, 2002b: 84). And since there
is no easy separation, Levinas' view that the ethical relation is asymmetrical
is hard to maintain.

While Levinas frames his ethics in terms of responsibility to the Other,
Derrida has a different formulation – *hospitality* to the Other. I outline this
perspective below. As the reader will see, this outlook, together with
Derrida's stipulation that Self and Other are interdependent and inter-
penetrated, leads to an ethics which seeks to transform Self rather than
to an ethics where Self is subjugated to the Other.

7.3.2 Hospitality to the Other, negotiation, and interrup-
tion of the Self

Derrida argues that ethics should be founded on the willingness to welcome
the Other into one's home. Indeed, for Derrida, ethics is hospitality (Derrida,
2001a: 16–17). 'Hospitality', though, is not a simple notion for Derrida. An
illustration: I am throwing a party. In showing hospitality to guests (who
may include strangers), I demote Self to the Other in allowing them to
consume my food and drink, wander around my house, etc. Nevertheless,
there are still rules – either overtly mentioned or implicit – about how I

expect them to behave: 'Do you mind taking your shoes off if you go upstairs?' and so on. This means that my hospitality is conditional. So, really we should refer to the everyday idea of 'hospitality' as 'conditional hospitality'. Derrida then asks 'What would true hospitality look like?', i.e. hospitality which is not conditional. And the answer is it would be an impossible form of hospitality. If I allow the Other to do whatever they want – graffiti my walls, wear my clothes, etc. – I become a kind of hostage in my own home. Unconditional hospitality is impossible since the host – the Self – must always be in a position to give hospitality. Derrida thus uncovers a tension in the concept of hospitality or what he refers to as an *aporia*: I cannot be hospitable unless I demote Self to the Other; I can only be hospitable by promoting Self over the Other (Derrida, 2000).

Derrida is relaxed about this aporia. This is because, he argues, we should embrace the tension within the concept of hospitality as the basis of a productive ethics. In our encounter with the Other, we should always begin from the position of unconditional (or absolute) hospitality. In other words, we demote Self to the Other from the beginning. This is an optimum starting point since it most likely ensures that the Self will be interrupted (Derrida, 1999a: 51), something Derrida sees as valuable. The encounter with the Other offers the possibility of benefit – of positive transformation of Self. To offer unconditional hospitality to the Other, however, clearly carries a risk and so we should proceed cautiously (Derrida, 1999b: 71). To reduce this, Derrida stresses the importance of negotiating unconditional hospitality to the Other via conditions which we regard as important (Derrida, 2001a: 22–23) and which apply to the particular situation where hospitality is offered. Not only, then, do we demote Self to the Other. In line with the aporia of hospitality, we also promote Self over the Other. This means that aspects of Self which are vital to us – say, adherence to the idea of human rights – will be preserved. But because our starting point is absolute hospitality – the extreme condition of hospitality – this best ensures the possibility that other elements of Self may undergo unpredictable positive change through its negotiated engagement with the Other.

7.3.3 The Other, Self-invention and the future

As will be apparent, to be hospitable to the Other in Derrida's ethics links to invention, specifically the re*creation* of Self. Indeed, the link between Self-invention, and allowing the Other into our lives, is in the etymology of 'in-vention' – 'in-venir' or 'in-coming'. Self-invention occurs when we allow the Other to come in. The aim of philosophy for Derrida is 'to allow for the passage toward the Other' (Derrida, 1992: 341) which will, in turn, transform understanding of the current order. This Other – not necessarily a person(s) – may already exist or is *yet-to-come*. In effect, Derrida advocates an ethical orientation to a future encounter with an Other which is

understood as implying the possibility of de-sedimenting the existing thoughts and actions in the Self.

7.3.4 Transformation in reading through the encounter with the Other

Reflecting what I wrote in Chapter 3, Derrida's ethical outlook to a future encounter with the Other also informs his mode of reading. Similar to CDA, many of his readings are an *affirmation* of the Other – often the excluded, the marginal, the invisible – which could include socially/economically relatively powerless groups. Where Derrida has a different emphasis from CDA is his *responsiveness* to the Other in his mode of reading. Indeed, his entire way of reading could be characterised as follows: opening out the reading of texts to the Other. He intervenes in texts to highlight where an author's position is dependent on exclusion, marginalisation and totalisation of the Other. Since these moves reflect inhospitality to the Other, they are unethical for Derrida. Moreover, in line with Derrida's creative openness to the Other, and orientation to the future, he sees the reading experience as purposely open and unpredictable. In bringing in the marginal, excluded or new Other into our reading, we should not know what to expect. In turn, our normal reading position is decentred; transformation of Self is made possible.

7.3.5 But Derrida's and Levinas' ethics do not look like ethics

The common understanding of ethics is that it is the philosophy of morality – the philosophy of how we should conduct ourselves.[5] The three standard perspectives in ethics – deontological, teleological and virtue ethics – are set out in Definition Box 7.1. Derrida and Levinas's ethics do not fall under these three standard positions. Their ethics is not 'normative' in relation to moral conduct – it does not provide us with norms for living. To be clear, the ethics of Derrida and Levinas *is* normative to the extent that we are exhorted to orient to the Other. Nevertheless, their ethics stops short of stipulating what we should do once we encounter the Other.

Definition Box 7.1 The three standard approaches in normative ethics

Deontological ethics: making moral judgements on the basis of universalising principles of social duty. Kant's 'categorical imperative' is one example of deontological ethics. Religious ethics such as the '10 Commandments' also constitute this form of ethics.

Teleological ethics: making moral judgements on the basis of consequences. The 'Utilitarian', Jeremy Bentham, is a philosopher who subscribed to teleological ethics. Justifying the killing of a genocidist in order to prevent the slaughter of more people reflects this ethics.

Virtue ethics: posing questions such as 'how can I become a better person?' is to engage in virtue ethics. Advice to a colleague that they are too nice and not selfish enough to get on in their career is to bypass virtue ethics. Aristotle promotes a version of virtue ethics.

Since Derrida and Levinas have little to say about norms for how we execute our responsibilities to the Other, are they not promoting an irresponsible ethics? Let me respond from Derrida's vantage. How can we can make a proper *decision* on ethical action appropriate to the specific context in which we find ourselves if we only obey a general rule which pre-exists that context? How can we act ethically towards the particular Other in front of us if we only treat them in relation to a general maxim which precedes our encounter with this Other? By only acting according to a general maxim, not only is ethical specificity lost, but it could well ensue that the Other is reduced or totalised in our ethical 'decision'. Since we all inhabit different traditions (cultural, political, etc.), we may well begin an ethical encounter with fairly generalised orientations. On a Derridean ethics, the important thing is that these orientations should only act as *parameters* for our engagement with the Other rather than a rigid set of directions. This more flexible way of interacting with the Other not only allows us to appreciate their specificity better, thereby reducing the prospect that we totalise the Other. It also creates space to facilitate better decision-making on the specific ethical action we take apropos the Other as well as for possible review, as a result of the encounter with the Other, of the parameters with which we began the engagement.

7.3.6 Summary

I have outlined Levinas' ethics of responsibility to the Other. I have done the same for Derrida's ethics of hospitality to the Other, which both endorses and critically adapts Levinas' position. Both ethical slants are important to the second analytical strand of this book for digitally deconstructing public sphere arguments. Below I appropriate Levinas' concept of 'ethical subjectivity'. Since the second strand, in this book, is grounded in CDA, the ethical subjectivity equates to the standpoint of a socially/economically relatively powerless group. The Self-transformative dimension to Derrida's

ethics is also important to the second strand. I should say, though, that despite chiming with Levinas' heteronomous vision, I feel his genuflection to the Other risks masochism. In this respect, I am more sympathetic to Derrida's (non-religious) stipulation that we exercise caution, agency and a critical attitude in negotiating with the Other. I move on to explain how I appropriate the notion of ethical subjectivity.

7.4. The second critical deconstructive strand

7.4.1 Corpus analysis of counter-discourse

In the second critical strand of this book, the analyst evaluates a public sphere argument relative to the key concerns of the socially/economically relatively powerless Other who is attacked in the argument. The web offers a multitude of places for conveniently accessing the up-to-date key concerns of relatively powerless Others who seek social and political change. Showing unconditional hospitality to a new Other in this way facilitates deterritorialisation. This has the benefit that we escape routine critical Self. Self is recreated through connection to a new Other.

Let me take the reader through the procedure of the second strand. First, the analyst chooses a public sphere argument, from whatever source, where a (mostly) unfamiliar socially/economically relatively powerless Other is being criticised, characterised or is potentially affected for the worse by the perspective asserted in the argument. Alternatively, the analyst might choose a public sphere argument which completely ignores the key critical concerns of a campaign group which opposes the stance of the argument.

Following their selection of a public sphere argument, the analyst shows digital hospitality to the Other, ascertaining their key concerns by:

• compiling a corpus, from the web, of a large number of appropriate texts generated by the Other which detail their motivations for social/political change;
• using digital tools to conduct a lemma, word and collocation frequency analysis of this counter-discourse.

The reason for generating lemmas is to help achieve an effective 'birds-eye' view on the lexical content of the counter-discourse corpus. After all, if a key concern is recurrently expressed through lexical repetition, this may be via different word forms of the same lemma. This process enhances accessing of key semantic content and, in turn, the recurrent concerns of the Other. (Generating lemmas is not the only way of effecting a useful birds-eye vantage on the lexical content of a corpus. In chapters 8 and 9, I show how this can be done using keywords).

7.4.2 Deconstructing the argument 'dialethically'

After ascertaining the most frequent concerns of the Other, the analyst then investigates the extent to which the author of the argument has accurately represented the Other's standpoint. Should it transpire that the argument has excluded, marginalised or totalised key concerns of the Other, the argument can be problematised. That is to say, the argument can be shown to be dialectically fallacious – it is a straw man. But my focus is not just dialectical. Since we have shown unconditional digital hospitality to an unfamiliar socially/economically relatively powerless Other in order to view the argument from their standpoint, we have constructed – in line with Derridean/ Levinasian ethics – an ethical subjectivity. In being both dialectical and ethical, the second analytical strand of this book is 'dialethical'.

Viewing the public sphere argument from the perspective of the ethical subjectivity also enables us to see whether or not the argument's coherence is destabilised relative to the counter-discourse. This is achieved by making present in the argument how the Other really represents its standpoint. Repeated lexis and grammar which establish cohesive structure in the argument is likely to reflect how the author recurrently frames the relatively powerless Other that they criticise or just characterise. Since an argument's capacity to persuade is dependent, in part, on effective cohesion, should the cohesive structure of the text of the argument be disturbed by making relevant absences visible, then its coherence diminishes and its credibility does too relative to the Other's perspective. Alternatively, after making a relevant absence visible, tensions can emerge in the argument which affect its coherence regardless of whether it retains cohesion. The evaluative procedure of the second analytical strand of this book thus mirrors that of the first strand.

7.4.3 Deepening ethical responsiveness

The readers may perhaps be asking themselves 'Why might I want to go to the trouble to explore possible deconstruction of coherence in the argument? If I find out that the argument is not credible relative to the Other's standpoint, why not just leave it at that?' To explore potential deconstruction of coherence is to *deepen ethical responsiveness to an unfamiliar socially/economically relatively powerless Other*, not just trying on their shoes, but walking about in them in the argument and 'becoming-Other' in the process. In other words, a deeper and more dynamic ethical responsiveness to the Other goes beyond appreciating that an argument which criticises/bypasses it is dialectically fallacious. And by evaluating the coherence of the argument relative to the key concerns/motivations in the counter-discourse, appreciating how an argument might distort and occlude the Other in quite subtle ways, interruption of Self and appreciation of the Other are intensified.

7.4.4 Non-predestined deconstructions

If the analyst shows unconditional hospitality to a relatively powerless Other who is (largely) unfamiliar to them, then the following should apply: revelation of coherence problems in the argument would not be predestined. This is because the ethical subjectivity would be based on the quantitative results of data mining which the analyst could not really have known. This is analogous to the point I made at the end of Chapter 6 where the analyst generates a discursive subjectivity to train on a public sphere argument with an unfamiliar topic.

7.4.5 Advantages of the technology used for generating an ethical subjectivity

Campaign/petition websites and user-generated text

Which texts to choose for creating an ethical subjectivity from? One obvious place would be texts on campaign websites – that is, websites campaigning for social/political change. In Chapter 9, I will highlight how this can be done straightforwardly using text archives from a campaign website. In this chapter, I will highlight how an ethical subjectivity can be created from 'user-generated' text on a petition website.

It is now habitual for websites to carry the capacity for users to deposit their own texts. Such user-generated content on a campaign website is worth mining for my purposes if it can tell us the key concerns of *supporters* of a particular campaign rather than just its generators. If there are hundreds, if not thousands, of supporter-generated reasons on a campaign website, but we only based an ethical subjectivity on the reasons provided by the initiator(s) of the campaign, we could be accused of skewed and narrow selection. While it is reasonable to suppose that everyone signing up to a campaign agrees on the ends, it cannot be assumed that they all have the same motivation. The motivations which come to define a campaign will be the most frequent ones across an aggregate of the initiator reasons and supporter reasons. Supporter user-generated reasons are, thus, not an 'outside' supplement to the campaign. Their visibility makes them an important part of a campaign's motivation and we need to take account of them in building an ethical subjectivity. There is also a key advantage for knowing supporter reasons as comprehensively as possible. The ethical subjectivity would carry quantitative authority, based on the most prominent concerns of many people supporting a campaign rather than just one or a handful.

Corpus linguistic method

But there is no use in having access to large numbers of digitised campaigner/ supporter texts if we cannot access frequent concerns across them

conveniently and rigorously. As I will demonstrate in Part III, the growth of an ethical subjectivity is facilitated by the useful capacity of corpus analysis to access efficiently in a *concentrated* manner common concerns across multiple campaign/supporter texts. Another boon of corpus linguistic method for my purposes is one already mentioned in this book, but worth reiterating – it substantially reduces partiality and arbitrariness in manual analysis of data.

In Section 7.5, I reproduce a widely circulated argument which contests a recent campaign. This campaign, 'No More Page 3' (NMP3), initiated by Lucy Holmes, asked for the removal of a topless model page from the UK popular tabloid newspaper, *The Sun*. The picture of the topless model featured prominently in this tabloid – on its page 3, hence 'Page 3 Model'. To ascertain accurately prototypical aspects of the campaign standpoint, in Section 7.6 I collect reasons given by signatories to the NMP3 petition on the website Change.org and combine these with the reasons given by the initiators of the campaign. I sift through this corpus of reasons using a corpus linguistic tool. In Section 7.7, I then compare the most frequent concerns/motivations of this counter-discourse with how they are constructed in the argument. On this basis, I not only reveal the argument to be a straw man, but also that much of the argument's coherence unravels relative to the common concerns of the counter-discourse.

7.5. Argument data and description of its major cohesive chains

7.5.1 The Sun and the 'No More Page 3' campaign

The Sun is owned by the billionaire mogul Rupert Murdoch, whose communications empire spans the globe. *The Sun*'s topless model page began in 1970. NMP3 was started in the summer of 2012.[6] In January 2015, the paper version of the *The Sun* suspended 'Page 3'. In the light of the 45-year existence of Page 3 – which was (implicitly) supported by a billionaire global communications mogul with proven political clout – it should be evident that we have the following: a straightforward dichotomy of *The Sun* as socially relatively powerful and NMP3 as socially relatively powerless during its campaign. At the time of the NMP3 campaign, over 2 million copies of *The Sun* were purchased daily,[7] but it was estimated to have a daily readership of more than 5 million.[8]

7.5.2 The argument criticising NMP3

I come to the public sphere argument which contested NMP3 (Figure 7.1). It appeared in another UK daily national newspaper – this time a quality 'broadsheet' – *The Telegraph*, on 18 September 2012. *The Telegraph* has a

The censorious campaign against Page 3 is driven by the oldest and most foul form of snobbery

By Brendan O'Neill

Does Page 3 really condition the **Sun's readers** to hate *women*?

[A]
Is there no end to the feminist nagging about Page 3? Yet another censorious campaign has been launched to try to rid Britain of the alleged scourge that is the Sun's daily serving of boobs. Following Clare Short's efforts in the '80s to have Page 3 branded porn, and the appearance of the blue-pen brigade known as Turn Your Back on Page 3 before the Leveson Inquiry earlier this year, we now have an online petition called "Take the Bare Boobs Out of the Sun".

[B]
It is calling on Dominic Mohan, editor of the Sun, to "stop showing topless pictures of young *women* in Britain's most widely read newspaper", and it is thrilling some broadsheet commentators who are impressed by the fact that, so far, it has been signed by more than 17,000 people. (Though, of course, that's an infinitesimally small number in comparison with the estimated **seven million people who read the Sun every day** and who presumably do not have a problem with its Page 3 pics).

[C]
What is it about Page 3 that so riles <u>campaigners</u> and commentators? Ours is an age in which you can't switch on MTV without seeing a half-naked *woman* whipping her backing singers and where films and TV shows have more nudity and sex in them than ever before, but it is always Page 3 that gets <u>campaigners</u> hot under the collar. It's all because of context. It's because of where Page 3 appears – in the gutter press – and who looks at it: **gutter people**.

[D]
What <u>campaigners</u> find most upsetting about Page 3 is not the photographs themselves – after all, far more revealing pics are available at the click of a mouse these days – but rather the thought of who is looking at those photographs: **Sun readers, gruff blokes, men who *shudder* have jobs that involve physical labour**. **These people** are presumed to be so **ill-educated** so incapable of distinguishing reality from fantasy, that if **they** gawp at Page 3 for long enough **they** will automatically turn into sexist beasts who believe that every *woman* is like Chloe, 21, from Essex: saucy and sexually available.

[E]
Peruse the propaganda of the anti-Page 3 lobby and you will see that <u>they [campaigners]</u> are far more concerned about **male Sun readers' tiny minds** than <u>they [campaigners]</u> are about Page 3 girls' ample bosoms. So the new petition calls on the Sun to "stop conditioning your **readers** to view *women* as sex objects."

[F]
"Conditioning" – what an interesting choice of word. It means the process by which "the behaviour of an organism becomes dependent on an event occurring in its environment". That is how <u>anti-Page 3 campaigners</u> see **Sun readers** – as organisms moulded and remoulded by the all-powerful, mind-controlling editors of the tabloid **they read** over their morning tea.

[G]
Elsewhere, commentators talk about Page 3 as part of a process of "neoliberal social conditioning" that encourages **men** to go over to the "dark side of sexual objectification". Turn Your Back on Page 3 claims there is a link between Page 3 pictures and "the attitudes and behaviours associated with violence towards *women*". Page 3 twists **men**'s minds, it says, "encouraging negative attitudes . . . and at worst, acts of violence". In less pseudo-psychological lingo: monkey see, monkey do. **The sort of people who see Page 3** – whisper it: **Them** – are judged to be incapable of looking at a picture without having the nerve endings in their brains frayed and their attitudes "reconditioned" in a more hateful direction. **They** are looked upon as having minds like putty, as being highly malleable creatures who can be turned Bad through regular exposure to photos of *women* in their knickers.

[H]
But the idea that **Sun readers** are "conditioned" – that is, brainwashed – into hating *women* is as bonkers as the notion that someone who visits a Damien Hirst exhibition will become a depressive obsessed with death and decay or that people who watched The Wire will have developed prejudicial attitudes towards the inhabitants of Baltimore.

[I]
Every day, people consume art and entertainment, some of it provocative and depraved, without having their moral compass warped and their moral outlook completely and dangerously reconditioned. Why do campaigners assume that **Sun readers** are any different? It's because they [campaigners] view **them** as **not very well educated**, as **coarse**, as **having such empty minds** that **they** might easily be filled with all sorts of weird passions and ideas. Behind the radical pretensions of the anti-Page 3 lobby there lurks the same snobbery that motored the campaign to keep Lady Chatterley's Lover banned, only these campaigners don't ask "Would you let your wife read this book?", but rather "Would you let your **husband** – your **gruff, labouring, potentially violent husband** – look at these photos?"

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Figure 7.1 O'Neill's argument annotated for broad cohesive chains.

significantly large print and online readership.[9] The argument was written by Brendan O'Neill. I have alphabetised its paragraphs. I have also annotated salient cohesive chains across the argument. Different annotation styles show different cohesive chains in the argument. I have annotated cohesive chains because:

- it allows me to appreciate systematically how O'Neill repeatedly frames the motivation of the NMP3 campaign;
- after I ascertain NMP3's key concerns and motivations, I show where the argument's cohesive structure omits/occludes categories important to this campaign;
- once these omissions/occlusions are made present, I show where the argument lacks coherence, and thus credibility, relative to the standpoints of NMP3.[10]

I explain the different annotation patterns below. As should be clear, O'Neill's general argument is that the anti-Page 3 campaign patronises the working-class men who read *The Sun*.

7.5.3 Using software to help highlight the cohesive structure of the argument

Once again, I used the corpus tool AntConc (Anthony, 2011) to ascertain the argument's most frequent words (Table 7.1). This helps with tracing salient aspects of the argument's cohesive structure. And, echoing 5.3, tracing major cohesive chains across the text with the assistance of a digital tool is useful since:

- it reduces the prospect that we miss where an argument has framed the standpoint it criticises;
- in augmenting systematic tracing of cohesive chains, it helps ensure the credibility of any subsequent deconstruction.

Table 7.1 shows frequencies for words repeated at least twice. That is to say, these could be words contributing to cohesive structure.[11]

Figure 7.1 annotates three different and frequent lexical/semantic repetitions:

- BOLD: '(*Sun*) readers'; 'people' where this word refers to *Sun* readers; where (*Sun*) readers are described as male working-class adults, including ironic descriptions;
- ITALICS: 'woman/en';
- UNDERLINED: 'campaigners'.

With this broad tracing completed, it becomes easier to see how less frequently repeated lexis and grammar relate to the broader cohesive chains. For example, 'gruff' (x2; [D], [I]) and 'ill-educated' (x2; [D], [I]) are used ironically in relation to O'Neill's construction of *Sun* readers as working-class male adults.[12]

I come now to the NMP3 Change.org petition and my mining of reasons given by signatories for supporting the campaign.

7.6 Corpus analysis of key NMP3 standpoints

7.6.1 The NMP3 petition on www.Change.org

Change.org was launched in 2007 to provide a free petition tool. Its ethos is 'empowering people everywhere to create the change they want to see'. It is allegedly 'the world's largest petition platform'.[13] Change.org provides the

Table 7.1 Frequencies for words repeated at least twice in O'Neill's argument (all data treated as lower case)

Rank	Frequency	Word	Rank	Frequency	Word	Rank	Frequency	Word
1	41	the	25	6	their	49	3	every
2	28	of	26	6	women	50	3	far
3	22	and	27	6	your	51	3	men
4	20	page	28	5	by	52	3	most
5	18	that	29	5	more	53	3	not
6	15	is	30	5	so	54	3	than
7	14	to	31	5	with	55	3	them
8	13	it	32	4	all	56	3	there
9	11	as	33	4	attitudes	57	3	turn
10	11	in	34	4	be	58	3	what
11	11	s	35	4	but	59	3	without
12	11	sun	36	4	having	60	2	available
13	11	who	37	4	minds	61	2	back
14	9	a	38	4	read	62	2	been
15	9	are	39	4	see	63	2	before
16	8	they	40	4	these	64	2	boobs
17	7	at	41	4	will	65	2	britain
18	7	people	42	4	you	66	2	can
19	7	readers	43	3	anti	67	2	censorious
20	6	about	44	3	because	68	2	day
21	6	an	45	3	campaign	69	2	educated
22	6	campaigners	46	3	commentators	70	2	from
23	6	have	47	3	conditioning	71	2	gruff
24	6	on	48	2	do	72	2	gutter

(continued)

Table 7.1 Continued

Rank	Frequency	Word	Rank	Frequency	Word	Rank	Frequency	Word
73	2	has	84	3	over	95	2	some
74	2	husband	85	2	petition	96	2	stop
75	2	incapable	86	2	photographs	97	2	t
76	2	into	87	2	photos	98	2	this
77	2	its	88	2	pics	99	2	towards
78	2	let	89	2	pictures	100	2	view
79	2	like	90	2	process	101	2	violence
80	2	lobby	91	2	rather	102	2	where
81	2	looking	92	2	reconditioned	103	2	which
82	2	monkey	93	2	sex	104	2	woman
83	2	moral	94	2	snobbery	105	2	would

facility for not only setting up a petition or signing a petition, but also for depositing a reason why a signatory supports a petition. The reasons are publicly available.[14] The NMP3 petition was launched on 22 August 2012. O'Neill's argument has a hyperlink to the petition at the end of his paragraph [A].

7.6.2 Lexical lemma frequency analysis of the digital supplement

On 18 November 2012, a short time after O'Neill's article was written – two months – I pulled together all available reasons for signing the NMP3 petition on Change.org into a corpus.[15] This consisted of 1691 reasons totalling 31,564 words. Because I did not go beyond two months after O'Neill's argument was published, I adduce the reasons to be relevant to the time O'Neill was writing. I combined these with the 678 words of reasons for initiating the campaign, given by Lucy Holmes and her colleagues on the NMP3 website, which were available on 18 November 2012.[16] The combined total for all reasons is 32,242 words. The next stage was to use AntConc to generate the most frequent lexical lemmas in the combined corpus (see Table 7.2). To help achieve the most effective 'birds-eye' view on the semantic content of the campaign corpus, I also treated all data as lower case.[17] And since, in trying to access semantic content, it is helpful to have ready access to lexical words without the 'noise' of grammatical words (e.g. 'and', 'in', 'she', 'the'), I filtered out the latter by using a stoplist.[18] This use of a stoplist is not completely necessary, mind – it just makes identification of lexical words in a word frequency list more efficient.

Following lemma generation, I explored how different word forms of lemmas were used in the corpus. Thus the quantitative procedure is followed by a qualitative one. I found three broad reasons for signing the petition.[19]

Sun readers can be young daughters

The first broad reason – one I did not appreciate beforehand – is that *The Sun*, as a family newspaper, naturalises the objectification of women not just for dad, but for his children also. This reason can be seen by accessing the lemmas YOUNG (77 instances), GIRL (62), DAUGHTER (49), GROW (38), CHILD (29), BOY (23), FAMILY (22). So marked is this pattern that if one aggregates all word forms under these lemmas, then it would be the second largest category in Table 7.2. Here is a post exemplifying this pattern:

> I've always found it odd and embarrassing that there should be naked women inside a "family" newspaper. Not nice for daughters to see their dads perving over girls not much older than them.

Table 7.2 Fifty most frequent lexical lemmas for the change.org corpus

Rank	Freq	Lemma	Word form A	Freq	Word form B	Freq	Word form C	Freq	Word form D	Freq
1	418	woman	woman	31	women	387				
2	144	page	page	143	pages	1				
3	117	man	men	117						
4	78	newspaper	newspaper	58	newspapers	20				
5	77	young	young	73	younger	4				
6	70	object	object	10	objects	60				
7	62	girl	girl	12	girls	50				
8	61	sun	sun	61						
9	50	society	society	50						
10	49	daughter	daughter	23	daughters	26				
11	49	place	place	39	places	9	placing	1		
12	48	naked	naked	48						
13	44	sexual	sexual	44						
14	43	people	people	41	peoples	2				
15	41	respect	respect	36	respected	2	respecting	1	respects	2
16	40	news	news	40						
17	40	sex	sex	36	sexes	4				
18	39	time	time	38	times	1				
19	38	body	bodies	20	body	18				
20	38	grow	grew	2	grow	25	growing	11		
21	38	objectification	objectification	38						
22	38	stop	stop	27	stopped	10	stops	1		
23	37	degrade	degrade	2	degraded	1	degrades	10	degrading	24
24	36	paper	paper	27	papers	9				
25	35	feel	feel	31	feels	4				
26	35	picture	picture	7	pictures	28				
27	33	image	image	11	images	22				

28	view	33	view	24	viewing	6	views	3
29	breast	31	breasts	31				
30	female	30	female	23	females	7		
31	child	29	child	7	children	22	treating	4
32	treat	27	treat	9	treated	14		
33	boob	25	boob	2	boobs	23		
34	make	25	made	8	makes	17		
35	sexist	24	sexist	24				
36	boy	23	boy	3	boys	20		
37	think	23	thinking	18	thinks	5		
38	family	22	families	3	family	19		
39	wrong	22	wrong	22				
40	year	22	year	16	years	6		
41	demean	21	demean	1	demeaning	15	demeans	5
42	porn	21	porn	21				
43	thing	21	thing	15	things	6		
44	day	20	day	20				
45	find	20	find	19	finds	1		
46	medium	20	media	20				
47	outdated	20	outdated	20				
48	public	20	public	20				
49	world	20	world	20				
50	male	19	male	17	males	2		

The reference to 'daughters' echoes a number of comments from women reflecting on when they were young and feeling unnerved by the experience of their dad reading Page 3 in front of them, as well as seeing the pictures themselves, at a time when they were sensitive about their growing bodies.

The experience of women

Another broad reason relates to how supporters commonly experience Page 3 as degrading, objectifying and disrespectful to women. Indeed, many supporters giving this reason are female. Here is a fragment from a post exemplifying this pattern:

> I feel Page 3 is very degrading to females. We're not an object to be ogled upon.

This reason for rejecting Page 3 can be found around the use of the lemma WOMAN (418 instances) and FEMALE (30) as well as the lemmas OBJECT (70), RESPECT (41), OBJECTIFICATION (38), DEGRADE (37), and DEMEAN (21). WOMAN is the most frequent lexical lemma. In order to thicken the analysis, it is useful to look at concordance lines for these lemmas and to see the extent to which word forms collocate with one another. Figure 7.2 shows concordance lines for DEGRADE where it is clear that WOMAN is a regular collocate. Marked collocation patterns can be demonstrated for WOMAN/FEMALE and the other lemmas mentioned above.

Incongruity of Page 3 in a newspaper

Another broad reason given for the NMP3 stance is the incongruity between the newspaper status of *The Sun* and the soft porn status of 'Page 3'. This reason can be commonly accessed under the lemma NEWSPAPER (78), e.g:

> If The Sun is a newspaper then print the news. If The Sun is a soft porno, then put it on the top shelf. It's embarrassing that this is still considered acceptable.

Having ascertained frequently recurring concerns of initiators/supporters of the campaign, echoing Derrida's ethics of hospitality, at this stage I accept these reasons unconditionally.

```
1   en's perceptions of women. Degrades women and actually  degrades  men too. I am a daughter, a sister, a cousin, a friend
2   ornographic publications to minors as well. It is also  degrading  for women. It is unnecessary and perpetuates a derogat
3   se page 3 just isn't helpful. Men degrading women also  degrades  men. No-one benefits. People should be treated with mo
4   100% sorry for waffling Its dirty, cheap and            degrading. I am angry at what these images do to adolescent (and
5   news! Normalising female objectification is crass and   degrading. As a country we should be beyond this! The Sun has a
6   . It's 2012. Let's move on. I find it embarrassing and  degrading  women. To me it seems like a man only paper. I cant bu
7   ing page 3 in the paper it is downright disgusting and  degrading  - including the way Clare Short was treated when she b
8   ting these pictures are saying its ok to objectify and  degrade  women?! this is wrong and needs to stop Without a doub
9   both our young boys and girls. It is pornographic and   degrading. It is illegal for women to be publicly topless and al
10  of sexual symbols in the public domain unecessary and   degrading  for women. Stop exploiting women because we must do ev
11  s being published of men. don't like it when women are  degraded- tits arent news Its degrading! Because women are huma
12  he page. Because its patronising, annoying, demeaning,  degrading  and therefore dangerous. And I have daughters who dese
13  ions of themselves, corrupt men, and is just downright  degrading. Because women do not simply exist for men's viewing p
14  hat thinks page3 is a good idea. It's not. Think it is  degrading  for the models and not needed in today's press. It's s
15  ired of being a victim of patriarchy. I'm tired. It is  degrading. It puts pressure on a lot of younger girls whose ambi
16  up to respect women. This demeans everyone. Page 3 is   degrading  women and make men stupid. Because it makes it very di
17  ct it had on women of all ages. basically the paper is  degrading  towards women and should not be kept in family establi
18  g over these days. Because as a straight man I find it  degrading  to both sexes. Woman are more than a pair of boob's to
19  inting a full frontal picture of a male next to it! It  degrades ALL women. Because it's quite sad to realise that this
20  not objectify them Apart from the obvious fact that it  degrades everyone involved, it represents all that is wrong a.
21  t like it when women are degraded- tits arent news Its  degrading! Because women are human beings not objects. This is i
22  have to start somewhere. Because page 3 stuff is just   degrading  to everyone. And 365 women a year who 'choose' to mode
23  . Page three only degrades women and a world with less  degradation of women in the media can only better her and every gr
24  who seem to have an obsession with the images and make  degrading  remarks about them and girls in general. It's sending
25  er. I'm signing because page 3 just isn't helpful. Men  degrading  women also degrades men. No-one benefits. People shoul
26  ttle Goddaughter who deserves respect. Page three only  degrades women and a world with less degradation of women in th
27  ctification of women is offensive and damaging. Page 3  degrades women and girls. On behalf of my daughters and grand-d
28  o eliminate a little more sexism! This kind of picture  degrades women everywhere and, makes us appear as mere sex obje
29  erpool, apology or not, the Sun should be banned. It's  degrading  for most normal people to have to see this, especially
30  ld be on the top shelf, not masquerading as news. It's  degrading  and horrible to women. Archaic. Papers are widely avai
31  in the workplace when this is how they are seen? It's   degrading  to them and suggestive of their availability to men, a
32  xample of the mainstream objectification of women It's  degrading  to us all, and sends the wrong message to e eryone Pag
33  where, better for the baby, better for the mum. x It's  degrading. Because naked women aren't news! Normalising female o
34  ouldn't be in a daily 'family' newspaper. It is sexist, degrading  and repulsive. Sexualisation of women should not be th
35  ism isn't and shouldn't be. So why is it acceptable to  degrade women ?! Very sad. I would like to stop living in a we
36  ld be as unacceptable as racism. I feel Page 3 is very  degrading  to females. We're not an object to be ogled upon. Beca
37  mless fun, but damaging to men's perceptions of women.  Degrades women and actually degrades men too. I am a daughter,
38  m, but easily assessable naked pictures of young women  degrades women as a whole and contributes (I believe) to a negat
```

Figure 7.2 Concordance lines for word forms of the lemma, DEGRADE (plus 'degradation').

7.7 Deepening ethical responsiveness: Evaluating the argument's cohesion and coherence via the NMP3 ethical subjectivity

7.7.1 Orientation

Showing unconditional digital hospitality to NMP3 involves creating an ethical subjectivity rigorously from the broad reasons for supporting the NMP3 campaign. From the perspective of this ethical subjectivity, in 7.7.2 and 7.7.3 I highlight how O'Neill misconstrues the concerns of the campaign. In order then to deepen ethical responsiveness to the NMP3 campaign, I also do the following: evaluate whether or not O'Neill's failure to address key concerns of supporters of NMP3 leads to problems for his argument's cohesion and coherence relative to the counter-discourse. This evaluation is achieved by opening up the way NMP3 is framed in the argument to categories and category differentiations that are important in NMP3 campaigners/supporters' standpoints. This is another appropriation of Derrida's approach to reading – showing how deconstruction takes place by opening up a text to suppressed difference.

7.7.2 Deconstructions

'Sun readers' includes 'young daughter Sun readers'

As we saw in Section 6, campaign supporters have a plural idea of *The Sun* reader, i.e. it can include children – specifically girls and daughters – and thus fathers. These category differences and relations are obscured in O'Neill's argument where he treats Sun readers as male working-class adults. Consider paragraph [D]. Its first sentence is as follows:

> (D)
> What <u>campaigners</u> find most upsetting about Page 3 is not the photo-graphs themselves – after all, far more revealing pics are available at the click of a mouse these days – but rather the thought of who is looking at those photographs: **Sun readers, gruff blokes, men who *shudder* have jobs that involve physical labour** [my bold and underlining].

From 7.6.2, we know one thing that 'campaigners find upsetting' is indeed the 'thought of who is looking at those photographs' – one group of *Sun* readers in particular: *child* Sun readers. Relative to the NMP3 ethical subjectivity, we can say that there is a collocate deficit in 'Sun readers' in [D] – the absence of the collocate 'child' or more specifically 'girl' or 'young daughter'. Just as I did in Part II, I can read the argument through the 'trace' of normal collocation – not this time for how a topic is generally discussed,

but for how a topic is habitually discussed by the standpoint criticised in the argument. In other words, I can read the argument through the 'trace' of normal collocation in the 'big D' counter-discourse. By addressing the collocate deficit through including 'young daughter' within 'Sun readers' – since that is how many supporters of the campaign would see things – paragraph [D] loses coherence (Figure 7.3):

[D]
What <u>campaigners</u> find most upsetting about Page 3 is not the photographs themselves – after all, far more revealing pics are available at the click of a mouse these days – but rather the thought of who is looking at those photographs: (**young daughter**) **Sun readers, gruff blokes, men who *shudder* have jobs that involve physical labour. These people (young daughters)** are presumed to be so **ill-educated** so incapable of distinguishing reality from fantasy, that if **they** gawp at Page 3 for long enough **they** will automatically turn into sexist beasts who believe that every *woman* is like Chloe, 21, from Essex: saucy and sexually available.

Figure 7.3 Coherence problems in paragraph [D] relative to the ethical subjectivity.

Why is this? O'Neill's repeated use of 'ill-educated' ([D], [I]) now jars since, obviously, girls are still being educated at school. And girls are unlikely to have jobs which involve 'physical labour' ([D], [I]), and they are not usually described as 'gruff' ([D], [I]). The byproduct of making up for the collocate deficit in how NMP3 discusses a key concern is that 'young daughter', in effect, has become a collocate surplus in the original category 'Sun readers'. 'Young daughter' is a meaning surplus which unsteadies the argument's sense, indeed, making it say something unintentionally absurd, i.e. that girls reading *The Sun* will turn into 'sexist beasts'. Another way of putting things is to say that relative to a key concern of NMP3, the coherence of paragraph [D] is unstable. Paragraph [I] loses coherence for similar reasons.

Cohesion via understanding of (adult, male) 'Sun readers'

Now I appreciate that many campaigners/supporters would see 'Sun readers' 'who look at those photographs' in paragraph [D] as including 'young daughters', there is another way of viewing ramifications for the argument: a significant cohesive chain involving 'Sun readers' is now destabilised by the collocate surplus of 'young daughter'. This happens because the effectiveness of this cohesion relies on an understanding that 'Sun readers' are *male adults*. Cohesion between [D] and [E] is, for example, destabilised (Figure 7.4):

[D]
What campaigners find most upsetting about Page 3 is not the photographs themselves – after all, far more revealing pics are available at the click of a mouse these days – but rather the thought of who is looking at those photographs: **(young daughter) Sun readers, gruff blokes, men who *shudder* have jobs that involve physical labour**. **These people (young daughters)** are presumed to be so **ill-educated**, so incapable of distinguishing reality from fantasy, that if **they** gawp at Page 3 for long enough **they** will automatically turn into sexist beasts who believe that every *woman* is like Chloe, 21, from Essex: saucy and sexually available.

COHESION DECONSTRUCTED

[E]
Peruse the propaganda of the anti-Page 3 lobby and you will see that they [campaigners] are far more concerned about **(adult) male Sun readers' tiny minds** than they [campaigners] are about Page 3 girls' ample bosoms. So the new petition calls on the Sun to "stop conditioning your **readers** to view *women* as sex objects."

Figure 7.4 Destabilisation of lexical cohesion between paragraphs [D] and [E].

With cohesion destabilised relative to the ethical subjectivity, so too is the argument's coherence. In turn, the rhetorical language of 'gruff blokes, men who *shudder** have jobs that involve physical labour', and thus O'Neill's rhetorical strategy of framing critics of Page 3 as snobbish and patronising, is rendered defective. Lastly, similar deconstructions would ensue from intervening in the text using 'child' or 'boy' instead of 'young daughter'.

Female experience of Page 3

O'Neill uses WOMAN eight times ('woman' x2; 'women' x6). WOMAN has i) sexualised reference: 'topless'[B], 'half-naked'[C], 'saucy and sexually available'[D], 'sex objects'[E], 'knickers'[G]; ii) relates to violence towards women [G]; iii) hatred of women [headline, G, H].

   In my initial reading of the argument, I was unaware of how O'Neill was *not* using the category of WOMAN relative to the key concerns of the NMP3 campaign. Adopting the ethical subjectivity, however, enables me to transform what was a naive/shallow reading relative to the concerns of the Other. Though O'Neill repeats WOMAN, he does not address – whether deliberately or inadvertently – the degrading *female experience* of Page 3. It is a key absence in his argument relative to the ethical subjectivity. This is reflected in the absence of female gender-marking of 'campaigners' (x6). Or put another way, in the category of 'campaigners' – whose repetition provides a salient cohesive chain across the argument – there is a collocate deficit of

'female' relative to the counter-discourse. And O'Neill neglects to see that 'campaigners' subsumes both campaign initiators and the many supporters of the campaign who have made their backing explicit online.

What is the implication for the argument of its failure to address the degrading female experience of Page 3? From the perspective of the ethical subjectivity, [D] loses coherence for another reason. I include 'female campaigners (initiators / online supporters)' within 'campaigners' in [D] as well as inserting something they find generally 'upsetting' (see Figure 7.5). In making up for the collocate deficit around 'campaigners' in respect to the ethical subjectivity, 'female' becomes a collocate surplus in O'Neill's argument which disturbs the coherence of [D]:

(D)
What (female) campaigners (initiators / online supporters) find most upsetting about Page 3 is (that it is degrading, objectifying and disrespectful to women) not the photographs them-selves – after all, far more revealing pics are available at the click of a mouse these days – but rather the thought of who is looking at those photographs: **Sun readers, gruff blokes, men who *shudder* have jobs that involve physical labour**.

Figure 7.5 Coherence problems in paragraph [D] relative to the ethical subjectivity.

O'Neill's construction of campaigners as being upset because of the type of men who read Page 3 is destabilised.

Lastly, [D] could also lose coherence if, instead, we intervened with the third broad reason given in the Change.org corpus that what (female) campaigners generally 'find upsetting' is that the titillation of bare breasts is incongruous in a newspaper.

Inside-outside interventions on the logic of supplementation

On the one hand by opening up the categories of 'Sun readers' and 'campaigners' to the more specific categories 'young daughter Sun readers' and 'female campaigners (initiators / online supporters)' respectively, one might say that I have intervened in the argument from the outside – the outside being the corpus of campaign reasons. And if we intervene in an argument from the outside and alter its lexis, it is hardly surprising if it loses cohesion and thus coherence! Construing what I did *only* as an outside intervention is misleading, however. This is because, relative to the counter-discourse, 'young daughter Sun readers' is included within the category 'Sun readers' and 'female campaigners (initiators / online supporters)' is included within the category 'campaigners'. So, it is not so much that I changed, from the outside, 'Sun readers' into 'young daughter Sun readers', or 'campaigners' into 'female campaigners/online supporters' in the argument. Rather, I

threw into relief i) the category of 'young daughter Sun readers' which was already *inside* 'Sun readers' from the lights of the counter-discourse, and ii) the category of 'female campaigners (initiators / online supporters)' which was already *inside* 'campaigners' from the same. In other words, the categories of 'Sun readers' and 'campaigners' can be said to obfuscate – whether intended or not – the aforementioned specific categories important to the ethical subjectivity. More generally, I have shown, via the logic of supplementation appropriated from Derrida, how an outside supplement disturbs the inside of the public sphere argument it is supplementing.

I say 'supplementing' because there is a weblink right at the end of paragraph [A] to the NMP3 Change.org petition (underlined below):

> [A]
> Is there no end to the feminist nagging about Page 3? Yet another censorious campaign has been launched to try to rid Britain of the alleged scourge that is the Sun's daily serving of boobs. Following Clare Short's efforts in the'80s to have Page 3 branded porn, and the appearance of the blue-pen brigade known as Turn Your Back on Page 3 before the Leveson Inquiry earlier this year, we now have an online petition called "<u>Take the Bare Boobs Out of the Sun</u>".

A weblink is a modern form of footnoting, a piece of supplementary information. Analogous to how Derrida uses footnotes to deconstruct a text's main body, I have in effect demonstrated how mining the content of the weblink 'footnote' in the argument can lead to its deconstruction.

7.7.3 Deconstructing the argument via another weblink ('footnote') supplement

Another place where use of weblinking, in the argument, is a hostage to fortune is in paragraph [G]:

> [G]
> Elsewhere, commentators talk about Page 3 as part of a process of "neo-liberal social conditioning" that encourages men to go over to the "dark side of sexual objectification". Turn Your Back on Page 3 claims there is a link between Page 3 pictures and "<u>the attitudes and behaviours associated with violence towards women</u>". Page 3 twists men's minds, it says, "encouraging negative attitudes . . . and at worst, acts of violence" . . .

The weblink (underlined above) is to a document co-authored by two campaign groups related to NMP3. These groups are called 'Turn Your Back on Page 3' (TYBOP3) and 'Object'.[20] The document is a submission

Table 7.3 Fifty most frequent lexical lemmas for the TYBOP3 and Object submission to the Leveson Inquiry

Rank	Freq	Lemma	Word form A	Freq	Word form B	Freq	Word form C	Freq	Word form D	Freq
1	136	woman	woman	10	women	126				
2	43	sex	sex	43						
3	41	analysis	analyses	1	analysis	40				
4	40	page	page	36	pages	4				
5	39	sexual	sexual	39						
6	36	girl	girl	6	girls	30				
7	34	press	press	34						
8	30	violence	violence							
9	26	object	object	14	objects	12				
10	25	objectification	objectification	25						
11	25	UK	UK	25						
12	24	image	image	9	images	15				
13	22	newspaper	newspaper	9	newspapers	13				
14	22	sexualised	sexualised	22						
15	18	attitude	attitudes	18						
16	18	include	include	7	included	4	includes	2	including	5
17	18	sexualisation	sexualisation	18						
18	18	tabloid	tabloid	9	tabloids	9				
19	17	article	article	16	articles	1				
20	17	discrimination	discrimination	17						
21	17	medium	media	17						
22	17	young	young	17						
23	16	November	November							
24	16	relation	relation	14	relations	2				
25	15	man	men	15						
26	15	submission	submission	15						
27	14	body	bodies	1	body	13				

Table 7.3 Continued

Rank	Freq	Lemma	Word form A	Freq	Word form B	Freq	Word form C	Freq	Word form D	Freq
28	14	pornography	pornography	14						
29	14	print	print	5	printed	9				
30	14	story	stories	3	story	11				
31	14	sun	sun	14						
32	13	daily	daily	13						
33	13	photograph	photograph	5	photographed	5	photographs	3		
34	13	regulation	regulation	13						
35	13	star	star	11	stars	2				
36	12	culture	culture	12						
37	12	hyper	hyper	12						
38	12	sexually	sexually	12						
39	12	sport	sport	11	sports	1				
40	11	basis	basis	11						
41	11	breast	breasted	1	breasts	10				
42	11	equality	equality	11						
43	11	front	front	11						
44	10	age	age	10						
45	10	evidence	evidence	10						
46	10	female	female	9	females	1				
47	10	male	male	8	males	2				
48	10	news	news	10						
49	9	advert	advert	3	adverts	6				
50	9	babe	babe	1	babes	8				

to the Leveson Inquiry in 2011–2012, a judicial public inquiry into the culture, practices and ethics of the British press. (O'Neill refers to the Leveson Inquiry in paragraph [A]). The submission (6, 241 words) provides detailed evidence of the sexual objectification of women in the UK tabloid press. I used AntConc to generate lemmas from the document. These are shown in Table 7.3. Among the most frequent lemmas is GIRL (x30). Many of these instances form part of an appraisal that sexualisation of women in a number of UK tabloids has harmful effects on girls, i.e. since UK tabloids are family newspapers, they are read by girls. Here is one example from page 21 of the document:

> Constant monitoring of appearance – studies show that women and girls face intense pressure to maintain exacting 'beauty' standards. This often results in Body Dismorphic Disorder and appearance anxiety and is affecting women and girls at an increasingly young age.

In conclusion, the content of the joint submission to Leveson chimes with a frequent reason supplied on the NMP3 Change.org petition for opposing Page 3 – which we saw leads to the argument's destabilisation. In other words, the content of this weblink in O'Neill's argument subverts the very argument he is making![21]

7.7.4 Explanation of the normalising of non-gender marking of 'campaigners'

In this last sub-section of Section 7.7, I explain how the cohesion between 'campaigners' and 'commentators' subtly helps to normalise the non-gender marking of 'campaigners' – whether this is intended or not. Repetition of 'commentators' (bold) and 'campaigners' (underlined) across [B], [C] and [D] is flagged in Figure 7.6.

'Thrilling some broadsheet commentators' in [B] is hyperlinked in O'Neill's argument to a blog published on 17 September 2012 in another UK newspaper, *The Guardian*. In this blog, the journalist Roy Greenslade highlights how the NMP3 campaign was increasingly gathering support.[22] O'Neill does not mention that this broadsheet 'commentator' is male – why would he? The gender-neutrality of 'commentators' here is completely expected. However, the gender-neutral 'commentators' returns, in paragraph [C], in a phrase which *includes* 'campaigners', i.e. the expression 'campaigners and commentators'. By association, the gender-neutrality of 'campaigners' in this phrase is conditioned as normal. This helps reduce the prospect that subsequent sole use of the gender-neutral 'campaigners' in [C], and again in [D], looks out of place.

[B]
It is calling on Dominic Mohan, editor of the Sun, to "stop showing topless pictures of young women in Britain's most widely read newspaper", and it is thrilling some broadsheet **commentators** who are impressed by the fact that, so far, it has been signed by more than 17,000 people . . .

[C]
What is it about Page 3 that so riles campaigners and **commentators**? Ours is an age in which you can't switch on MTV without seeing a half-naked woman whipping her backing singers and where films and TV shows have more nudity and sex in them than ever before, but it is always Page 3 that gets campaigners hot under the collar. It's all because of context. It's because of where Page 3 appears – in the gutter press – and who looks at it: gutter people.

[D]
What campaigners find most upsetting about Page 3 is not the photographs themselves – after all, far more revealing pics are available at the click of a mouse these days – but rather the thought of who is looking at those photographs: Sun readers, gruff blokes, men who *shudder* have jobs that involve physical labour.

Figure 7.6 Repetition of 'campaigners' and 'commentators' in O'Neill's argument.

7.8 Conclusion

I have highlighted the incoherence of a public sphere argument relative to an ethical subjectivity. O'Neill's argument turned out to be a straw man. Specifically, it is a 'hollow man' (2.3.4); the standpoint O'Neill describes is a fabrication. More generally, I have shown again how the impression of stability in an argument's coherence can be dependent on meanings which are relevant absences – whether these are deliberately excluded or not. I have demonstrated once more that substantial parts of an argument's cohesive structure can fall apart because of one surplus meaning (or deficit meaning) which, in turn, can lead to unintended understandings of the text. Deconstruction derives this time from:

• focusing on relatively frequent categories in a public sphere argument which are used to describe the standpoint of the socially/economically relatively powerless being criticised;
• opening these argument categories out to key categories, and key category differentiations, used by or relevant to the relatively powerless when it discusses its standpoint.

Conversely, I argued that the categories of 'Sun readers' and 'campaigners' can be said to obfuscate – whether intended or not – the more specific categories important to the ethical subjectivity, i.e. 'young daughter Sun readers' and 'female campaigners/online supporters'. In establishing how a

public sphere argument can be subverted via use of a web-based supplement, I was able to deepen my ethical responsiveness to a relatively powerless Other.

Notes

1 The following corpus-based CDA studies of media representations of the relatively powerless – asylum seekers / refugees and Muslims respectively – are notable: Baker *et al.* (2008) and Baker *et al.* (2013).

2 Emmanuel Levinas (1906–1995) was born in Lithuania. He grew up a religious Jew, retaining this outlook to his death. He became a naturalised French citizen in 1931. He studied under the philosophers, Edmund Husserl and Martin Heidegger. As a young man, he came to idolise Heidegger so it came as an enormous blow, given Levinas' religious outlook, when Heidegger aligned with the Nazi party in the early 1930s, thus endorsing – whatever his private thoughts – its anti-Semitism. In part, Levinas' ethics derives from his rejection of Heidegger's philosophical outlook. The way Levinas saw it, Heidegger's philosophy must be fundamentally flawed if he was able to make the appalling calculation that he did – one which Levinas never forgave him for. It becomes easier to understand Levinas' perspective once we realise that several members of his family were murdered during the war for being Jews. He himself survived the war in a prisoner-of-war camp – four years of hard labour, hunger and cold. Levinas' ethics is not something dreamed up in an ivory tower. It derives from personal suffering and traumatic rejection of Heidegger, as much as his philosophical imagination and religious orientation.

3 For Levinas, had Heidegger appreciated that ethics precedes ontology, he could not have made the catastrophic error that he did. Put another way, for Levinas, there were insufficient ethical resources in Heidegger's ontologically based philosophy.

4 NB differentiation in the production of 'little d' discourse is not the same as *différance*. The former is a discursive action by human agents; the latter is what Derrida alleges to be the natural state of affairs of signification irrespective of human agency.

5 Available at http://www.britannica.com/EBchecked/topic/194023/ethics [accessed July 2016].

6 See https://en.wikipedia.org/wiki/No_More_Page_3 [accessed July 2016].

7 Available at http://www.pressgazette.co.uk/july abcs-most-national-newspapers-see-month-month-circulation-boost-royal-baby-month [accessed July 2016].

8 Available at https://media.info/newspapers/titles/the-sun/readership-figures [accessed October 2014].

9 In September 2013, *The Telegraph* website (www.telegraph.co.uk) had 7.41 million readers. Available at http://www.journalism.co.uk/news/telegraph-most-read-uk-newspaper-website-in-september/s2/a555230/ [accessed July 2016].

10 The unannotated version of the argument with its hyperlinks can be found at: http://blogs.telegraph.co.uk/news/brendanoneill2/100181517/the-censorious-campaign-against-page-3-is-driven-by-the-oldest-and-most-foul-form-of-snobbery/ [accessed July 2016].

11 The argument was short enough for me to identify semantic field cohesive patterns around the words in Table 7.1 without the help of WMatrix's semantic tagging function.

12 The repetition of 'page' or 'sun' (Table 7.1) is hardly surprising since *The Sun*'s Page 3 is what the argument is fixing on. For this reason, I do not trace repetition

of 'page' in O'Neill's text. However, where 'Sun' collocates with 'reader' in the argument, this is annotated in Figure 7.1.

13 Available at http://www.change.org/en-GB/about [accessed July 2016].

14 Only registered petition signatories can provide user-generated content on change.org, thus reducing the prospect of trolling or lack of seriousness.

15 I cleaned irrelevant material such as dates of posting and names / locations of campaign supporters.

16 These reasons could be found at http://nomorepage3.org/faqs/ [accessed November 2012].

17 I used a lemma list from Lawrence Anthony's website, available at http://www.antlab.sci.waseda.ac.jp/antconc_index.html [accessed July 2016].

18 A stoplist is a list of words automatically omitted from a computer-generated word frequency list. Many are available free online, e.g. https://cup.sketchen-gine.co.uk/stopwords/english/ [accessed July 2016]. There is no definitive stoplist since its make-up will depend on the purposes of the user. I created my own stoplist of English grammatical words (articles, auxiliary verbs, conjunctions, determiners, modal verbs, prepositions, pronouns). NB I did not use a stoplist of grammatical words when I calculated word frequencies for the argument because grammatical words are important for the argument's cohesion as well as lexical words.

19 The 'No More Page 3' website also explicitly commented on reasons supporters gave for signing the petition. This information could be found at http://nomorepage3.org/news/parents-views-on-page-3/ [accessed October 2014]. In other words, the reasons were not seen as outside the sphere of the campaign.

20 Despite 'Page 3' being signalled in its name, TYBOP3 campaigns against sexualisation of women not just in *The Sun* but in other UK tabloids as well. In existence for over 40 years, 'Page 3' is so infamous that TYBOP3 is able to use it as a metonym for this type of sexualisation.

21 It is possible that it was a sub-editor, and not the author, who included the weblink.

22 Available at http://www.theguardian.com/media/greenslade/2012/sep/17/sun-women [accessed July 2016].

Chapter 8

Ethical subjectivity generated with keywords

8.1 Introduction

In Chapter 8, I develop the second analytical strand in three ways:

- I show how an ethical subjectivity can be constructed via keywords instead of lemmas.
- I highlight how a different type of digital supplement can be used for revealing where a public sphere argument unravels – the discussion forum underneath an online argument.
- I develop appreciation of the extent to which an argument's cohesive structure can be deconstructed because of collocation deficit. I do this by showing, in more detail than up till now, how deconstruction of local (micro) cohesive chains can have significant impact on global (macro) cohesive chains in a public sphere argument.

The topic of the public sphere argument I examine is the 'new atheism' associated with intellectuals such as Richard Dawkins and Daniel Dennett. The argument explicitly attacks the standpoint of 'new atheism'. I shall indicate why I view 'new atheism' as a relatively powerless standpoint. Lastly, as with previous chapters in Parts II and III, the appropriations from Derrida apply. I keep mention of these to a bare minimum now in the interests of avoiding unnecessary repetition.

8.2 Online comments in a discussion forum as a digital supplement

8.2.1 Orientation

In the last few years, one technological innovation of the World Wide Web has been the appending of electronic discussion forums to online texts. The facility allows readers to post responses to a text and to debate issues raised in it. Discussion forums are particularly salient in online newspapers, and especially following argumentative texts such as editorials and opinion

pieces. The innovation of discussion forums which succeed online arguments is a convenient source for a potentially useful form of comparison: seeing the degree to which the arguer responds to representations of the standpoint of the criticised found in the forum. The greater the volume of posts, the greater the chance that the forum will contain contributions which are knowledgeable about the standpoint of the criticised (SotC hereafter), and thus describe it accurately, because i) posters empathise with SotC; ii) posters are knowledgeable about SotC even if they disagree with it. In turn, should the preceding argument not respond to accurate SotC representations, the greater the chance the analyst is alerted to this via the comparison. Such a comparison is particularly useful for a reader who does not know the standpoint being criticised in the argument so well (and is thus showing open hospitality to the Other).

In line with the logic of supplementation, an online discussion forum appended to an argument is, potentially, an inside/outside supplement to the argument if it can alert the reader to deficiencies within its representation of SotC. Adding to replace these deficiencies in the argument – just as I highlighted in Chapter 7 – can lead to the argument's cohesion and coherence deconstructing with reduction in credibility. I should say also that it is important that the analyst seek corroboration of the representations of SotC found in the forum supplement. The advantage of digitally mining the content of a discussion forum is that it enables potentially the detecting of a *conveniently* illuminated discrepancy between SotC representation in the forum and argument. If such a discrepancy has been found, it would then be worth going to the trouble to check with another source to see whether or not the SotC representations mostly used in the forum are accurate.

8.2.2 Why is keyword analysis of a discussion forum useful?

The argument deconstruction of this chapter uses *keyword* analysis to create an ethical subjectivity. The reader will recall from Chapter 4 that a keyword is a word which occurs '. . . with unusual frequency in a given text . . . by comparison with a reference corpus' (Scott 1997: 236). Keywords are established through statistical measures such as log likelihood (see Dunning, 1993). Importantly, the log likelihood value, as a statistical measure, reduces arbitrariness in what is selected as salient. I must emphasise that keyword analysis should not only be quantitative – keywords also need to be qualitatively explored in the texts of a discussion forum to understand their usage.[1]

Keyword analysis of the discussion forum following an online argument can help establish concepts which are habitually used in SotC. Focusing on the highest keywords returns the critical mass of concepts in the forum, making it likely we avoid capturing interpersonal aspects of communication, which are not relevant to the SotC, e.g. abuse, silliness. If the analyst

finds that keywords in the discussion forum are absent from or marginal in the argument, then they could be 'on to something' – it may be that the argument does not discuss SotC accurately. From such a conveniently ascertained discrepancy, it would now be worth going to the effort to seek confirmation that the keyword analysis does indeed reflect normal SotC representations. That way, a robust ethical subjectivity can be created. To be clear, this strategy does not naively assume there will be a homogeneous set of opinions on a topic. It does, however, make the reasonable assumption that there will be conceptual norms for how the criticised represents its standpoint whether people agree or disagree with that standpoint.

8.3 The anti-'new atheism' argument and analysis of its cohesion

8.3.1 Atheism as socially relatively powerless

The public sphere argument that I focus on is entitled 'The New Atheism'. It appeared in the UK based newspaper *The Guardian*, on 30 December 2007. Its author, Brendan O'Neill, uses the expression 'the new atheism' to capture the ethos of a number of books published in 2006 and 2007 which set out atheistic positions: Dawkins (2006), Dennett (2006), Harris (2006), Hitchens (2007). I see atheism as socially relatively powerless as compared with organised religion. From a UK context, this may, at first glance, seem a somewhat odd claim. For example, it is not as if atheists are barred from high office – Nick Clegg, the former deputy prime-minister (2010–2015), is openly atheist. However, the existence of an established church – 'The Church of England' – means there is systemic privilege for Christianity in the UK. For example, the Church of England (C of E) is granted privileged access to the UK Parliament. The 26 most senior C of E Bishops are automatically granted membership in the upper chamber of Parliament ('The House of Lords') – where they have the right to speak and vote on all legislation. It is also worth noting that 34 per cent of state-funded schools in England, 14 per cent in Scotland, 15 per cent in Wales and 94 per cent in Northern Ireland are designated with a religious character. Except for those in Scotland, these schools have been allowed to discriminate against students in their admission policies, favouring those of the faith over those of other faiths and of no faith, or even favouring those of other faiths over those of no faith. In December 2013 the Fair Admissions Campaign flagged this issue and established that 16 per cent of state-funded places in England and Wales, or 1.2 million, were subject to such admissions policies.[2]

An argument criticising 'new atheism' in a UK newspaper is, thus, taking place against this background. Yet the online version of *The Guardian* has a global readership. In April 2013, for instance, there were 81 million online visits; only a third of these were from the UK.[3] It is straightforward to show

that systemic privileging of religion is marked in many parts of the world, including liberal nations such as the USA:

> Being identified as an atheist in the United States today is still such a major political liability that a candidate holding this position probably could not gain a major party's nomination for president or even the Senate.
>
> (Smith, 2015)

Worse, the death penalty for atheism, apostasy or blasphemy is possible in several countries.[4] Misrepresentation of atheism in a popular global communication platform, whether the atheism is 'old' or 'new', has the potential to contribute to the sustaining of a planetary status quo which systemically privileges religion.

8.3.2 The argument: 'The New Atheism'

O'Neill's argument totals 926 words and consists of 10 paragraphs and 42 sentences. It is laid out below in accordance with its original paragraph structure (indicated with capital letters); I have numbered all the sentences. Though it is a relatively long piece of data, the reader will see that it is important to include the entire argument. This is because there is instability *across* its cohesive structure, as I will show.

1. [headline] The New Atheism
2. [sub-headline] There is more humanity in the 'superhuman' delusions of the devout than there is in the realism of the hectoring atheists
(A)
3. "New atheism" was the surprise political hit of 2007.
4. God-bashing books by Hitchens, Dawkins and other thinkers who come out in a rash when they hear the word "religion" flew out of the bookshops.
5. Philip Pullman's anti-divine Golden Compass hit the big screen.
6. Everywhere, God was exposed as a fraud and God botherers were given an intellectual lashing.
(B)
7. I am as atheistic as it gets.
8. But I will not be signing up to this shrill hectoring of the religious.
9. The new atheists have given atheism a bad name.
10. History's greatest atheists, or the "old atheists" as we are now forced to call them, were humanistic and progressive, critical of religion because it expressed man's sense of higher moral purpose in a deeply flawed fashion.

11. The new atheists are screechy and intolerant; they see religion merely as an expression of mass ignorance and delusion.

12. Their aim seems to be, not only to bring God crashing back down to earth, but also to downgrade mankind itself.

(C)

13. There's something bitterly ironic in the fact that the new atheists pose as the successors to Darwin.

14. Darwin himself had little interest in baiting the devout.

15. In the early 1880s, he was asked by the radical atheist Edward Aveling to endorse a new book on evolutionary theory.

16. Darwin, caring little for Aveling's "anti-religious militancy", refused. He wrote to Aveling: "It appears to me . . . that direct arguments against Christianity and theism produce hardly any effect on the public; and freedom of thought is best promoted by the gradual illumination of men's minds which follows from the advance of science. It has, therefore, been always my object to avoid writing on religion . . .".

(D)

17. Marx, too, believed that direct assaults on religion were pointless.

18. He argued that religion existed as spiritual compensation for social alienation, and believed that once the true nature of religion as a comfort blanket in an alienated society had been revealed, it would become clear that religion is merely a secondary phenomenon dependent for its existence on socioeconomic circumstances.

19. Radical critics should focus their intellectual ire on the degraded society that sustains religion rather than on attacking religion itself: "The criticism of heaven turns into the criticism of earth, the criticism of religion into the criticism of law, and the criticism of theology into the criticism of politics."

(E)

20. Old atheists sought to "illuminate men's minds", through advancing science or deepening our understanding of capitalist society.

21. New atheists take exactly the opposite approach.

22. They expend all of their energy on attacking the institution of religion and its ridiculous adherents.

(F)

23. Consider their bizarre and fevered obsession with religious symbols, such as crucifixes worn around the neck, or statements of religious belief by public figures like Tony Blair or Nick Clegg: their distaste for anything that looks or sounds vaguely religious exposes the shallow anti-intellectualism of their new atheism.

24. Their opposition to religion is not driven by a profound or radical vision, as was Darwin's and Marx's, but rather by a dinner-party disdain and moral revulsion for the stupidity of the religious.

25. Where old atheism was driven by a passionate belief in progress, new atheism springs from today's crisis of secularism.

26. It is because new atheists have lost their own belief in progress and Enlightenment that they turn harshly against those who still cling to visions of a better society or "kingdom".

(G)

27. The inhumanity of the new atheism is best illustrated by its move from the world of social critique into the realm of sociobiology.

28. Some new atheists believe humans must be genetically predisposed to believing in a higher being.

29. Marx and others saw religion as the product of socioeconomic circumstances, and thus believed that religion would wither away as humanity proceeded along the path of progress.

30. New atheists see religious belief as a kind of animalistic instinct, driven by DNA.

31. Where Marx viewed people's turn towards religion as an understandable response to the harsh reality of alienation in capitalist society, new atheists see it as the product of mankind's twisted genetic makeup.

(H)

32. So what is their solution?

33. Mass genetic therapy?

34. Compulsory injections of the correct DNA – you know, the kind possessed by intelligent and well-bred people who can see through religious delusion?

35. The new atheists' abandonment of a social outlook leads them to adopt some very grim, anti-human views.

(I)

36. The key difference between the old and new atheism is in their views of mankind.

37. For atheists like Marx, religion expressed, in a backward and limited form, human aspirations to greatness: "Man . . . looked for a superhuman being in the fantastic reality of heaven and found nothing there but the reflection of himself."

38. He continued: "The criticism of religion ends with the teaching that man is the highest being for man, hence with the categorical imperative to overthrow all relations in which man is a debased, enslaved, forsaken, despicable being . . ."

39. Today, Hitchens says of religion's destructive impact: "What else was to be expected of something that was produced by the close cousins of chimpanzees?"

40. For Marx, religion had to be abolished because it made man despicable; for new atheists religion exists precisely because man is despicable, little more than a monkey.

(J)
41. New atheists will continue to ridicule the religious in 2008.
42. But there is more humanity in the "superhuman" delusions of the devout – in their yearning for a sense of purpose and greatness – than there is in the monkeyman realism of the hectoring atheists.

(© Guardian News & Media Ltd, 2007)

Using the text mining software, WMatrix (see Chapter 6), I generated a frequency list of words repeated at least twice in the argument (see Appendix 8.1). The most frequent lexical word is 'religion' (21 instances). Once again, knowledge of repeated words is needed because i) it facilitates systematic description of major cohesive chains across the argument which, in turn, enables us to appreciate rigorously how the argument frames the stand-point it is attacking and ii) I will compare unusually common concepts in the discussion forum supplement with their frequency in the argument. I could have used a number of different text mining tools to generate word frequencies. I employ WMatrix because I also use it to generate keywords from the online forum appended to O'Neill's argument. This will help illuminate if O'Neill responds to how 'new atheists' usually describe their standpoint.

8.4 Digital analysis of the discussion forum supplement

8.4.1 Keywords

The planetary reach of the online version of *The Guardian* – *www. theguardian.com* – is useful for my purposes since, for global phenomena such as 'new atheism', the responses in a discussion forum are likely to be less nationally parochial than they may otherwise be. In the discussion forum appended to the argument, there are 365 individual posts. The word count for the combined posts is 69, 252.[5]

I generate keywords with WMatrix from a corpus of these discussion forum posts.[6] In order to make my examination manageable, I use the keyword cloud function of WMatrix which shows only the 100 highest keywords (Figure 8.1). Again, in WMatrix a log likelihood value of ≥ 7 ($p < 0.01$) confers keyness on a word (6.2.2). The larger the log likelihood value, the greater the salience of the keyword. See also Appendix 8.2 for log likelihood values for these keywords as well as their frequencies.

8.4.2 Keywords 'faith' and 'belief'

Figure 8.1 shows that 'faith' is a significant keyword in the forum. However, it is absent from the argument. Overwhelmingly, O'Neill represents 'new

Figure 8.1 Keyword cloud showing the 100 highest keywords in the discussion forum; keywords with higher log likelihood values are in larger font size; generated using WMatrix (Rayson, 2009).

atheism' as being critical of the general category *religion* [4, 11, 22, 24, 31, 39, 40]. As I flagged earlier, 'religion' is the most frequently used lexical word (21 instances).

The semantically close, 'belief', is also a significant keyword in the forum as are its cognates, 'beliefs', 'believe' and 'believers' (see Figure 8.1). Yet, 'religious belief' only occurs twice in the argument [23, 30]. I should stress that quantitative comparison is not enough. It is important to understand qualitatively how these keywords are used in the forum. When I inspected the forum qualitatively, I found that 'faith' and 'belief' are used mostly in a way equivalent to religious belief. Generally speaking, whether or not posters are agreeing or disagreeing with 'new atheism', are religious or non-religious (as far as one can tell in some cases), predominantly they ascribe to it the following: *either* the view that faith/belief in a supernatural power is irrational in the absence of scientific evidence *or* that scientific evidence is irrelevant to faith/belief in a supernatural power. Here are some examples of posters who agree with 'new atheism' (keywords bolded):

> Post 102 In context, this "**new atheism**" is entirely understandable . . . 9/11/01 was a **faith** based initiative . . . We [the US] have a sustained undermining of **science**, both in teaching—as creation mythology / "intelligent design theory" is pushed in schools—and in research—as there is tremendous opposition to stem-cell research based on profound misunderstanding . . .

> Post 150 **Richard Dawkins** pointing out the difference between evidence-based **argument** and **belief** systems based on **faith** does not strike me as being **hectoring** or **shrill** . . .

8.4.3 Qualitative corroboration

A significant value of the relatively new technology of online discussion forum supplementation is that we do not have to travel very far from the argument to get, potentially, an insightful 'outside' angle on it. Digital mining of the discussion forum supplement enables a convenient, relatively speedy and possibly illuminating *quantitative* perspective on how an argument represents SotC. However, we cannot automatically assume that keyword evidence for SotC representation, from even a large forum, is *qualitatively* correct about SotC – particularly where the identity of posters may be unclear. Should a quantitative conceptual disjuncture be (conveniently) found between the argument and discussion forum, the following would then be worth the effort: exploring whether or not it can be qualitatively confirmed that the discussion forum does indeed reflect how the criticised normally represents its standpoint.

Out of a number of potential sources that I found, in the end I chose the following by Taylor (2010) – a definition of 'new atheism' from *The Internet Encyclopedia of Philosophy* (I.E.P), 'a peer-reviewed academic resource'.[7] Let me quote part of the opening summary, which gives a good idea of the central foci of 'new atheism':

> New Atheists tend to share a general set of assumptions and viewpoints . . . The framework has a metaphysical component, an epistemological component, and an ethical component. Regarding the *metaphysical component*, the New Atheist authors share the central belief that there is no supernatural or divine reality of any kind. The *epistemological component* is their common claim that **religious belief** is irrational. The *moral component* is the assumption that there is a universal and objective secular moral standard . . . [I]t is used to conclude that religion is bad in various ways . . .
>
> The New Atheists make substantial use of the natural sciences in both their criticisms of **theistic belief** and in their proposed explanations of its origin and evolution . . . They believe empirical science is the only (or at least the best) basis for genuine knowledge of the world, and they insist that a **belief** can be epistemically justified only if it is based on adequate evidence. Their conclusion is that science fails to show that there is a God and even supports the claim that such a being probably does not exist. What science will show about **religious belief**, they claim, is that this **belief** can be explained as a product of biological evolution. Moreover, they think that it is possible to live a satisfying non-religious life on the basis of secular morals and scientific discoveries [my bold].

As reflected in the first two components (metaphysical and epistemological), and also in the importance placed on science, the critical thrust of 'new

atheism' is that *religious belief* is irrational given the lack of scientific evidence for the existence of a supernatural being.[8]

I have solid qualitative corroboration that the discussion forum keywords '(religious) belief' / 'faith' are part of the normal 'big D' discourse of 'new atheists'. In other words, O'Neill does not respond to how 'new atheism' normally describes its standpoint when he characterises it via the more general category of 'religion'. In Section 8.5, I replace the deficiency of normal representation of 'new atheism' in O'Neill's argument, and then explore the effects on its cohesive structure. In doing this, in effect I adopt a standpoint subjectivity – the discursive position of a 'new atheist'. Since, as I have argued, this is a relatively powerless position as compared with global systemic privileging of religion, this standpoint subjectivity is thus also an ethical subjectivity.

8.5 Evaluating the cohesion and coherence of paragraph [B] relative to the ethical subjectivity

8.5.1 'Old atheism' as critical of the institution of religion

O'Neill structures his entire argument through a binary opposition: 'old atheism' = POSITIVE and 'new atheism' = NEGATIVE. When O'Neill refers to the 'old atheists' – Darwin and Marx – he brings in quotations which show that the emphasis of their antipathy is to the *institution of religion*. This can be seen in the quotation from Darwin that O'Neill brings into [16] where Christianity is mentioned. Immediately afterwards in [17], O'Neill says that Marx believed that 'direct assaults on religion were pointless' [17], and so we understand 'religion' here to mean a religion such as Christianity. Antipathy to the institution of religion is also evident in [10] and [19] where religious values are alluded to, and in [38] and [40] respectively where O'Neill refers to Marx's wish to 'overthrow' the social relations of religion and that religion be 'abolished'. Reflecting its critique of the institution of religion (or perhaps what O'Neill chooses to emphasise), when he characterises 'old atheism' O'Neill always uses the category 'religion' rather than 'religious belief' [10, 16, 17, 18, 19, 24, 29, 31, 37, 38, 40].

In contrast, as we have seen, the standpoint of 'new atheism' is that *religious belief* is irrational given the lack of scientific evidence for the existence of a supernatural being. In other words, 'new atheists'' primary target is not the institution of religion, but the delusion of religious believers. It is this tension which, as I show, leads to instability in the cohesive structure of O'Neill's argument.

8.5.2 Cohesion between sentences 10 and 11

The binary opposition, 'old atheism' = POSITIVE and 'new atheism' = NEGATIVE, first appears in paragraph [B]. This paragraph is a summary of the argument:

[B]

    7. I am as atheistic as it gets.

    8. But I will not be signing up to this shrill hectoring of the religious.

    9. The new atheists have given atheism a bad name.

    [NEW ATHEISM = *NEGATIVE*]

    10. History's greatest atheists, or the 'old atheists' as we are now forced to call them, were humanistic and progressive, critical of religion because it expressed man's sense of higher moral purpose in a deeply flawed fashion.

    [OLD ATHEISM = *POSITIVE*]

    11. The new atheists are screechy and intolerant; they see religion merely as an expression of mass ignorance and delusion.

    12. Their [new atheists] aim seems to be, not only to bring God crashing back down to earth, but also to downgrade mankind itself.

    [NEW ATHEISM = *NEGATIVE*]

In sentence 11, O'Neill represents 'new atheism' as viewing 'religion merely as an expression of mass ignorance and delusion'. Given the results detailed in Section 8.4, this representation of the SotC can be said to be deficient. Let me now explore the effects on cohesive structure of addressing this deficiency of 'religious belief'. I replace 'religion' with 'religious belief' in sentence 11 (I could have used 'faith' instead), crossing out 'religion':

    11. The new atheists are screechy and intolerant; they see ~~religion~~ **religious belief** merely as an expression of mass ignorance and delusion.

Sentences [8, 9, 11 and 12] refer to 'new atheism'; 'old atheism' is first mentioned in [10]. Sentences [10] and [11, 12] originally link through the same general category, 'religion'. But following my intervention, there is no longer linkage between [10] and [11] via the common category of 'religion'. In other words, like is no longer being contrasted with like. This has adverse effects on the binary opposition structure in paragraph [B] of 'old atheism' = POSITIVE / 'new atheism' = NEGATIVE – it unravels (Figure 8.2).

    Put another way, the intervention highlights that the original cohesive structure of [B] is unstable relative to the ethical subjectivity, to normal standpoint representation by 'new atheists'. And if the cohesive structure of [B] is unstable, so too is its coherence. Note that I did not also alter 'religion' in sentence 10 because O'Neill is describing '*old atheism*' there rather than 'new atheism'.

▲ **[OLD ATHEISM=_POSITIVE_]**

[B]
10. History's greatest atheists, or the "old atheists" as we are now forced to call them, were humanistic and progressive, critical of **religion** because it expressed man's sense of higher moral purpose in a deeply flawed fashion.

DECONSTRUCTION OF   *COHESION*
BINARY OPPOSITION   *DECONSTRUCTED*

11. The new atheists are screechy and intolerant; they see religion **religious belief** merely as an expression of mass ignorance and delusion.

12. Their [new atheists] aim seems to be, not only to bring God crashing back down to earth, but also to downgrade mankind itself.
▼ **[NEW ATHEISM = _NEGATIVE_]**

Figure 8.2 Deconstruction 1 relative to the ethical subjectivity.

8.5.3 Inside-outside interventions via an ethical subjectivity

Echoing 7.7.2, by replacing 'religion' with 'religious belief', it might look as if I have intervened in the argument from the outside only – the outside being the supplements of the discussion forum / Taylor (2010). Construing what I did only as an outside intervention is misleading, however. This is because the category of 'religious belief' is, from a 'new atheist' perspective, the key category *inside* 'religion'. It is just that O'Neill's use of the general category of 'religion' obfuscates this. (It may even be a deliberate suppression). I needed to go *outside* the argument to appreciate this properly. So, while from one viewpoint I changed, from the outside, 'religion' into 'religious belief' from another viewpoint, I did the following: by taking on the perspective of a 'new atheist', I threw into relief the category of 'religious belief' which is semantically subsumed within 'religion', i.e. digging out from *inside* 'religion' the more specific category which is key to the 'new atheist' perspective. On the logic of supplementation in relation to an ethical subjectivity, I thus conducted an 'inside-outside intervention'. The deconstructions which follow are also inside-outside interventions.

8.5.4 Collocation of TOLERANCE and (religious) belief

There is a further adverse effect on the argument from this deconstruction. Now that the second clause of [11] has become a reasonable reflection of

how 'new atheism' normally describes its standpoint, a tension is revealed between 'religious belief' and 'intolerant' in this sentence. Intuitively, it is difficult to see how one can be intolerant of something that cannot be seen – in this case, the *mental states* of religious believers. Corpus linguistic evidence supports this intuition. Table 8.1 shows common collocation of the lemma TOLERANCE with 'religion(s)', 'religious' and 'religious belief' using a 1.5 billion word corpus of English, the UKWaC corpus accessed via the software Sketchengine. As usual the word span for calculating collocations is $n\pm4$. The strength of collocation was calculated using the t-score function of Sketchengine. As before, t-scores over 2 are significant; t-scores over 10 are very significant.

Table 8.1 Frequency and t-score values for collocation in the 1.5 billion word corpus, UKWaC, of 'religion(s)', 'religious', 'religious belief(s)' with the lemma TOLERANCE for an $n \pm 4$ word span; values are for both lower-case and initial capital letter instances of TOLERANCE

Collocation values for frequency and t-score

	religion(s)		religious		religious belief(s)	
	freq.	t-score	freq.	t-score	freq.	t-score
intolerance	40	6.3	267	16.3	5	2.2
intolerant	35	5.9	18	4.2		
tolerance	106	10.2	386	19.6	8	2.8
tolerant	76	8.7	46	6.7	4	1.9
toleration	21	4.6	234	15.3		
Intolerance	4	2.0	17	4.1		
Tolerance	27	5.2	69	8.3		
tolerated	31	5.5	14	3.6		
tolerate	20	4.4	14	3.6		
tolerating	6	2.4	3	1.7		
Toleration	4	2.0	18	4.2		

Table 8.1 indicates that while it is habitual for forms of the lemma TOLER-ANCE to collocate with 'religion(s)' and 'religious', there is little evidence of forms of the lemma TOLERANCE collocating with the category, 'religious belief(s)'. In turn, accurately representing the standpoint of 'new atheism' in sentence 11 by replacing 'religion' with 'religious belief' introduces a collocational oddity which supports the intuition of real world oddity, i.e. intolerance of the *mental state* of religious belief. For another reason, then, *à la Derrida*, the cohesive stability of paragraph [B] is dependent on exclusion of 'religious belief' in its representation of 'new atheism's' standpoint (see 3.4).

8.5.5 Explaining how God metaphors can be seen to exclude 'religious belief'

'God' occurs four times in the argument [4, 6, 12]. Interestingly, all these occurrences are in the first two paragraphs (see bold below) where they are used in descriptions of 'new atheism':

> [A]
> 3. 'New atheism' was the surprise political hit of 2007.
> 4. **God**-bashing books by Hitchens, Dawkins and other thinkers who come out in a rash
>   when they hear the word 'religion' flew out of the bookshops.
> 5. Philip Pullman's anti-divine Golden Compass hit the big screen.
> 6. Everywhere, **God** was exposed as a fraud and **God** botherers were given an intellectual lashing.
> [B]
> [. . .]
> 12. Their [new atheists] aim seems to be, not only to bring **God** crashing back down to earth, but also to downgrade mankind itself.

Three usages of 'God' involve metaphor ('bashing' [4]; 'fraud' [6]; 'crashing' [12]); 'God botherers' [4] is a slang expression. Since the argument is in a newspaper, the use of metaphor/slang here would seem to have an interpersonal function to help attract the reader into the argument by use of colourful imagery/informality.

'God' is a keyword in the discussion forum. Very common expressions in the forum which contain this keyword also use two other keywords, 'belief' or 'believe' – such as in 'belief in God' or 'believe in God'. Out of 439 instances of 'belief/ve' in the forum, a quarter (113 instances) are realised in these expressions as well as in related ones such as 'belief in the supernatural'. This is largely in relation to the 'new atheist' perspective, corroborated in Section 8.4.3, that there is no rational/scientific evidence for 'belief in God'. Despite the interpersonal function of the 'God metaphors' in paragraphs [A] and [B], we can nevertheless perspectivise the argument as atypically lacking, in its discussion of the standpoint of 'new atheism', the collocations *belief/faith* and *God / supernatural being*. In other words, use of these metaphors enables a circumvention or exclusion of such collocation whether this is premeditated or not.

On this evidence-based comparison, we can make the following judgement: use of metaphor which enables omission of 'belief/ve in God' also contributes to the impression of stability in the binary opposition structure, in paragraph [B], of old atheism' = POSITIVE and 'new atheism' = NEGATIVE. By this I mean that if O'Neill had expressed himself using 'belief/ve in God' instead of the God metaphors, this would have had repercussions for the

stability of the binary opposition. This is because, as we saw, the cohesive felicity of the binary opposition is dependent on repeated use of the general category 'religion' in sentences 10 and 11 and *not* use of the specific category of '(religious) belief'. For example, this alternative version of the first part of sentence 12:

> 'Their [new atheists] aim seems to be, not only to bring belief in God to an end . . .'

could be seen to conflict with the cohesion in [B] achieved by repetition of 'religion' in sentences 10 and 11.

8.6 Evaluating cohesion and coherence elsewhere in the argument relative to the ethical subjectivity

8.6.1 Sub-binary opposition structure across the argument

Knowledge of normal conceptual usage for 'new atheism' does not just adversely affect, in [B], O'Neill's binary opposition structure of 'old atheism' = POSITIVE versus 'new atheism' = NEGATIVE. There is deconstruction of cohesive structure in other parts of the argument. In order to show this, I need first to provide more detail on the global structure of the argument.

The binary opposition structure of 'old atheism' = POSITIVE and 'new atheism' = NEGATIVE is, in fact, a *supra*-binary opposition structure which subsumes two *sub*-binary oppositions:

- sub-binary opposition 1: 'old atheism' is + DEEP / – HECTORING / + PROGRESSIVE *versus* 'new atheism' is – DEEP / + HECTORING / – PROGRESSIVE;
- sub-binary opposition 2: 'old atheism' is associated with HIGH VIEW OF HUMANKIND OF THE RELIGIOUS *versus* LOW VIEW OF HUMANKIND of 'new atheism'.

I refer the reader to Appendix 8.3 where the argument is annotated for these sub-binary oppositions. But as brief illustration, below are some examples of annotated text from Appendix 8.3. Sub-binary opposition 1 can be seen, for instance, in [20–22]:

> **OLD ATHEISM: + DEEP / – HECTORING / + PROGRESSIVE = _POSITIVE_**
> 20. Old atheists sought to "illuminate men's minds", through advancing science or deepening our understanding of capitalist society.
> 21. New atheists take exactly the opposite approach.

22. They expend all of their energy on attacking the institution of religion and its ridiculous adherents.
    NEW ATHEISM: – DEEP / + HECTORING / – PROGRESSIVE = *NEGATIVE*

In sub-binary opposition 2, the 'low view of mankind' ascribed to 'new atheists' derives, for O'Neill, from their sociobiological views:

NEW ATHEISM: LOW VIEW OF HUMANKIND = *NEGATIVE*
    27. The inhumanity of the new atheism is best illustrated by its move from the world of social critique into the realm of sociobiology.

This alleged sociobiological view is that religious belief derives from instinct (paragraph [G]). Another and related reason that O'Neill gives for 'new atheists' having a low view of humankind is the opinion he attributes to Christopher Hitchens: since religion was created by early homo sapiens (sentence 39), it is not something to value. In contrast, O'Neill argues that 'old atheists' espouse a high view of humankind since they share the aspiration of the religious for a sense of purpose and greatness (sentence 42). Sub-binary opposition 2 is evident in this extract:

OLD ATHEISM is associated with HIGH VIEW OF HUMANKIND of the RELIGIOUS = *POSITIVE*
    37. For atheists like Marx, religion expressed, in a backward and limited form, human aspirations to greatness . . .
    [. . .]
    40 . . . for new atheists religion exists precisely because man is despicable, little more than a monkey.
    NEW ATHEISM: LOW VIEW OF HUMANKIND = *NEGATIVE*

8.6.2 Deconstruction of sub-binary opposition structures in paragraph [B]

Let me now return to paragraph [B], the first substantive paragraph of the argument. On first read, the detail of the binary structuring of [B] – that it contains sub-binary oppositions 1 and 2 – is not completely clear. It is only on consuming the entire argument that we understand, for example, why O'Neill thinks that 'new atheists' 'downgrade mankind' [12]. As I demonstrated in Section 8.5.1, there is cohesive disruption between sentences [10] and [11; 12] which unsettles the *supra*-binary opposition of 'old atheism' = POSITIVE and 'new atheism' = NEGATIVE. However, with knowledge of the *sub*-binary opposition structure in the argument, deconstruction of the supra-binary in paragraph [B] necessarily means the *sub*-binary oppositions 1 and 2 in this paragraph also become deconstructed (Figure 8.3):

▲ **OLD ATHEISM: + DEEP / – HECTORING / + PROGRESSIVE =** *POSITIVE*
    associated with HIGH VIEW OF HUMANKIND of the RELIGIOUS = *POSITIVE*

[B]
10. History's greatest atheists, or the "old atheists" as we are now forced to call them, were humanistic and progressive, critical of **religion** because it expressed man's sense of *higher* moral purpose in a deeply flawed fashion.

COHESION
DECONSTRUCTED

DECONSTRUCTION
OF SUB-BINARY
OPPOSITIONS 1 + 2

11. The new atheists are screechy and intolerant; they see ~~religion~~ **religious belief** merely as an expression of mass ignorance and delusion.

12. Their aim [new atheists] seems to be, not only to bring God crashing back down to earth, but also to *downgrade* mankind itself.

▼ **NEW ATHEISM: – DEEP / + HECTORING / – PROGRESSIVE =** *NEGATIVE*
        LOW VIEW of HUMANKIND = *NEGATIVE*

Figure 8.3 Deconstruction 1 elaborated upon relative to the ethical subjectivity.

8.6.3 Deconstruction of sub-binary opposition structure elsewhere in the argument

It might have been possible to brush aside the deconstruction of paragraph [B], its loss of coherence, as a local weakness. However, once we account for sub-binary oppositions 1 and 2 across the argument we realise that: i) much, if not most, of O'Neill's text is tied together by these sub-oppositions; ii) paragraph [B] is a *summary* of an argument which is based on sub-oppositions 1 and 2. As a result, the deconstruction of sub-binary oppositions in [B] is likely to be replicated elsewhere in the argument, which is indeed the case. Take the link between paragraphs [D] and [E], for example. This is structured via sub-binary opposition 1. Like paragraph [B], cohesion relies on the common lexical tie of 'religion'. This is between sentence 22 (paragraph [E]) – where 'new atheism' is mentioned – and sentences in paragraph [D] – where 'religion' is mentioned seven times in relation to 'old atheism'. (Sentence [20] is a summary of paragraph [D]).

Once we replace, in sentence [22], the deficiency of accurate representation of new atheism's standpoint, there is no longer a common lexical link of 'religion' facilitating cohesive contrast between 'old atheism' and 'new atheism'. In turn, there is deconstruction of sub-binary opposition 1 here (Figure 8.4) and loss of coherence.

As another example, consider paragraph [G] where O'Neill attributes to 'new atheism' the 'sociobiological' view that humans are genetically

▲ OLD ATHEISM: + DEEP / – HECTORING / + PROGRESSIVE = _POSITIVE_

[D]
17. Marx, too, believed that direct assaults on **religion** were pointless.

18. He argued that **religion** existed as spiritual compensation for social alienation, and believed that once the true nature of **religion** as a comfort blanket in an alienated society had been revealed, it would become clear that **religion** is merely a secondary phenomenon dependent for its existence on socioeconomic circumstances.
19. Radical critics should focus their intellectual ire on the degraded society that sustains **religion** rather than on attacking **religion** itself: "The criticism of heaven turns into the criticism of earth, the criticism of **religion** into the criticism of law, and the criticism of theology into the criticism of politics."

[E]
20. Old atheists sought to "illuminate men's minds", through advancing science or deepening our understanding of capitalist society

DECONSTRUCTION   **COHESION   DECONSTRUCTED**
OF SUB-BINARY
OPPOSITION 1

21. New atheists take exactly the opposite approach.
22. They expend all of their energy on attacking ~~the institution of religion~~ **religious belief** and its ridiculous adherents.

▼ NEW ATHEISM: – DEEP / + HECTORING / – PROGRESSIVE = _NEGATIVE_

Figure 8.4 Deconstruction 2.

conditioned to believe in a higher being. (This attribution is not quite right. Rather, 'new atheists' hold that 'religious belief . . . can be explained as a product of biological evolution' – see quotation from Taylor, 2010 in Section 8.4.3). O'Neill begins this attribution in sentences 27 and 28. Having done this, he employs both sub-binary opposition 1 and (half of) sub-binary opposition 2. Once again, the efficacy of these structures hinges on common cohesion of the word 'religion'. This cohesion takes place both within sentence 31 as well as between sentence 31 and sentence 29. After we replace the deficiency in O'Neill's representation of new atheism – this time in sentence 31 – cohesion is disrupted. In turn, the sub-binary oppositions 1 and 2 here are deconstructed (Figure 8.5) with further loss in coherence:

OLD ATHEISM: + PROGRESSIVE = _POSITIVE_

[G]
29. Marx and others saw **religion** as the product of socioeconomic circumstances, and thus believed that **religion** would wither away as humanity proceeded along the path of progress.

30. New atheists see religious belief as a kind of animalistic instinct, driven by DNA.

31. Where Marx viewed people's turn towards **religion** as an understandable response to the harsh reality of alienation in capitalist society,

DECONSTRUCTION
OF SUB-BINARY   _COHESION DECONSTRUCTED_
OPPOSITIONS 1 + 2

new atheists see **it** [religion] **religious belief** as the product of mankind's twisted genetic makeup.

NEW ATHEISM: – PROGRESSIVE = _NEGATIVE_
                    LOW VIEW OF HUMANKIND = _NEGATIVE_

Figure 8.5 Deconstruction 3.

As one more illustration of where apparently stable cohesive structure can be problematised, consider paragraph [I], which is constructed around sub-binary opposition 2. By replacing the conceptual deficiency of 'religious belief' in [40] where 'new atheism's' standpoint is described, cohesive structure once more is deconstructed. Like is no longer being contrasted with like. In turn, the stability of sub-binary opposition 2 is compromised (Figure 8.6).[9]

8.6.4 Summary

Not only is paragraph [B] unstable relative to how 'new atheism' normally represents its standpoint, but so is much of the cohesive structure of the rest of the argument. Given O'Neill is 'as atheistic as it gets' [7], and he explicitly refers to Dawkins and Hitchens, could not one presume the following: that O'Neill is in fact better acquainted with the standard terms of reference used by 'new atheists' than his argument suggests? This leads me to go further than previously and speculate that O'Neill's use of 21 instances of 'religion', no instances of 'faith', and only 2 instances of 'religious belief' is not accidental but reflects a deliberate suppression/marginalisation strategy. That is to say, by using the general category of 'religion', O'Neill is able to obscure

▲ **OLD ATHEISM is associated with HIGH VIEW OF HUMANKIND of the RELIGIOUS =** *POSITIVE*

[I]
37. For atheists like Marx, **religion** expressed, in a backward and limited form, human aspirations to greatness "Man . . . looked for a superhuman being in the fantastic reality of heaven and found nothing there but the reflection of himself."
38. He continued: "The criticism of **religion** ends with the teaching that man is the highest being for man, hence with the categorical imperative to overthrow all relations in which man is a debased, enslaved, forsaken, despicable being . . ."
39. Today, Hitchens says of religion's destructive impact: "What else was to be expected of something that was produced by the close cousins of chimpanzees?"
40. For Marx, **religion** had to be abolished because it made man despicable;

DECONSTRUCTION   *COHESION DECONSTRUCTED*
OF SUB-BINARY
OPPOSITION 2

40. . . . for new atheists ~~religion~~ **religious belief** exists precisely because man is despicable, little more than a monkey.

▼ **NEW ATHEISM: LOW VIEW OF HUMANKIND =** *NEGATIVE*

Figure 8.6 Deconstruction 4.

the more specific, and more relevant, categories of 'religious belief' and/or 'faith'. Since these elements of religion are the most vulnerable to criticism from atheists – i.e. including O'Neill himself – I am led to suppose that it would be better for him to obfuscate, exclude or marginalise these concepts in the argument in order to avoid contradicting himself.

8.7 Some comments on 'religious belief' in the argument

There are two instances of 'religious belief' in O'Neill's descriptions of 'new atheist' standpoints. Surely, then, there is obvious cohesive conflict already in the argument? Let me highlight why this is not so. The first instance of 'religious belief' occurs in sentence 23:

> 23. Consider their bizarre and fevered obsession with religious symbols, such as crucifixes worn around the neck, or statements of **religious**

belief by public figures like Tony Blair or Nick Clegg: their distaste for anything that looks or sounds vaguely religious exposes the shallow anti-intellectualism of their new atheism [my bold].

Here 'religious belief' relates to two specific individuals (one a Christian – Blair – and one an atheist – Clegg). 'New atheism's' standpoint apropos 'religious belief' is not being contrasted here with 'old atheism' apropos 'religion'. In turn, mention of 'religious belief' here does not cause obvious conflict in cohesive structure.

   In sentence 30, however, there *is* mention of 'religious belief' in relation to an alleged standpoint of 'new atheists' which is contrasted with the standpoint of 'old atheists':

   30. New atheists see **religious belief** as a kind of animalistic instinct, driven by DNA [my bold].

One imagines that O'Neill is boxed in here. That is to say, he has to mention 'religious belief' in sentence 30, rather than 'religion', since 'religion' cannot meaningfully be described as an instinct. After all, 'religion' is a complex category consisting not only of the mental state of religious belief, but cultural creations which go beyond instinct such as religious practices (e.g. prayer), religious institutions (e.g. the Vatican), religious art and so on. The second clause of sentence 31 reinforces the proposition expressed in sentence 30:

   31. Where Marx viewed people's turn towards **religion** as an understandable response to the harsh reality of alienation in capitalist society, new atheists see **it** as the product of mankind's twisted genetic makeup [my bold].

Look closely at the instance of 'it' I have bolded in sentence 31. 'It' does not refer to 'religious belief' in sentence 30. Instead, 'it' refers to 'religion' used in the first clause of sentence 31. (This type of cohesive link is known as grammatical reference (see 5.8.2)). If O'Neill had used 'religious belief' instead of 'it', cohesion within sentence 31 between the old atheist and new atheist perspectives would have been obviously infelicitous. Alternatively, if he had used 'religion' instead of 'it', there would have been blatant disruption of cohesion between sentences 30 and 31 in their description of 'new atheism'. O'Neill's use of 'it', inadvertently or deliberately, is subtle. Not only does 'it' avoid an explicit, and thus hyperbolic, statement that religion is an instinct, but significantly it also reduces the visibility of tensions in cohesive structure within sentence 31 and between sentences 30 and 31 (see Figure 8.5).

8.8 Other relevant digital supplements

Other relevant digital supplements could be grabbed whole or aggregated from the World Wide Web and keywords generated from them for the purpose of the argument's potential deconstruction. For example, a web search led me to http://www.richarddawkinsfoundation.org/fourhorsemen-transcript, a transcript of Dawkins *et al.* (2007). This is a text of 20,536 words known as 'Four Horsemen'. It is a colloquy of the 'new atheists', Richard Dawkins, Daniel Dennett, Sam Harris and Christopher Hitchens. This source is thus highly relevant qualitatively. Keyword (quantitative) analysis of the transcript using WMatrix corroborates keywords in *The Guardian* discussion forum, e.g. 'faith' is a highly significant keyword (47; LL=263.9), and is indeed the highest noun keyword. See Appendix 8.4 for a concordance of the 47 instances of 'faith' from this transcript. The reader will see these instances of 'faith' mostly have the sense of 'religious belief'.

Because it is a colloquy of 'new atheists', coming from the apocalyptic horsemen's mouths, it is a better digital supplement to use for argument deconstruction than the discussion forum. Yet, because I knew enough already about 'new atheism', Dawkins etc., I was able to locate and judge the relevance of this source fairly easily. Someone new to this topic may not do this so readily.

8.9 Conclusion

I have shown how a group standpoint subjectivity can be generated with the help of keyword analysis of a particular digital supplement – a discussion forum attached to an argument in the online version of a newspaper. Since I made a case that 'new atheism' is relatively powerless, globally speaking, for me the standpoint subjectivity generated is an ethical subjectivity. On the basis of this ethical subjectivity, I showed that the public sphere argument criticising 'new atheism' is a straw man. I judge the straw man to be the misrepresentation sub-type (2.3.4). This is because the repeated use of 'religion' in description of the 'new atheism' position obscures the more specific focus on 'religious belief' in 'new atheism's' 'big D' discourse.

For those new to the topic of a public sphere argument, the discussion forum appended to it is a particularly convenient place from which to start exploring possible problems in the cohesive structure of the argument relative to how the SotC is expressed by its adherents. One needs, however, to be discriminating in choice of discussion forum. For example, many readers of an argument in a quality newspaper who are motivated to post a comment may well be knowledgeable about the topic. Where this is the case, this would be a discussion forum worth mining for helping to create an

ethical subjectivity. Finally, another purpose of this chapter was to show in more detail how small fractures in cohesion at a local level can impact upon the global cohesive structure of a public sphere argument and thus its overall coherence.

Appendix 8.1 Frequencies of all repeated words in 'the new atheism' text

53 the	5 be	3 humanity	2 delusion	2 moral
46 of	5 it	3 It	2 delusions	2 out
22 to	5 New	3 its	2 direct	2 people
21 and	5 society	3 little	2 DNA	2 product
21 religion	4 an	3 mankind	2 earth	2 public
19 a	4 anti	3 more	2 expressed	2 purpose
19 in	4 because	3 not	2 For	2 radical
17 atheists	4 being	3 old	2 genetic	2 rather
15 as	4 belief	3 progress	2 given	2 realism
14 is	4 Darwin	3 social	2 greatness	2 reality
14 s	4 God	3 superhuman	2 have	2 science
13 new	4 into	3 they	2 heaven	2 sense
12 that	4 see	3 were	2 higher	2 socioeconomic
11 by	4 than	3 who	2 himself	2 something
9 for	4 there	3 with	2 hit	2 Their
9 religious	3 Aveling	2 against	2 Hitchens	2 them
9 their	3 believed	2 alienation	2 human	2 There
8 on	3 but	2 all	2 I	2 through
8 The	3 despicable	2 are	2 intellectual	2 turn
7 atheism	3 devout	2 attacking	2 itself	2 views
7 criticism	3 driven	2 been	2 kind	2 Where
7 or	3 from	2 best	2 like	2 which
7 was	3 had	2 But	2 men	2 will
6 man	3 He	2 capitalist	2 merely	2 would
6 Marx	3 hectoring	2 circumstances	2 minds	

Appendix 8.2 The 100 highest keywords, including frequency ('Freq') and log likelihood values ('LL'), in the discussion forum; generated using WMatrix (Rayson, 2009).

Keyword	Freq	LL
religion	336	1665.17
atheists	227	1249.02
religious	264	1127.97
god	200	1100.46
atheism	141	764.05
atheist	117	632.37

belief	141	604.86
i	1093	545.37
that	1232	525.72
Dawkins	90	495.21
n't	445	463.60
you	707	384.81
science	84	363.00
faith	86	339.49
beliefs	77	337.06
think	188	316.27
do	365	310.95
is	1195	304.30
what	327	249.59
Brendan	47	249.02
article	77	246.86
believe	114	232.50
'm	142	222.99
religions	44	220.18
Hitchens	40	220.09
Marx	44	210.46
people	239	207.66
Darwin	37	203.58
not	569	197.82
intolerant	36	189.02
cif	34	187.08
folks	34	187.08
does	146	185.47
delusion	32	167.24
believers	34	166.65
christians	44	165.24
humanity	31	161.80
hectoring	29	159.57
universe	34	150.52
it	884	146.14
read	71	146.01
just	187	145.03
catholic	45	142.57
scientific	41	136.10
why	117	130.57
shrill	25	129.21
human	57	125.86
actually	61	122.95
moral	40	122.48
about	230	120.18
argument	42	117.73
O'Neill	21	115.55
supernatural	27	114.91
christian	45	113.10
are	561	110.79
@	20	110.05
reason	63	107.19
intellectual	29	105.08

(*Continued*)

Keyword	Freq	LL
theists	19	104.54
Brendan_O'Neill	18	99.04
spirituality	18	99.04
their	323	98.59
they	425	96.08
as	562	94.48
or	387	94.46
Grayling	17	93.54
those	154	90.70
agree	38	88.74
metaphysical	16	88.04
your	200	85.10
christianity	26	82.71
spiritual	26	82.71
arguments	32	82.43
point	61	80.24
silly	26	78.35
've	75	76.02
have	432	75.98
islam	19	75.18
rational	19	75.18
secular	19	75.18
thinking	44	72.89
morality	18	72.84
--	13	71.53
Richard_Dawkins	13	71.53
hardtimethinking	13	71.53
enlightenment	17	70.62
ignorance	19	70.57
irrational	15	70.48
ideas	42	70.15
exist	30	68.31
so	201	67.76
new	180	66.73
intolerance	15	66.71
attacking	19	66.57
faustroll	12	66.03
trying	47	65.78
evolutionary	14	65.24
but	453	64.65
say	91	64.01
catholics	16	63.05

Appendix 8.3 'The new atheism' argument annotated for macro-cohesive structure: sub-binary oppositions 1 and 2

1. [headline] The New Atheism
2. [sub-headline] There is more humanity in the 'superhuman' delusions of the devout
[HIGH VIEW OF HUMANKIND OF THE RELIGIOUS = *POSITIVE*]
than there is in the realism of the hectoring atheists
[NEW ATHEISM: + HECTORING = *NEGATIVE*]

[A]
3. [Introductory paragraph] "New atheism" was the surprise political hit of 2007.
4. God-bashing books by Hitchens, Dawkins and other thinkers who come out in a rash when they hear the word "religion" flew out of the bookshops.
5. Philip Pullman's anti-divine Golden Compass hit the big screen.
6. Everywhere, God was exposed as a fraud and God botherers were given an intellectual lashing.

[B]
7. I am as atheistic as it gets.
8. But I will not be signing up to this shrill hectoring of the religious
[NEW ATHEISM: + HECTORING = *NEGATIVE*]
9. The new atheists have given atheism a bad name.
10. History's greatest atheists, or the "old atheists" as we are now forced to call them, were humanistic and progressive, critical of religion because it expressed man's sense of *higher* moral purpose in a deeply flawed fashion.
[OLD ATHEISM: + DEEP / – HECTORING / + PROGRESSIVE= *POSITIVE*]
[OLD ATHEISM associated with HIGH VIEW OF HUMANKIND of the RELIGIOUS = *POSITIVE*]
11. The new atheists are screechy and intolerant; they see religion merely as an expression of mass ignorance and delusion.
12. Their aim seems to be, not only to bring God crashing back down to earth, but also to *downgrade* mankind itself.
[NEW ATHEISM: – DEEP / + HECTORING / – PROGRESSIVE= *NEGATIVE*]
[NEW ATHEISM: LOW VIEW of HUMANKIND = *NEGATIVE*]

[C]
13. There's something bitterly ironic in the fact that the new atheists pose as the successors to Darwin.
14. Darwin himself had little interest in baiting the devout.

[OLD ATHEISM: – HECTORING = _POSITIVE_]
15. In the early 1880s, he was asked by the radical atheist Edward Aveling to endorse a new book on evolutionary theory.
16. Darwin, caring little for Aveling's "anti-religious militancy", refused. He wrote to Aveling: "It appears to me . . . that direct arguments against Christianity and theism produce hardly any effect on the public; and freedom of thought is best promoted by the gradual illumination of men's minds which follows from the advance of science. It has, therefore, been always my object to avoid writing on religion . . .".

[D]
17. Marx, too, believed that direct assaults on religion were pointless.
[OLD ATHEISM: – HECTORING = _POSITIVE_]
18. He argued that religion existed as spiritual compensation for social alienation, and believed that once the true nature of religion as a comfort blanket in an alienated society had been revealed, it would become clear that religion is merely a secondary phenomenon dependent for its existence on socioeconomic circumstances.
19. Radical critics should focus their intellectual ire on the degraded society that sustains religion rather than on attacking religion itself: "The criticism of heaven turns into the criticism of earth, the criticism of religion into the criticism of law, and the criticism of theology into the criticism of politics."

[E]
20. Old atheists sought to "illuminate men's minds", through advancing science or deepening our understanding of capitalist society.
[OLD ATHEISM: + DEEP / – HECTORING / + PROGRESSIVE = _POSITIVE_]
21. New atheists take exactly the opposite approach.
22. They expend all of their energy on attacking the institution of religion and its ridiculous adherents.
[NEW ATHEISM: – DEEP / + HECTORING / – PROGRESSIVE = _NEGATIVE_]

[F]
23. Consider their bizarre and fevered obsession with religious symbols, such as crucifixes worn around the neck, or statements of religious belief by public figures like Tony Blair or Nick Clegg: their distaste for anything that looks or sounds vaguely religious exposes the shallow anti-intellectualism of their new atheism.

[NEW ATHEISM: – DEEP = *NEGATIVE*]
24. Their opposition to religion is not driven by a profound or radical vision, as was Darwin's and Marx's,
OLD ATHEISM: + DEEP / + PROGRESSIVE = *POSITIVE*]
but rather by a dinner-party disdain and moral revulsion for the stupidity of the religious.
[NEW ATHEISM: – DEEP = *NEGATIVE*]
25. Where old atheism was driven by a passionate belief in progress,
[OLD ATHEISM: + PROGRESSIVE = *POSITIVE*]
new atheism springs from today's crisis of secularism.
26. It is because new atheists have lost their own belief in progress and Enlightenment
[NEW ATHEISM: – PROGRESSIVE = *NEGATIVE*]
that they turn harshly against those who still cling to visions of a better society or "kingdom".
[NEW ATHEISM: + HECTORING of the religious for HIGH VIEW OF HUMANKIND = *NEGATIVE*]

[G]
27. The inhumanity of the new atheism is best illustrated by its move from the world of social critique into the realm of sociobiology.
[NEW ATHEISM: LOW VIEW OF HUMANKIND = *NEGATIVE*]
28. Some new atheists believe humans must be genetically predisposed to believing in a higher being.
29. Marx and others saw religion as the product of socioeconomic circumstances, and thus believed that religion would wither away as humanity proceeded along the path of progress.
[OLD ATHEISM: + PROGRESSIVE = *POSITIVE*]
30. New atheists see religious belief as a kind of animalistic instinct, driven by DNA.
31. Where Marx viewed people's turn towards religion as an understandable response to the harsh reality of alienation in capitalist society, new atheists see it as the product of mankind's twisted genetic makeup.
[NEW ATHEISM: LOW VIEW OF HUMANKIND / – PROGRESSIVE = *NEGATIVE*]

[H]
32. So what is their solution?
33. Mass genetic therapy?
34. Compulsory injections of the correct DNA – you know, the kind possessed by intelligent and well-bred people who can see through religious delusion?
35. The new atheists' abandonment of a social outlook

[NEW ATHEISM: – PROGRESSIVE = *NEGATIVE*]
leads them to adopt some very grim, anti-human views.
[NEW ATHEISM: LOW VIEW OF HUMANKIND = *NEGATIVE*]

[I]
36. The key difference between the old and new atheism is in their views of mankind.
37. For atheists like Marx, religion expressed, in a backward and limited form, human aspirations to greatness "Man . . . looked for a superhuman being in the fantastic reality of heaven and found nothing there but the reflection of himself."
[OLD ATHEISM associated with HIGH VIEW OF HUMANKIND of the RELIGIOUS = *POSITIVE*]
38. He continued: "The criticism of religion ends with the teaching that man is the highest being for man hence with the categorical imperative to overthrow all relations in which man is a debased, enslaved, forsaken, despicable being . . ."
[OLD ATHEISM associated with HIGH VIEW OF HUMANKIND of the RELIGIOUS = *POSITIVE*]
39. Today, Hitchens says of religion's destructive impact: "What else was to be expected of something that was produced by the close cousins of chimpanzees?"
40. For Marx, religion had to be abolished because it made man despicable; for new atheists religion exists precisely because man is despicable, little more than a monkey.
[NEW ATHEISM: LOW VIEW OF HUMANKIND = *NEGATIVE*]

[J]
41. New atheists will continue to ridicule the religious in 2008.
[NEW ATHEISM: + HECTORING = *NEGATIVE*]
42. But there is more humanity in the "superhuman" delusions of the devout – in their yearning for a sense of purpose and greatness
[HIGH VIEW OF HUMANKIND OF THE RELIGIOUS = *POSITIVE*]
than there is in the monkeyman realism of the hectoring atheists.
[NEW ATHEISM = LOW VIEW OF HUMANKIND / – DEEP / + HECTORING / – PROGRESSIVE = *NEGATIVE*]

Appendix 8.4: Concordance for 'faith' in The Four Horsemen transcript

it's almost an ontological commitment of atheism to say that all **faith** claims are in some sense equivalent. You know, the media says

a move that they don't accept when done in the name of another **faith**. [DD] Exactly. [CH] But now, in which case, could I ask you

to say that you look forward to a world where no one had any **faith** in the supernatural? [RD] I want to answer this. Whether it's

expect to, or wish to, see that. [SH] What do you mean by **'faith'?** [CH] Well I don't think it's possible, because it replicates

significant phrase to me: "There's a reason that it's called **faith!"** He said it very decisively, almost aggressively, that there's

almost aggressively, that there's a reason that it's called **faith.** And that was, to him, the absolute knockdown clincher. You can

but an argument that suggests that what we're up to, criticising **faith,** is a bad thing. [RD] Oh, that's much easier. [SH] That we

Well I don't think it's possible, because it replicates so fast, **faith.** As often as it's cut down, or superseded, or discredited, it

have a question for the three of you. Is there any argument for **faith,** any challenge to your atheism that has given you pause, that

The only argument that I find at all attractive, and this is for **faith** you asked as well as for theism, is what I would, I suppose I'd

all I got from this report was that this was the first time his **faith** had ever really been explicitly challenged. And so it's true to

Western Europe, is largely the result of the fact that we honour **faith** so much in our discourse that the community has not become as

What do you mean 'something like faith'? [DD] Yeah, and how like **faith?** [CH] Something like the belief that there must be more than we

unintelligently there, I think. What do you mean 'something like **faith'?** [DD] Yeah, and how like faith? [CH] Something like the belief

ld actually in a sense welcome the persistence of something like **faith.** I feel I've put it better now than I did at the beginning.

    What does moderation consist of? It consists of having lost **faith** in all of these propositions, or half of them because of the

do with the fear of extinction, or annihilation [SH] So you mean **faith** in supernatural paradigms? [CH] Yes, the wish. Wish thinking.

. . [DD] I could give you several discoveries which would shake my **faith** right to the ground. [SH] No, no! Let me just broaden the

that we could share. [SH] Dan Dennett believes that, that's not **faith.** [DD] Yeah, sure. [SH] I mean, we know there's more than we

we reasonably think we can accomplish? And then this article of **faith** that I think circulates, unfortunately, among people of our

precisely that they'll say that they're in a permanent crisis of **faith.** There is indeed a prayer, "Lord I believe, help thou my

that. The less you believe it, the more your demonstration of **faith.** [SH] The more you prove it's true. [CH] Yes, and the struggle,

evidence is especially noble". I mean, this is the doctrine of **faith.** This is the parable of Doubting Thomas. And so you start with

cast of mind in, I think, a very long end note in 'The End of **Faith',** where I say, "any text can be read". Well, with the eyes of

where I say, "any text can be read". Well, with the eyes of **faith** you can make magical (?prescience/impressions) out of any text.

the people I know who call themselves believers, or people of **faith.** [CH] If everyone has seen the resurrection, and if we all knew

be nothing to be faithful about. [SH] Right, that's the point of **faith.** that faith is somehow self-enlightening, whereas it's been

and moderates tend to argue that this is somehow a triumph of **faith,** is. I mean, there aren't any new tricks, these tricks have

hurt feelings card, and reminds you how wonderful taking it on **faith** There's been a moratorium on this for a long time. We're just

I think it may be easier than we're supposing to shake peoples' **faith.** And it's bearing fruit, and the obstacles it seems to me are

beginning of a new wave of explicit attempts to shake peoples' **faith.** to reason, latently at least, equally dangerous. [RD] Equally

false. And for that reason, because they're forced by preferring **faith** and he said it proudly and defiantly rather than in any sort of

    knockdown clincher. You can't argue with it because it's **faith.** And then he said this very significant phrase to me: "There's

And he said I accept all your rational arguments, however it's **faith.** that we do, as atheists. I mean, they reject the pseudo

religious person feels the same criticism of other people's **faith,** and they see it rather readily. You know, every Christian

of others, and they see the confidence tricks in other people's **faith,**

tend to argue that this is somehow a triumph of faith, that faith is somehow self-enlightening, whereas it's been enlightened you can't put it forward. We're not going to let you play the faith card. Now if you want to defend what your holy book says, in for me. Say what you think that move is. [DD] Somebody plays the faith card. [CH] Yes. [DD] They say look, I am a Christian and we internal to their faith or the contradiction between their faith and what we've come to know to be true about the universe, and of what they knew to be true and what they were told by their faith that I think we have to just highlight the fact that it's I'm constantly getting e-mail from people who have lost their faith and in effect been argued out of it. And the straw that broke Dan Barker's making a collection of clergymen who've lost their faith but don't dare say so, because it's their only living. It's the for people to be shown the contradictions, internal to their faith or the contradiction between their faith and what we've come to real objective is. Do we, in fact, wish to see a world without faith? I think I would have to say that I don't. I don't either Because that is harder for me to imagine, than a world without faith, I must say. [SH] Well, you brought up the bell curve – I mean, the curriculum of becoming a scientist and never have your faith explicitly challenged, because it's taboo to do so, and now we

Notes

1 Undertaking qualitative analysis of keyword usage will also help ensure that keywords are part of genuine posts rather than, say, spam.
2 Available at http://freethoughtreport.com/wp-content/uploads/2013/07/FOTR eport2013.pdf [accessed July 2016].
3 Available at http://www.guardian.co.uk/help/insideguardian/2013/may/24/ theguardian-global-domain [accessed July 2016].
4 Available at http://freethoughtreport.com/wp-content/uploads/2013/07/ FOTReport2013.pdf [accessed July 2016].
5 The whole argument and the discussion forum appended to it can be found at: http://www.guardian.co.uk/commentisfree/2007/dec/30/thenewatheism [accessed July 2016]. At the time of publication of O'Neill's argument, *The Guardian* had a policy of closing a forum after three days.
6 Programs other than WMatrix are available for generating keywords (e.g. AntConc). But, they require the user to be able to get their hands on a reference corpus – something which may not be readily available.
7 Available at http://www.iep.utm.edu/n-atheis/#H1 [accessed July 2016].
8 The prominence that criticism of 'religious belief' is given in 'new atheism' is also reflected in four of the eight section headings in Taylor (2010): 'Faith and Reason', 'Arguments For and Against God's Existence', 'Evolution and Religious Belief', 'Alleged Divine Revelations'. (The other section headings are 'The Moral Evaluation of Religion', 'Secular Morality', 'Secular Fulfilment', 'Criticism of the New Atheists'.)
9 Given O'Neill's hyperbole, Dawkins *et al.* are still unlikely to endorse the proposition ascribed to 'new atheism', in the second clause of sentence 40 in Figure 8.6, even if it does now contain 'religious belief'. And, in any case, chimpanzees are apes not monkeys.

Chapter 9

Ethical subjectivity generated rhizomatically

9.1 Introduction

In the last chapter of Part III, I enrich and extend the method for constructing an ethical subjectivity, as well as the procedure for digitally deconstructing arguments, by taking cues from two different thinkers – Gilles Deleuze and Félix Guattari. This may seem something of an abrupt turn. I am near the end of Part III – why bring in these thinkers? First, the influence of Deleuze and Guattari has been across this book. What I have done with Derrida – rhizomatically engaging with his thinking – is in the spirit of Deleuze and Guattari's book, *A Thousand Plateaus*. Second, there are convergences between the ethical outlooks of Deleuze/Guattari and Derrida and Levinas. Since one of the aims of this book is a deterritorialisation of pedagogical CDA so as to include a pronounced focus on the ethical alongside the political, this is better achieved by showing convergences between the outlook of different philosophers rather than using just one.

For the data analysis, I come full circle by using the public sphere argument that the reader first met in Chapter 5 – the pro-GM argument which criticises the standpoint of the 'anti-GM lobby'. This time I create an ethical subjectivity based on the 'anti-GM lobby' for examining critically how the argument's author frames this standpoint. This lobby is a broad perspective, being composed of different campaign groups. This means that more than one supplement needs to be mined for creating a convincing ethical subjectivity. Stimulated by ideas from Deleuze and Guattari, I outline how this burden can be reduced by generating the ethical subjectivity through rhizomatic use of keyword analysis. I start this chapter outlining some significant concepts from Deleuze and Guattari.

9.2 Some key concepts in Deleuze and Guattari's thinking

9.2.1 Becoming

Deleuze and Guattari are less interested in states of being and more with what we can become (Deleuze, 1990[1969]: *passim*). Since transformation

is a clear tendency in life, rather than reflect on the nature of being, they contend that becoming is where philosophy should fix its gaze. Indeed, for Deleuze, we '. . . should allow ourselves to *become* in relation to what we are seeking to understand' (Colebrook, 2002a: 46). The becoming of the analyst through knowledge generation – of the habitual big 'D' Discourse of a topic and of habitual 'big D' Discourse associated with the standpoint of the criticised (SotC) in an argument – is key to the strategies of this book.

9.2.2 Differentiation

With their focus on becoming, Deleuze and Guattari want to open up life to more diverse thinking, to richer possibilities. While science may give consistent descriptions of the actual world, it is philosophy which has the power to understand the 'virtual world': that is, the very possibilities for life. For Deleuze, the concept that best captures this power is *difference* (Deleuze, 1991[1966]: 95). Life, if it is allowed to, will always differentiate from what already exists. Plant and animal species will differentiate. The same goes for religions, political movements and so on. To become is to create difference. Deleuze and Guattari (1987[1980]: *passim*) ask why we do not seek to accelerate this process and actively promote new differences. Conversely, to engage in thinking and behaviour which simply returns us to what we were before is not living.

9.2.3 Desiring machines and immanent connections

For Deleuze and Guattari, all life is a mobile and active forming of connections, e.g. a plant 'desires' contact with sunlight, a baby desires contact with its mother's breast. Human life is/should be an array of connective processes, a throng of desires for forming novel and unpredictable networks which, in turn, can mobilise subjectivity in novel ways (May, 2005: 125). In other words, through this connection-making, our subjectivities are produced. We make ourselves through the connections we create with people, with ideas and so on. And since we are always *in* life, since we are always desiring and creating networks within it, production of subjectivity is *immanent* to life rather than *transcendent* to it. Because of this, Deleuze and Guattari avoid talking about 'the Subject' since it suggests, for them, something hovering statically above life. Instead, they prefer 'desiring machine' (Deleuze and Guattari, 2004[1972]: *passim*; Jun, 2011:95). The use of 'desiring' here stresses the active seeking of connections within life. 'Desire is a process of increasing expansion, connection and creation' (Colebrook, 2002b: xxii). By 'machine', Deleuze and Guattari are not referring to a mechanism, but to the fact that machines work because they have been *connected* up in a particular way. On this outlook, humans connected together to perform work – in a game of tug-of-war, building the pyramids etc. – would count as a machine.

9.2.4 Rhizome and in-between-ness

An important concept in Deleuze and Guattari (1987[1980]) is one I introduced near the start of the book – the *rhizome*. Recall that an actual rhizome is a horizontal, underground stem which can sprout roots or shoots from any part of its surface. Deleuze and Guattari's rhizome concept discourages any unified, static plan or organisation in favour of a dynamic, unlimited plane in which one is always moving from one point to another, and all the while making random connections. Crucially, their focus is more on the movement and changes taking place *between* points and less on the points themselves. To think rhizomatically is to think between things – ideas, concepts, texts etc. – and thereby open up life to difference and potentially new insight. As Deleuze and Guattari (1987[1980]: 28) say:

> The middle is by no means an average; on the contrary, it is where things pick up speed.

Thinking rhizomatically has the capacity to effect change, to break up order and boundaries, to produce movement and growth. Rhizomatic thinking is, thus, unpredictable and transformative. And since rhizomatic movement crosses borders, and in the randomness of connection-making we are able to re-see the lie of the land, this movement *deterritorialises* – to use another of Deleuze and Guattari's concepts that I flagged in the introduction.

9.2.5 Actual-virtual ontology

The ontological outlook of Deleuze reflects his focus on creative production. Since he is interested in the tendency of life to lead to transformation, he does not see what something is only in its actual terms but rather in its potential to lead to becoming. Deleuze refers to the capacity of the actual to become a different actual as the virtual (Deleuze, 1991[1966]; 2004 *passim*). As Deleuze sees it, the virtual is as real as the actual. The virtual is not abstract 'possibility'. For example, genes do not have an abstract possibility for producing bodies. This capacity for genes to lead to bodies is very real. Or put in Deleuzian terms, the actual of the human body derives from the real virtuality within the actual of our genes. Crucially, for him, the virtual and the actual are of equal importance ontologically speaking, inextricably linked rather than being in dualist opposition.

9.2.6 Exteriority/interiority

With a focus on life as process, anything which seeks to stabilise the flow of life – such as the distinction between an interior and an exterior – is treated suspiciously by Deleuze (1995[1990]: 6). He argues that what we call an

interior is, in fact, a factitious abstraction. This is because the distinction between interior and exterior is always blurred once we open up to the throng of life and realise its relations, interconnections and interpenetrations. A simple example. Here I am in an interior, my office at university with the door shut. But this interiority as separated from exteriority is illusory. I can see email requests from colleagues who are outside my door but inside it, electronically speaking. Because, for Deleuze, the interior/exterior distinction is blurred, he holds that to understand any state of affairs, we must not look to the intrinsic meaning or structure of the terms involved (Roffe, 2010). Instead, it is understanding how an interior relates to an exterior where insight will be generated. As before, it is from the relations *between* things that fresh awareness arrives.

I will use the above insights and concepts to enrich and extend the method for generating an ethical subjectivity as well as the deconstructive analytical procedure for engaging with public sphere arguments. Before I get on to showing this, I provide some coverage of Deleuze and Guattari's ethics. The reader will see their ethical outlook overlapping with the ethics of Levinas and Derrida, in turn enriching the ethical outlook of this book.

9.3 Deleuze and Guattari's ethics

9.3.1 Becoming-Other / becoming-minoritarian

The basis of Deleuze and Guattari's ethics is what they refer to as 'becoming-Other' (Deleuze and Guattari, 1987[1980]: 262). To be ethical is to open oneself out from any fixed point such as an identity, a particular way of seeing the world, to appreciate the Other, its problems and frustrations. It is to actively empathise with the Other through *becoming* at one with it. Deleuze and Guattari do not have just any Other in mind. Their Other is what they call *minoritarian*. This active orientation to the Other, Deleuze and Guattari call *becoming-minoritarian*:

> all becoming is a becoming-minoritarian. When we say majority, we are referring not to a greater relative quantity but to the determination of a state or standard in relation to which larger quantities, as well as the smallest, can be said to be minoritarian: white-man, adult-male, etc. Majority implies a state of domination, not the reverse.
>
> (Deleuze and Guattari, 1987[1980]: 320–321)

Minoritarian is not a quantitative notion – that is, it does not imply minority (though in practice this may be the case). For example, one becoming-minoritarian that Deleuze and Guattari flag is 'becoming-woman'. Minoritarian is, instead, a qualitative notion – 'not *majoritarian*' in

Deleuzian-Guattarian parlance, not the dominant socio-political reality. This understanding of minoritarian is insufficient though. Minoritarian, crucially, refers to political movements that have the capacity to deterritorialise the majoritarian, opening it up to difference and plurality and, in turn, creative becomings. As Deleuze and Guattari put things, the minoritarian can be:

> thought of as seeds, crystals of becoming whose value is to trigger uncontrollable movements and deterritorialisations of the mean or majority.
>
> (Deleuze and Guattari, 1987[1980]: 117)

Since minoritarian movements have the capacity to deterritorialise the majoritarian in this way, one purpose of Deleuzian-Guattarian criticism is to identify and amplify such movements.

It should, I hope, be clear that the idea of becoming-minoritarian sits with showing hospitality to a socially/economically relatively powerless Other and related political campaigns. In other words, to create an ethical subjectivity in the way I have framed things in Part III is to 'become minoritarian' – in the sense of taking on a minoritarian perspective for the duration, at least, of the critical analysis of a public sphere argument.

9.3.2 Nomadism, experimentation and ethics of deterritorialisation

When we become minoritarian, there is an unpredictability that flows from opening out to new possibilities for subjectivity, to new connections. This ethical project is, in effect, *nomadic* – to use another term from *A Thousand Plateaus*. In other words, in opening ourselves genuinely out to the Other, the encounter will not be predestined. Who knows what will come of it? And in opening ourselves out to the minoritarian, we are active experimenters with such subjectivities:

> The nomadic ethico-political project focuses on becomings as a pragmatic philosophy that stresses the need to act, to experiment with different modes of constituting subjectivity and different ways of inhabiting our corporeality.
>
> (Braidotti, 2006: 134)

The focus on connection-seeking in Deleuzian-Guattarian philosophy, the emphasis on rhizomatics and nomadism, embody what has been referred to as an 'ethics of exteriority' (Roffe, 2005: 98). To live life as though one is not connected, to live life as an 'interior' which is separate from 'exteriors', is to ignore the rich, dynamically interconnected nature of life. An aim of a

Deleuzian-Guattarian ethics is to 'reconnect with the external world again, and to be caught up in its life' (Roffe, 2005: 98) – hence 'ethics of exteriority'. This is one reason why Deleuze and Guattari place so much emphasis on figures such as the rhizome or nomad where borders are crossed, where the relationship between inside and outside is troubled. For this reason, their ethics has also been referred to as an 'ethics of deterritorialisation' (Patton, 2003: 21). To be ethical is to loosen the way we 'territorialise' the world by opening up to the Other. This may, indeed, involve trying to see how the Other regards our own territorialisation of life if we subscribe to a majoritarian outlook.

9.3.3 Immanent ethics and creativity

Deleuze's focus on becoming is crucial to his distinction between morality and ethics (Deleuze, 1995 [1990]: 100; Smith, 2011). The morality of unalterable religious texts, for instance, sets up transcendent and timeless values which abstract from the dynamic complexity of ever changing life and, in so doing, obstruct the becoming of life and its creative capacities. Transcendent ideas such as 'God' which feed into morality place brakes on becoming and more generally on life's capacities. Deleuze rejects transcendent morality, but embraces immanent ethics. To be immanently ethical is to engage with the particular in front of us – rather than being directed by inflexible 'transcendent' abstractions which may or may not apply to the matter in hand. (In chapters 7 and 8, the ethical subjectivities were generated immanently. They were generated from results of data mining which I did not know in advance). Crucially, for Deleuze, ethics and creativity go hand in hand. Ethical decisions emerge from what discussants regard as leading to maximisation of becoming via creative differentiation and innovative connection. This needs to be negotiated since one should not, and indeed cannot, maximise one's becoming whilst restricting the becoming of others (Marks, 2010: 89). To do the latter is to reduce the possibilities for life, to reduce its potential for transformation. It is to be anti-life itself.

9.4 Linking the (ethical) outlooks of Deleuze/ Guattari, Levinas and Derrida

9.4.1 General convergence

Derrida and Deleuze were contemporaries and knew each other – though they were not personally close (Peeters, 2013 [2010]: 475–476). But, on a number of points, they were cosy philosophically (see Patton and Protevi, 2003). Indeed, in a eulogy written for Deleuze after his death, Derrida wrote of how he experienced a 'nearly total affinity' between their 'theses' (Derrida, 1998: 3).[1] It is reasonably straightforward to see why Derrida

might come to this judgement. Both Derrida and Deleuze share a commitment to the possibility of movement of our thinking, of removing blockages, and enabling thinking to be re-directed to an open future (Patton, 2003). Both are philosophers of the Other. Both open texts and contexts out to new possibilities of difference. Both trouble borders, blurring the distinction between inside and outside. Both emphasise the disruption of the centre/majoritarian to allow space for minoritarian voices. Both emphasise transformations. Another key similarity is the need not to predestine an encounter with the Other – to be open to the rhizomatic possibilities of where engagement with the Other can take one. In particular, reading should be open and unpredictable for both thinkers (Deleuze, 1995[1990]: 7–9; Derrida, 1987b[1980]: 4). Derrida and Deleuze dovetail too in how they tie ethics with creativity. Showing hospitality to the Other and allowing Self to be refreshed, or indeed re-invented, through the 'incoming' of the Other is very much akin to becoming-Other in Deleuze and Guattari.[2]

Importantly, for these thinkers, we should never be so open-minded to the Other that our brain becomes unmoored. Engagement of Self with the Other is always a process of critical and prudent negotiation about what we are prepared to transform and the core values we wish to preserve at all costs; negotiation may in fact lead to us censuring the Other. Not all Others are, obviously, worth opening the door to (e.g. terrorists, racists, misogynists, homophobes, theocratists). As regards their own core political values, both Derrida and Deleuze were oriented to future ideas of democracy. Deleuze and Guattari refer to this as 'becoming-democratic' (Deleuze and Guattari, 1994[1991]: 113); Derrida uses the expression 'democracy-to-come' (Derrida, 2005: *passim*). These are not determinate teleological ideas of democracy, nor utopian notions. They are instead what might be called 'horizon concepts'. On a boat, we may aim at a horizon, but as we approach it, a new horizon continually comes into view. As soon as the process and conditions of democracy are improved, work is both complete and incomplete for the practice of democracy can never be perfected (see Patton, 2007; 2008). Forever will there be social, cultural, technological etc. change accompanied by fresh problems. A better version of democratic practice is always over the horizon. Finally, and perhaps surprisingly, given the rather lazy way both thinkers can be automatically bracketed as 'postmodern' and sometimes inaccurately as 'relativists', Deleuze and Derrida are post-Enlightenment philosophers:

> I am for the Enlightenment, I'm for progress, I'm a 'progressist'.
> (Derrida, 2001b: 100)[3]

In relation to 'Enlightenment reason', Deleuze sees part of his endeavour as 'attempts to preserve some part of it or reconstruct it' (Deleuze, 1995[1990]: 162). Reflecting this statement, Deleuze has a complicated and complicating relationship with Kant.[4] The same applies to Derrida.[5]

And Levinas and Deleuze? The 'ethics of exteriority' of Deleuze clearly echoes Levinas' orientation to the Other:

> the figure of becoming-minoritarian continues, although in different terms, the Levinasian and Derridean theme of otherness and the problem of taking the responsibility for the other.
>
> (Žukauskaitė, 2011: 194)

Indeed, the subtitle of Levinas' first major work, *Totality and Infinity*, is 'An Essay on Exteriority'. Another key similarity is that these thinkers stress that ethical decision-making should emerge from discussion and reflection grounded in the particular rather than being directed rigidly by generalised maxims. While generalised maxims will offer orientation and ethical parameters for discussion and decision-making, for all these thinkers acting inelastically on a generalised maxim which precedes the encounter with the Other is by definition not to make a proper decision apropos the particular (see 10.8).[6]

9.4.2 Nomadic digital hospitality

Having outlined some key similarities between Deleuze/Guattari and Derrida/Levinas, I want to enrich the idea of 'digital hospitality' on which I based ethical subjectivities in chapters 7 and 8. 'Digital hospitality' signals one should be open to the Other. But this may be an Other that we are already familiar with. Deleuze and Guattari's nomadic ethics of deterritorialisation inspires a digital hospitality that *actively seeks out* public sphere arguments which attack, characterise or potentially affect minoritarian groups with which the analyst is (mostly) unfamiliar. The World Wide Web facilitates such nomadism. In other words, with a nomadic digital hospitality, we do not stay close to home. We roam the web looking for new opportunities for deterritorialisation. This is achieved through creating ethical subjectivities which are then trained on public sphere arguments criticising unfamiliar socially/economically relatively powerless Others. This nomadic process better ensures interruption of Self and, in turn, a non-predestined reading.

9.5 Rhizomatically generating an ethical subjectivity

9.5.1 When a relatively powerless Other consists of multiple related groups

The generation of ethical subjectivities in Chapter 7 and Chapter 8 was fairly straightforward because the mining of key concerns/standpoints of the Other was largely restricted to one supplement. Chapter 7 involved data

mining a single website mostly – www.Change.org. Chapter 8 involved mining one discussion forum. In this chapter, I am returning to the pro-GM text of Chapter 5 where its author, Julian Little, criticises quite a broad Other – what Little refers to as 'the anti-GM lobby'. This consists of many related national and international groups. Since most if not all of these 'sub-groups' (e.g. 'Greenpeace') have their own internet presence, relevant website texts are the obvious data to mine for generating an ethical subjectivity. I can hardly, however, choose just one or a handful of websites where such groups communicate their concerns. Were I to do so, I would be guilty of partiality or selection bias. Then again, going to many individual websites and compiling a corpus from each of them would be onerous.

9.5.2 Desiring-machine analyst and actual-virtual keywords

To address these issues, I take cues from ideas of Deleuze and Guattari. In data mining of relevant website texts, I suggest the analyst behave as a 'desiring-machine'. That is to say, the reader continually 'desires' the making of novel connections, where fresh knowledge of the Other leads to further connections and thus continual knowledge expansion/reinforcement. New keywords found in one corpus would be used as internet search terms, driving the nomadic reader to other new locations on the web from where they would compile a fresh corpus of relevant texts, and so on. On this staged procedure, keywords mined in one supplement are both actual and virtual simultaneously. They have actual log likelihood values and actual frequencies; they are actual in that they can tap us into the key concerns of the Other. But they are virtual also since they can lead us to new actuals – to fresh relevant texts on the web which can be compiled into more corpora. Thus, in the way described, is an ethical subjectivity generated with its growth dependent on rhizomatic, and thus non-pre-determined, knowledge generation. And, especially because generation is *over* the web, the issue of partiality is addressed. Moreover, the creation of the subjectivity is an immanent one. The open, emergent, 'desiring-machinic' process means the subjectivity is not being developed by prior ('transcendent') notions about the Other which may, in fact, be erroneous. The issue of selection bias is thus addressed also.

The reader may perhaps be thinking 'how is this rhizomatic/staged compilation of corpora any less onerous than going to many individual websites and compiling a corpus from each of them?' Allow me to explain.

9.5.3 Stages in rhizomatic approach to corpora compilation via keyword analysis

Stage 1. In the first instance, the reader needs to find a website which contains relevant texts from the minoritarian Other. Web search engines could be

used for this purpose. Choice of search terms, though, may involve trial and error before an appropriate website is found. A more convenient approach may be available if the public sphere argument that the reader is examining is online and there is a discussion forum appended to it. It is common behaviour in discussion forums for posters to include weblinks. Should posters be critical of the argument, they may provide a link to an organisation website which is oppositional in stance. Names of protest organisations are likely to show up as keywords since such proper names are unlikely to feature commonly in reference corpora. Thus, via keyword analysis, the names of protest/campaign organisations can be ascertained efficiently without having to read through, potentially, hundreds of posts. And, for this purpose, the quantity of keywords found is not necessarily important – one URL found via one proper name keyword may suffice. Mining a discussion forum in this way can be particularly useful for the reader who is largely unfamiliar with the Other being criticised in the argument.

Stage 2. With an appropriate minoritarian website located, the reader compiles relevant campaign texts from this website into a corpus. As many relevant texts as possible should be compiled. The reader then performs a keyword analysis of this corpus, establishing its most common concepts.

Stage 3. In tandem with the rhizomatic, and thus non-predetermined, ethos of corpora compilation, Stage 3 uses, as a web search term, a concept(s) mined in Stage 2 which is both new for the analyst and related to oppositional perspective(s). This concept(s) is then employed to drive compilation of another corpus from the web. However, while Stage 2 involves compilation of texts from one protest website, Stage 3 involves compilation of texts from related protest websites *across* the World Wide Web. This is done by employing a *web-crawler* – a program that compiles texts from many different websites.

Frequent replication in Stage 3 of how a keyword is used in Stage 2 gives us confidence that we have found a key concern across related oppositional groups. (And crucially this is done without the operose procedure of having to create on multiple occasions a single corpus from a single relevant website). With sufficient replication of how these concepts are used, we would then be in a confident position that we had found core concerns across a widely distributed counter-discourse, regardless of possible differences between sub-groups. As usual, it is important to explore keywords qualitatively in relevant texts in the corpora, making sure the keywords are distributed across the corpora, and developing an understanding of how these concepts might be used as part of the counter-discourse.

Let me move to generating an ethical subjectivity with which to critically analyse how the pro-GM argument in Chapter 5 discusses the standpoint of

the anti-GM lobby. Echoing Deleuze and Guattari's dictum that 'to create is to resist' (Deleuze and Guattari, 1994[1991]: 110), I create an ethical subjectivity to help resist an argument which otherwise I may deem reasonable through ignorance of the standpoint being attacked.

9.6 Generating an ethical subjectivity to examine the pro-GM argument

9.6.1 Corpora and keyness

To remind the reader, Julian Little's argument was published in October 2009. My corpora compilation and analyses were executed in April 2012. Since this was only two and half years after publication of Little's argument, I deem the corpora findings to be relevant to the content of Little's argument.

In my keyword investigations, I employ the following criteria for selection of keywords:

- for the sake of consistency, keywords in different corpora are amongst the 100 highest;
- keywords, and their usage, are replicated across different web-based corpora. This will ensure that the concepts I focus on relate to common concerns across anti-GM perspectives (irrespective of any heterogeneity within these perspectives).[7]

I provide the frequency (first value in brackets) and log likelihood values of keywords (second value in brackets).[8]

9.6.2 Stage 1: Guardian discussion forum [corpus 1]

There is a discussion forum appended to Little's argument. It consists of 78 posts, totalling 9, 498 words.[9] Many, if not most, of these posts are critical of Little's argument. Despite this, one cannot assume that *The Guardian* discussion forum is representative of anti-GM discourse, especially with only 78 posts and where identities of posters may be unclear. A keyword analysis of the forum could not be said, with confidence, to illuminate common concerns of anti-GM discourse.

To reiterate, the main purpose of mining the discussion forum for keywords is it can access efficiently possible 'leads' for the reader in the form of oppositional organisation URLs. Then again, there is no harm in being aware of other keywords in the forum. This is especially so if, in Stages 2 and 3, there is corroboration of keywords found in Stage 1. That is to say, it may turn out that this discussion forum is, after all, representative of some core concerns across anti-GM groups. Figure 9.1 is a keyword cloud, using WMatrix, of the 100 highest keywords in the discussion forum ('Corpus I'); size of keyword, as usual, is proportional to its statistical value.

agricultural agriculture are argument article balanced biased billion biodiversity biotech biotechnology buy Campesina chair chickens contamination corporate corporations crop crops debate diverse do drought eat ecological engineered environment environmental ersatz even_if farmers flax food foods gene genetic_engineering genetically genetically_modified global GM GMO gmos guardian harvesting http humanity hundreds_of_millions hunger hungry india industry is Julian Julian_Little lobbyists luddite MAIZ maize Mexico modified mono Monsanto n't not nt organic organisms patented people pesticide pesticides planet potato produce promoting research run-off science scientific scientists seed seed_companies seeds shit side_effects small-hold so sustainability sustainable technology terminator that third_world triffids warming we wild world yields

Figure 9.1 Keyword cloud of the 100 highest keywords for Corpus I; generated using WMatrix (Rayson, 2009).

'Campesina' (4; LL = 37.4) (see Figure 9.1) was an unfamiliar term for me; I assumed it might be (part of) a proper name. And, since the forum is largely critical of GM, I conjectured that perhaps exploration of 'Campesina' might engender becoming where I learn about common concerns in anti-GM perspectives. I discovered 'Campesina' referred to the organisation, 'La Via Campesina' ('The Peasants' Way'). Exploring its website (http://viacampesina.org/en/), I found out that this represents a very large group of farmers – several million, mainly across the developing world – who wish to pursue agricultural practices free from 'first-world' constraints. We shall come shortly to some of these alleged constraints.

9.6.3 Stage 2: Texts from La Via Campesina website [corpus II]

On the La Via Campesina website, there is an archive which contains texts – in English and Spanish – associated with various campaigns. The archive has a search facility. Using 'GM' and variants as search terms (e.g. 'genetically modified', 'genetic modification'), I retrieved 50 texts from the English language archive. These texts span the period April 2009 to April 2012. A corpus – 'Corpus II' – of 54, 799 words was assembled from these texts and keywords established using WMatrix. Figure 9.2 is a keyword cloud of the 100 highest keywords from Corpus II. Notice, in Figure 9.2, that 'biodiversity' (101; LL = 602.8) is replicated from Corpus I. Exploring the co-texts of this keyword in Corpus II in order to understand how it is used, I discovered that the critical stance around 'biodiversity' is similar to that in Corpus I (5; LL = 46.7). That is to say, I understand that, commonly,

Africa agrarian_reform agribusiness agricultural **agriculture** agroecological agroecology agrofuels **and** **biodiversity Campesina** Cancun **carbon** change **climate** communities contamination corporate **corporations** countries crisis **crisis crops** demand ecological **emissions** environmental false farm farmer **farmers** farming feed **food** forests free_trade genetic genetically_modified **global** GM gmos governments grabbing greenhouse Haiti haitian http humanity hunger **indigenous industrial international** justice **la** **land** local maize **monsanto** Monsanto Mother_Earth movement movements natural_resources organic **organizations** organized our **peasant** peasants peoples planet policies producers **production** rai reject resources rice rights seed **seeds** small_scale social solutions **sovereignty** struggles **sustainable** terminator TNCs transgenic **transnational** treaty UN UNFCCC united_nations **US** va **via** we world

Figure 9.2 Keyword cloud of the 100 highest keywords for Corpus II; generated using WMatrix (Rayson, 2009).

there is a strong concern – in some cases with alleged evidence cited – that GM crops lead (or could well lead) to a decrease in biodiversity. One example provided is the reduction in biodiversity caused by GM mono-cropping.[10]

Other keywords are 'seed' (97; LL = 412.9) and 'seeds' (138; LL = 746.2). Common to co-text around 'seed(s)' are claims of manipulation/coercion by GM companies, e.g.:

> agencies like the Alliance for a Green Revolution in Africa (AGRA) who conspire with TNCs [trans-national corporations] like Cargill and Monsanto and with our governments to buy off national research and **seed** systems in order to sell GMO **seeds** . . . The same companies even manipulate regional farmer organizations to push GMOs, and we call on such organizations to resist being used in such ways [keywords bolded].[11]

I move on to another keyword in Corpus II – 'sovereignty' (171; LL = 912.9). This, I discovered, is part of the collocation, 'food sovereignty' (157 instances). ('Food' is also a keyword in this corpus (530; LL = 2362.1)). The Declaration of Nyéléni (27 February 2007) defines 'Food Sovereignty' as follows:

> **Food sovereignty** is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems . . . It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations. It ensures that the rights to use and manage

lands, territories, waters, seeds, livestock and **biodiversity** are in the hands of those of us who produce food [keywords bolded].[12]

For the Food Sovereignty movement, the aim of 'food security', i.e. the idea that there be enough food to feed everyone on the planet, is laudable. However, that 'food security' only indicates *what* should be achieved, but not *how* the world can be fed is an issue for the Food Sovereignty movement since it allows GM companies unproblematically to attach to the notion of food security.

   Related to the concept of 'sovereignty', I discovered in Corpus II that the keywords 'farmers' (292; LL = 1474.6) and 'rights' (112; LL = 429.6) collocate in 'farmers' rights' / 'rights of farmers' (28 instances). Co-text for these expressions commonly relates again to allegations of coercion vis-à-vis GM agriculture, e.g.:

> crops that are genetically-engineered to withstand drought, heat, cold, flood and salt are being promoted by biotechnology TNCs as necessary to adapt to climate change. The advancement of GM climate-ready crops further threatens **farmers rights** to **seed agrobiodiversity** through patent claims and genetic **contamination** . . .
>   . . . under the guise of developing 'climate-ready' crops, TNCs are pressuring governments to allow what could become the broadest and most dangerous patent claims in intellectual property history [keywords bolded].

Co-text here also relates to another self-determination issue. As intimated in the quotation above, patented GM seeds are habitually regarded as under-mining the traditional right of farmers to use seeds from their own crop yields. This right is also referred to specifically as 'seed sovereignty'. Indeed, this collocation occurs eleven times in Corpus II (i.e. where the keyword 'seed' collocates with the keyword 'sovereignty').

   One other keyword which was replicated in Corpus II from Corpus I is 'contamination' (Corpus II: 35; LL = 199.8) and (Corpus I: 4; LL = 32.4). Exploring co-texts in Corpus II (see 'contamination' bolded in the extract above), I discovered that use of this term commonly relates to fears that GM pollen could fertilise non-GM plants with consequences that are difficult to predict.

9.6.4 Stage 3: webcrawled texts [corpus III]

There are a number of web-crawlers which can be used. The web-crawler I employ is 'Visual Web Spider'.[13] It finds 100 different webpages on search terms and then extracts all the text from the webpages into one document. The fact that the results are not pre-determined by the reader tallies with the rhizomatic and thus emergent ethos of web corpora construction. I used the
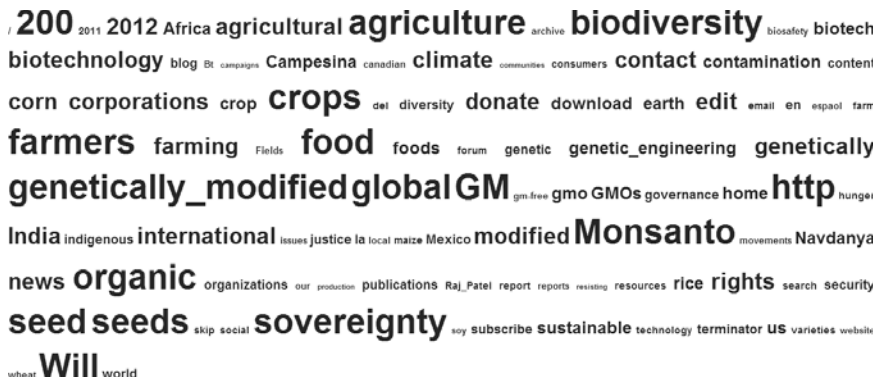
Figure 9.3 Keyword cloud of the 100 highest keywords for Corpus III; generated using WMatrix (Rayson, 2009).

same search terms from 9.6.3, but this time including 'sovereignty' – a new term for me from Stage 2. The reason I also used 'sovereignty' is I discovered that 'Food sovereignty' is embraced not just by 'La Via Campesina' but other campaigning organisations.[14] The immanent or 'bottom-up' approach has been advantageous, then, since I have captured a keyword which reflects anti-GM discourse, enabling me to accrue with confidence a corpus of anti-GM texts using the web-crawler program. In turn, I have reduced the possibility that I have captured pro-GM texts.[15] Moreover, replication of co-textual meanings of keywords in Corpus II would entail these keywords relate to common concerns across a number of 'anti-GM lobby' perspectives, not just in La Via Campesina.

Visual Web Spider gives the option to search on different web domains. Since La Via Campesina is an organisation, and reflecting Little's term 'anti-GM lobby', I searched only on the domain '.org'. To ensure the rigour of any replicability, I removed texts – two in all – that the web-crawler found on the La Via Campesina website. This left a corpus – Corpus III – consisting of 98 texts (34, 797 words) mainly from pressure groups (e.g. 'Friends of the Earth'). I then used WMatrix to generate a keyword cloud for this corpus (see Figure 9.3).

The keywords 'biodiversity' (41; LL = 295.2) and 'contamination' (21; LL = 143.1) are replicated from Corpus II. The same goes for the collocations 'farmers' rights' / 'rights of farmers' (13 instances) and 'seed sovereignty' (30 instances). My exploration of co-texts of these keywords/collocations found similar habitual usage to that in Corpus II (as well as in Corpus I). I have, then, ascertained common concerns, with reasonable certainty, across a set of anti-GM groups/perspectives using different manners of corpus construction.

9.6.5 Summary

I have shown how an ethical subjectivity can be rigorously generated in a way which reduces analyst graft. In the rhizomatic keyword propagation and replication, I have undergone two processes of becoming-minoritarian:

- I have some understanding that erosion of 'biodiversity' and 'contamination' of non-GM plants are important concerns across anti-GM perspectives;
- I am aware of concerns about the self-determination of many developing-world farmers with regard to GM ('farmers' rights' / 'seed sovereignty').

The growth of this 'anti-GM lobby' ethical subjectivity is a direct reflex of the capacity of keyword analysis to target in a concentrated way a series of important concerns across related oppositional perspectives on campaign websites. And, because of the breadth of capture of texts from across the web, together with the nomadic and immanent ('bottom-up') approach, partiality and selection bias have been substantially reduced. The ethical subjectivity has quantitative clout; I am in a more robust position than basing an ethical subjectivity on one anti-GM website or one anti-GM campaigner.

   In Sections 9.8 and 9.9, I employ the ethical subjectivity I have created to afford critical perspective on Little's argument and, in turn, show how the argument's coherence unravels relative to common anti-GM concerns. Before I do that, however, I want to enrich the deconstructive analytical procedure in Parts II and III via Deleuzian-Guattarian ideas.

9.7 Deleuze/Guattari and deconstructing a public sphere argument

9.7.1 Rhizomatic mapping versus tracing

Deleuze and Guattari make a key distinction between 'mapping' and 'tracing' in relation to the rhizome:

> The rhizome is . . . *a map and not a tracing* . . . What distinguishes the map from the tracing is that it is entirely oriented toward an experimentation in contact with the real . . . The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a meditation. Perhaps one of the most important characteristics of

the rhizome is that it always has multiple entryways . . . A map has multiple entryways, as opposed to the tracing, which always comes back "to the same." The map has to do with performance, whereas the tracing always involves an alleged "competence."

(Deleuze and Guattari, 1987[1980]: 13–14)

Like following the outline of an image under translucent paper, to trace is to reproduce what already exists, to reproduce existing territory. Cartography or mapping is different. To map is to deterritorialise – to see the territory in a fresh way.

All the deconstructions conducted in this book have involved tracing and mapping. Describing the cohesive structure of a public sphere argument is to trace it. It is to reproduce the territory of the text – understanding its framing of its topics and / or SotC so that these are thrown systematically into relief. Conversely, discovering blind spots of instability in coherence relative to normal collocation for how topics are discussed, or relative to how the criticised in the argument represents its standpoint, is to map the argument. The reader will recall my deconstructions of public sphere arguments in Parts II and III via dashed double-arrowed lines. These deconstructive annotations can be conceived as maps. These maps deterritorialise the 'cohesive territory' of the arguments. To map an argument is to critique and deconstruct it. And, just like Deleuze and Guattari's description of the rhizome above, 'multiple entry' has been a key feature of my deconstructive mapping. That is to say, I went outside the arguments and then allowed the keywords/lemmas/collocations discovered in the corpora to prompt a rhizomatic, and thus non-predestined, revisit of the arguments via multiple inputs.

9.7.2 Producing difference, becoming and the mapping of a public sphere argument

As I flagged in 9.2.2, Deleuze explicitly links becoming to the production of difference. The basis of the digital deconstructive analysis of public sphere arguments is the production of difference *between* the tracing of an argument's cohesion and its mapping (which emanates from the difference *between* the content of the argument and of the digital supplement). This difference leads to becoming – the positive becoming of the analyst in their knowledge gain and appreciation of constraints on the Other's self-determination as well as the negative becoming of the argument if its coherence unravels.

The act of mapping also leads to the production of difference *in* the text. This is akin to Derrida's mode of reading – to map a text is to open it out to the Other which, in turn, opens up the text to 'suppressed' differences. For example, in Chapter 7, the corpus analysis enabled me to open

up the category of 'Sun readers' to 'young daughter Sun readers' as different from 'adult male Sun readers' or more specifically as different from 'father Sun readers'. Or, put in Deleuzian terms, I read the public sphere argument in Chapter 7 as a site of the actual meeting the virtual; through the use of corpus linguistic technologies, the virtual of the text was actualised as new differences. In turn, this revealed how the category of 'Sun readers' suppresses – whether deliberately or not – category differentiation.

9.8 Re-tracing the cohesive structure of the pro-GM argument

I return to the public sphere argument from Chapter 5 'Our future food security depends on using GM crops' by Julian Little. In that chapter, I traced only some of the major cohesive chains in the argument. These helped me to see how the argument framed topics and sub-topics. Table 5.1 shows other repeated single words which help with annotating other major cohesive chains. In turn, this helps me this time to see systematically how the SotC is framed. Yet, cohesion in a text is not only effected through single words. It might transpire via collocation. Cohesion involving collocation can be identified quickly using a 2-gram search (4.5.2). For example, using AntConc to conduct a 2-gram analysis, I found that 'food security' occurs three times as does 'more food'. Moreover, generating a lemma list is useful for grouping together different word forms of the same lemma which provide cohesion – something a word list can't do. I found that the three instances of 'more food' collocate with word forms of the lemma PRODUCE ('to produce' [2]; 'producing' [6]; 'to produce' [11]). Figure 9.4 annotates cohesive chains as follows:

- BOLD: 'choose' ([5]; 11]);
- HIGHLIGHTER: farmers/farming ([5]; [8]; [9]; [11]
- ITALICS: 'produce(ing) more food' ([2]; [6]; [11]);
- UNDERLINED: 'food security' ([headline]; [1]; [2]).

'Produce(ing) more food' ([2]; [6]; [11]), in fact, fronts a repeated proposition: allegedly GM produces more food while being kind to the environment. Given this repetition, I do not just italicise 'produce(ing) more food', but the propositions in full. The italicised cohesion frames and reinforces probably the dominant point of the article.

Having traced a second round of major cohesive chains, using the ethical subjectivity generated in 9.6 I map categories along these patterns, highlighting where they suppress – whether deliberately or not – categories and category differentiations important for the anti-GM lobby. These mappings complicate Little's argument, unsettling its coherence relative to the ethical subjectivity. In 9.9, I map locally; in 9.10 I map globally.

Our future <u>food security</u> depends on using GM crops
Scaremongers must come to recognise the value of agricultural technology

[A]
[1] Felicity Lawrence, in her article on the Royal Society's science-based study on <u>food security</u>, reported the comments of the anti-GM lobby, which claimed that the research would be "of limited value" and questioned why it was needed. (It is too late to shut the door on GM foods, 17 October)

[B]
[2] The research was needed, however, and should be welcomed, because <u>food security</u> is one of the biggest challenges we face, and we must find ways in which *to produce more food while continuing to reduce the impact our agricultural practices have on the environment*.
[3] Britain has a key role to play in helping to deliver this solution; however, as widely acknowledged, our current methods of production will not be sufficient to meet the increasing demand.

[C]
[4] Lawrence wrote of the "concentration of corporate power" regarding GM crops.
[5] In fact, GM technology has done much to empower small farmers – over 90% of those who **choose** to use GM crops are small-scale farmers living in developing countries.
[6] They grow them because they work contributing to exactly the kind of "sustainable intensification" which the Royal Society called for – *producing more food from a lighter environmental footprint*.

[D]
[7] Additionally, it's worth noting that GM technology is highly accessible to small as well as large companies, and to university and public sector researchers, who have already developed GM crops of great potential value, such as virus-resistant papaya, insect-resistant vegetables for India, and vitamin-enriched "golden" rice.

[E]
[8] A recent Belgian study reported that "on average, two-thirds of the global benefits are shared'downstream', i.e. among domestic and foreign farmers and consumers, while only one-third is extracted 'upstream', i.e, by biotechnology developers and seed suppliers."
[9] In addition, a study published by Terri Raney, senior economist of the Food and Agriculture Organisation of the UN, recently pointed out: "The benefits are shared by consumers, technology suppliers and adopting farmers, although non-adopting farmers are penalised as their competitors achieve efficiency gains they are denied."

[F]
[10] With that sentiment in mind, Britain should be pursuing a policy that recognises the demonstrable benefits that agricultural technology, including GM, can bring.

[G]
[11] If we are serious about allowing UK farmers *to produce more food at a fair price to consumers while safeguarding our natural resources,* they must be given the **freedom to choose** modern, efficient farming methods based on tried and tested science.

[H]
[12] Sadly, the article gave voice to those scaremongering about GM crops. (particularly those who question the crops' safety, even though more than two trillion meals containing

GM ingredients have been consumed, without a single substantiated example of harm to health)
[13] We need science-based decision-making, something our politicians clearly understand. The world has moved on, and it's time the anti-science activists did too.

Figure 9.4 Tracing of other cohesive chains in the pro-GM argument.

9.9 Mapping 1 (local): Evaluating the argument's coherence relative to the ethical subjectivity

9.9.1 Orientation

In chapters 7 and 8, choice of categories to focus on in the argument was straightforward because of the lexical similarity with key categories mined from the counter-discourse (i.e. 'Sun readers' and 'young daughter Sun readers'; 'religion' and 'religious belief' respectively). For the pro-GM argument, I will also highlight such hyponymic and meronymic relations (see Definition Box 9.1). But I cannot always rely, for this public sphere argument, on lexical similarity to guide judgements of where one category is subsumed by another. Sometimes a semantic judgement is required. To reduce arbitrariness as much as possible in choice of categories to map, I draw on reputable definitions of terms where appropriate. Lastly, the mapping is rhizomatic and thus non-predestined – directed by the results of data mining, I am re-entering the cohesive structure at multiple points which I could not have predicted given my knowledge of the anti-GM standpoint was previously spartan.

> ## Definition Box 9.1 Hyponymy and meronymy
>
> **Hyponymy**: 'Child Sun reader' is a *type of* 'Sun reader'. In linguistics, the term hyponomy is used to describe this 'type of' semantic relation. 'Child Sun reader' is said to be a hyponym of 'Sun reader'. The bigger category in this semantic relation is referred to as the *hypernym* or *superordinate* category. So, 'Sun reader' here is the superordinate.
>
> **Meronymy**: It would be fine to say 'Islam' is a type of religion, but it would hardly make sense to say that 'religious belief' is a type of 'religion'. This is because 'religious belief' is, instead, a *part of* the larger category of 'religion'. In linguistics, the term meronymy is used to describe this 'part of' semantic relation. 'Religious belief' is said to be a meronym of 'religion'. Other meronyms of 'religion' would be 'religious art', 'prayer' and 'religious symbols'. The bigger category in this semantic relation is referred to as the *holonym*. So, 'religion' here is the holonym.

9.9.2 'Impact our agricultural practices have on the environment' [2]

The first thing to mention is that the concern of potential contamination of non-GM plants by GM pollen is not addressed in Little's article. Consider the following extract from [2]:

> [2] . . . food security is one of the biggest challenges we face, and we must find ways in which to produce more food while continuing to reduce the impact our agricultural practices have on the environment.

Straightforwardly, 'impact' [2] and 'contamination' can be semantically related since both carry the meaning of cause and effect with 'impact' being the more general term. That is, 'contaminate' is a hyponym of 'impact'. Moreover, relative to the ethical subjectivity, the modifier 'GM' is a collocate deficit in 'agricultural practice' [2] – since this is the most relevant agricultural practice from the perspective of the anti-GM lobby. I indicate semantically-hierarchical relations using double square brackets below and elsewhere:

> [2] . . . food security is one of the biggest challenges we face, and we must find ways in which to produce more food while continuing to reduce the **[impact [contamination]]** our **[agricultural practices [GM agricultural practice]]** have on the environment.

Once specific categories of the Other are thrown into relief, then conflict emerges with what Little intends. This pro-GM author naturally does not intend to say that we need to reduce contamination of the environment by GM agricultural practices! But this is what his argument can be interpreted as saying relative to a key concern of the anti-GM lobby.

9.9.3 Environment [2]

Another replicated keyword that is not addressed in Little's argument is 'biodiversity' and its alleged reduction. Since 'biodiversity' is a more technical term than 'impact' or 'contamination', a definition would help in determining whether or not there is a word, in Little's argument, which can be construed as including it semantically:

> The existence of a wide variety of plant and animal species in their natural environments, which is the aim of conservationists concerned about the indiscriminate destruction of rainforests and other habitats.
>
> (*Collins English Dictionary* – Complete and Unabridged 10th edn, 2009)

'Biodiversity' can, then, reasonably be considered a meronym of 'the environment'. Indeed, the 'United Nations Environment Programme' refers to 'biodiversity' as the 'genetic diversity of the environment'.[16] So when in [2] Little refers to 'reduc[ing]' the impact our agricultural practices have on the environment', relative to the ethical subjectivity 'biodiversity' can be subsumed by 'environment' here:

> [2] . . . food security is one of the biggest challenges we face, and we must find ways in which to produce more food while continuing to reduce the impact our agricultural practices have on the [**environment** [**biodiversity**]].

Similar to the analysis in 9.9.2, a conflict arises for the intention of the argument in respect to the ethical subjectivity – since, presumably, Little would not want to align himself with the anti-GM perspective that GM leads to diminished biodiversity.

9.9.4 Environmental footprint [6]

Relative to the ethical subjectivity, 'biodiversity footprint' can be seen as encapsulated by the concept of 'environmental footprint' [6]:[17]

> [6] . . . (Small farmers) grow (GM crops) because they work contributing to exactly the kind of "sustainable intensification' which the Royal Society called for – producing more food from a lighter [**environmental** [**biodiversity**]] footprint.

Once again, complication emerges because of the counter-discourse standpoint that GM agriculture would *not* lead to a 'lighter biodiversity footprint', but a 'heavier biodiversity footprint'. Moreover, use of 'environmental footprint' by Little can be construed – whether deliberately or not – as vague in not addressing a key concern of the 'anti-GM lobby' [1].

9.9.5 Natural resources [11]

Another category that can be viewed, apropos the ethical subjectivity, as problematising the intentions of the argument is 'natural resources' [11]. Here is a definition:

> **Natural resources**. All "gifts of nature" – air, land, water, forests, wildlife, topsoil, minerals – used by people for production or for direct consumption. Can be either renewable or nonrenewable. Natural resources include natural capital plus those gifts of nature that cannot

be stocked (such as sunlight) or cannot be used in production (such as picturesque landscapes).[18]

Natural resources include those that humans enjoy, such as varieties of fauna and flora. 'Biodiversity', thus, can fall within understanding of the category of 'natural resources'. Indeed, the OECD explicitly links 'biodiversity' to 'natural resources'.[19] Once 'biodiversity' is understood as a natural resource, tension emerges in [11] relative to the ethical subjectivity because of the counter-discourse standpoint that biodiversity is *not* safeguarded by GM:

> [11] If we are serious about allowing UK farmers to produce more food at a fair price to consumers while safeguarding our [**natural resources [biodiversity]**], they must be given the freedom to choose modern, efficient farming methods based on tried and tested science.

On the above definition, 'natural resources' [11] could also be seen as including 'non-GM plants'. The differentiation of non-GM plants from GM plants is important for the anti-GM lobby. Another important differentiation for the anti-GM lobby is non-GM seed from GM seed. The argument does not address concerns over 'farmers' rights' or 'seed sovereignty', the traditional ownership right of farmers to 'non-GM seed' – another 'natural resource'. I highlight how 'natural resources' also subsumes 'non-GM plants' and 'non-GM seeds' in [11]:

> [11] If we are serious about allowing UK farmers to produce more food at a fair price to consumers while safeguarding our [**natural resources [non-GM plants] [non-GM seeds]**], they must be given the freedom to choose modern, efficient farming methods based on tried and tested science.

Since the 'anti-GM lobby' alleges that non-GM plants/seeds are not 'safeguarded' by GM agriculture, once more conflicts arise in respect to the ethical subjectivity.

9.9.6 Summary

While Little addresses some concerns of the 'anti-GM lobby', e.g. the concern that GM crops are harmful to human health, there are general disquietudes across anti-GM perspectives which he does not address. Once certain general categories in the argument – 'impact on environment', 'environment', 'environmental footprint' and 'natural resources' – are shown to be holonyms/hypernyms of recurrent specific categories associated with the standpoint of the anti-GM lobby, we can see these general categories as

stray signifiers in the argument, inadvertently problematising its intentions. Another way of looking at things is to say that the general categories of 'impact on environment', 'environment', 'environmental footprint' and 'natural resources' can be said to obfuscate – whether intended or not – the aforementioned specific categories important to the ethical subjectivity.

9.10 Mapping II (global): Evaluating the argument's coherence relative to the ethical subjectivity

I now come to the global mapping of the cohesive structure of the argument on the basis of the local mapping I performed in 9.9.

9.10.1 Choose [5, 11]

Consider the lexical cohesion between [5] and [11] via 'farmers/ farming' (highlighter) and 'choose' (bold):

[C]
[5]. . . . GM technology has done much to empower small farmers – over 90% of those who **choose** to use GM crops are small-scale farmers living in developing countries.

[. . .]

[G]
[11]. If we are serious about allowing UK farmers to produce more food at a fair price to consumers while safeguarding our natural resources, they must be given the **freedom to choose** modern, efficient farming methods based on tried and tested science.

Figure 9.5 Coherence problems: freedom to choose GM.

Before constructing the ethical subjectivity, I read the above as follows: if UK farmers were allowed the same freedom to choose [11] GM as developing world farmers, then agnate benefits would accrue to UK farmers.[20] Now, from information accrued in co-texts for the keyword collocations, 'farmers' rights' and 'food/seed sovereignty', I understand there are allegations of manipulation and coercion surrounding the implementing of GM agriculture. Thus, my previous coherence unravels relative to the counter-discourse. That is to say, there is a salient tension in Little arguing that UK farmers should be given the 'freedom to choose' GM [11] when, allegedly, many developing world farmers are not in a position to choose this technology freely.

9.10.2 'Environment' [2], 'environmental footprint' [6] and 'natural resources' [11]

Another coherence problem in the argument, apropos the ethical subjectivity, relates to 'environment' [2], 'environmental footprint' [6] and 'natural resources' [11]. This semantic linkage helps sustain a key point of the argument (italics below) that GM can help 'produce more food' whilst reducing negative effects on the environment:

[B]
[2] . . . food security is one of the biggest challenges we face, and we must find ways in which to *produce more food while continuing to reduce the [impact [contamination]] our agricultural practices have on the [environment [biodiversity] [non-GM plants]]*.

[C]
[6] They (small farmers) grow them because they work contributing to exactly the kind of "sustainable intensification" which the Royal Society called for – *producing more food from a lighter [environmental [biodiversity]] footprint*.

[11] If we are serious about allowing *UK farmers to produce more food at a fair price to consumers while safeguarding our [natural resources [biodiversity] [non-GM plants] [non-GM seeds]]*, they must be given the freedom to choose modern, efficient farming methods based on tried and tested science.

Figure 9.6 Coherence problems: GM produces more food whilst being kind to the environment.

However, the cohesion between 'environment' [2], 'environmental' [6] and 'natural resources' [11] unravels relative to the counter-discourse because:

i)   the issues are much more specific and differentiated than Little's choice of representation (9.9);
ii) there are problems for the intentions of Little's argument (9.9).

In turn, Little's point that GM can help 'produce more food' whilst reducing negative effects on the environment is attenuated relative to habitual elements of the counter-discourse.

However, this cohesion is entangled with my previous data-driven problematising of the argument's intentions apropos:

- '(freedom to) choose' [5, 11]);
- the notion that GM can produce more food whilst reducing negative effects on the environment [2, 6, 11]).

In turn, the idea progression is adversely affected.

9.10.4 Map 'mash-up'

Maps generated on the basis of different digital supplements can be combined, making the analyst aware of connections between the different deconstructions that they have performed. As illustration, in Figure 9.8, I have combined a deconstructive map of the pro-GM argument from Chapter 5 which used the large corpus, UKWaC ('Map 1') and deconstructive maps from this chapter ('Map 2a' and 'Map 2b'). In creating 'a map mash-up', Figure 9.8 thus develops Figure 9.7 which, in turn, refreshes

[C]
[5] In fact, GM technology has done much to empower small farmers – over 90% of those who **choose** to use GM crops are small-scale farmers living in developing countries.

[6] They (small farmers) grow them because they work contributing to exactly the kind of "sustainable intensification" which the Royal Society called for – *producing more food from a lighter [environmental [biodiversity footprint]]*

MAP **2a**   MAP **2b**

[G]
[11] If we (UK) are serious about allowing UK farmers *to produce more food at a fair price to consumers while safeguarding* our (UK) *[natural resources [biodiversity] [non-GM plants] [non-GM seeds]]*, they (UK farmers) must be given the **freedom to choose** modern, efficient farming methods based on tried and tested **science**.

MAP **1**

[H]
[13] We (UK) need **science-based** decision-making, something our (UK) politicians clearly understand. The world has moved on, and it's time the (UK) anti-**science** activists did too.

Figure 9.8 'Mash-up' of deconstruction maps of the pro-GM argument relative to an ethical subjectivity and discursive subjectivities.

appreciation of quakes in the argument. Or in Deleuzian-Guattarian terms, the Figure 9.7 deconstruction is deterritorialised. Sentence 11 emerges as a key spot in the deconstruction. This is because I now appreciate that the proposition in sentence 11 is problematised in two interconnecting directions. Not only is it ironic that UK farmers are asked to be given the freedom to choose modern farming methods, when this is allegedly not always a free choice for developing world farmers, but it is a choice based on a notion – 'tried and tested science' – whose credibility is questionable.

9.11 Conclusion

In this chapter, I have conducted an evaluative analysis of Little's public sphere argument in relation to an ethical subjectivity created around key anti-GM concerns. This transformed my previously 'naïve' reading. I was able to see that the 'excluding discourse' works by semantically subsuming – and thus obfuscating whether intended or not – categories associated with specific concerns of the 'anti-GM lobby' which Little does not address. This problematises Little's argument: tensions emerge within it relative to the counter-discourse and it can be shown, in parts, to mean something other than intended. It follows that Little's argument is a straw man. Specifically, it can be considered to be both a hollow man in fabricating GM opposition as anti-science, and a selective straw man in, for example, only addressing concerns about GM and human health but not GM and the environment (2.3.4). Lastly, in this chapter, I have enriched and extended the approach of this book via contact with the ideas of Gilles Deleuze and Félix Guattari. In one enrichment, I showed how an ethical subjectivity can be created in a way which cuts down on the analyst's graft since it is rhizomatically generated via keyword analysis of different digital supplements. Such a procedure also reduces partiality and selection bias.

Notes

1 Following Deleuze's death, Derrida took to using *A Thousand Plateaus* in his teaching (Peeters, 2013: 476).

2 This is the ethics of the artist, is it not. From the self-recreator *par excellence*: '[Otherness] was my key word all the time, and otherness is maybe more of a continuity through much of my music'. Available at http://www.out.com/music/2016/1/11/david-bowie-obituary [accessed July 2016].

3 See also Derrida's 'Enlightenment Past and to Come' where he describes Europe 'as a proud descendant of the Enlightenment past and a harbinger of the new Enlightenment to come' (Derrida, 2004c). Jürgen Habermas, who sees his own work as continuing the Enlightenment project, was initially suspicious of Derrida's outlook (Habermas, 1987). Yet, towards the end of Derrida's life, Habermas came to appreciate their common Kantian roots: 'Apart from all the politics, it is the philosophical reference to an author like Kant that connects me to Derrida' (Habermas quoted in Thomassen, 2006: 3).

4 For a lucid exposition of how Deleuze modifies Kantian tools for a revisioning of the Enlightenment, see Groves (2001). Willatt and Lee (2009) usefully shows the wide range of connections between Deleuze and Kant.

5 On Derrida's complicating and complicated relationship with Kant, see Callinicos (2008) who describes Derrida as pursuing 'a philosophical project that is recognizably post-Kantian in the kinds of problems and themes that it addresses but that is resolutely non-Kantian in how it approaches them' (Callinicos, 2008: 83).

6 Deleuze and Derrida were very singular individuals so, naturally, there is not complete compatibility in their thinking. Their styles of expression and vocabularies were different. Moreover, there may be reasons not to view Deleuze and Derrida as compatible vis-à-vis the transcendence-immanence dichotomy (Smith, 2003).

7 If the same reference corpus is used, corpora of different sizes can be meaningfully compared with one another. A word of caution, though. Log likelihood values are dependent on the size of both corpora, not just the reference corpus. This means that one must be careful in comparing statistical significance across different corpora. Paul Rayson (p.c.) advises that, for comparison to have statistical validity, aside from using the same reference corpus, the sizes of the corpora being investigated should not be out by a factor of 10. All three corpora created in this chapter are within this parameter.

8 Inclusion of these values is not meant to reflect a comprehensive quantitative investigation of anti-GM discourse. Such an investigation would require i) much larger amounts of data; ii) a different research strategy involving principled sampling of different dimensions of anti-GM discourse. This kind of investigation would allow an analyst to appreciate not just consensus anti-GM discourse, but also differences of opinion within this discourse. In contrast, the technique of this chapter is much less likely to be able to establish the latter. This is because it focuses only on the most salient keywords which, in turn, are more likely to reflect consensus discourse.

9 The whole argument and discussion forum appended to it can be found at: http://www.guardian.co.uk/commentisfree/2009/oct/29/gm-food-security-farming [accessed July 2016].

10 'La Via Campesina/Australian Food Sovereignty Alliance' (published 16 November 2011). Available at http://www.viacampesina.org/en/index.php/main-issues-mainmenu-27/food-sovereignty-and-trade-mainmenu-38/1119-la-via-campesina-australian-food-sovereignty-alliance [accessed July 2016].

11 '1st Encounter of Agroecology Trainers in Africa Region 1 of La Via Campesina' (published 13 July 2011). Available at http://www.viacampesina.org/en/index.php/main-issues-mainmenu-27/agrarian-reform-mainmenu-36/1071-1st-encounter-of-agroecology-trainers-in-africa-region-1-of-la-via-campesina [accessed July 2016]. See also Engdahl (2007) as well as: http://www.theguardian.com/environment/2011/oct/19/gm-foods-a-biotech-revolution   [accessed   July 2016].

12 *Declaration of the Forum for Food Sovereignty*, Nyéléni Village, Sélingué, Mali (27 February 2007). Available at http://nyeleni.org/spip.php?article290 [accessed July 2016].

13 I used the free trial version of Visual Web Spider, Available at: http://www.newprosoft.com/web-spider.htm [accessed July 2016]. This software also filters html in text accrued from webpages.

14 'The International Planning Committee for Food Sovereignty is an international network that brings together several organizations representing farmers, fisherfolks and small and medium scale farmers, agricultural workers and indigenous peoples, as well as NGOs, providing a common room for mobilization that

holds together local struggles and global debate.' Available at https://www.tni.org/en/network/international-planning-committee-food-sovereignty [accessed July 2016].

15 Searching for 'sovereignty' alongside 'GM' also substantially reduces the prospect of retrieving web-texts that are unrelated to genetically modified agriculture, such as texts about 'General Motors' (GM).

16 'Viumbe hai: African Cities, Ecosystems, and Biodiversity' (p. 2). Available at http://www.unep.org/urban_environment/PDFs/biodiversity-brochure.pdf [accessed July 2016].

17 Available at http://www.footprintnetwork.org/en/index.php/GFN/page/the_footprint_and_biodiversity/ [accessed July 2016].

18 Available at http://www.worldbank.org/depweb/beyond/global/glossary.html [accessed July 2016].

19 The OECD works 'to ensure the sustainable use and conservation of biodiversity and natural resources.' Available at http://www.oecd.org/env/resources/theoecdandbiodiversityintheinternationalcontext.htm [accessed July 2016].

20 There are currently regulations which prohibit commercial growing of GM crops in the UK. This was also the case in 2009 when Little wrote his argument, which is why he was calling for UK farmers to be given the freedom to choose GM agriculture. See: http://www.genewatch.org/sub-568547 [accessed July 2016].

Part IV

Reflection

Posthuman subjectivities and critical reading

In the final two chapters, I ingather and reflect upon a variety of issues related to the deconstructions of the public sphere arguments in Parts II and III. In Chapter 10, I contemplate methodological issues. In doing so, I further enrich elements of the method. In particular, I flag the strategy as a mode of reading which uses posthuman subjectivities. In Chapter 11, I highlight the deterritorialisations of the book.

Chapter 10

Methodology

10.1 Summary

10.1.1 Digitally-driven critique of public sphere arguments

A public sphere argument may appear cohesive (on the page) and coherent (reading for sense) because of relevant information which has been excluded. Key exclusions could be the habitual way of discussing the topic of the argument or important elements in the standpoint which the argument attacks. I have shown how exclusion – which may be deliberate or accidental – can work in two ways:

- complete omission;
- occlusion where a general category subsumes and thus might also be said to obfuscate a specific category.

The initial procedure is to trace systematically major cohesive chains in an argument. This is important since it enables us to appreciate accurately how the argument has framed its topic and/or the standpoint of the criticised (SotC) as well as to avoid missing aspects of an argument's framing which are potentially deconstructible. Digital text analysis tools help reduce error in the tracing. Following this, the critical procedure is to make visible relevant absences in the text of the public sphere argument. Should the argument's cohesion unsettle as a result, then the argument reduces in coherence and thus credibility. It is possible also to deconstruct an argument on coherence grounds where cohesive instability is not a factor. That is to say, after making a relevant absence visible, tensions can emerge in the argument – tensions which affect its coherence – regardless of whether it retains cohesion.

Data-driven rhizomatic mapping of a public sphere argument deterritorialises the tracing of the argument's cohesive territory. To map an argument is to deconstruct and thus critique it. Loose impressionistic deconstruction of an argument is obviously less convincing than one based on rigorous procedures. This is another reason why systematic tracing of the argument's

cohesive structure is important as well as scrupulous use of corpus linguistic method and quantitative data.

10.1.2 Strands and subjectivities

I have demonstrated two different critical deconstructive strands which can be twined. The first uses a very large corpus as a norm of language use and compares the language use of a public sphere argument with this. This enables the analyst to notice if there are marked departures from how a particular topic is discussed habitually, regardless of how it is evaluated. Once normal collocation for discussion of a particular topic is bestowed on the argument, the ensuing surpluses or deficits of collocation may lead to the argument deconstructing. To conduct this kind of deconstruction, the analyst creates *discursive subjectivities*.

There is a second strand, which relates explicitly to the dialectical dimension of argument. In this strand, the analyst finds out whether or not the argument accurately represents the key concerns of an Other who is characterised, criticised or potentially affected for the worse by the outlook in the argument. Such engagement with the perspective of the Other – becoming-Other for the duration of the analysis – helps to interrupt Self and off-centre the analyst. To conduct this kind of deconstruction, the analyst creates a *standpoint subjectivity*. The second strand could be used, in principle, on any argument which has two sides. For such an engagement, discursive subjectivities could be twined with the standpoint subjectivity.

I regard this book as an attempt to make a contribution to critical thinking in helping evaluation of public sphere arguments in relation to discursive and standpoint subjectivities. Part III focused on a particular type of standpoint subjectivity – *ethical subjectivity* – which I see as relating to CDA. Since an ethical subjectivity is a type of standpoint subjectivity, I thus see the CDA focus of this book as falling under critical thinking.

The logical, rhetorical and dialectical dimensions of arguments can intersect. So, while the second strand orients explicitly to the dialectical, this does not mean that the rhetorical or logical dimensions are not worth reflecting on. Since deconstructions affect the stability of cohesive structure, they may render defective an argument's rhetorical strategies and/or unsettle its logical structure even if this logical structure has not been fully disclosed by the analyst. Moreover, the logical dimension may be a consideration vis-à-vis the content of a digital supplement. For instance, in Chapter 7 I used a set of reasons given by supporters of NMP3 to deconstruct the cohesion/coherence of the anti-NMP3 public sphere argument. However, while reasons are always a consideration when encountering an argument, in this book comprehensive and systematic reconstruction of an argument's logical structure has not been a focus (11.2).

10.1.3 Appropriations and enrichments

Many of the ideas for the strategies of this book are critically appropriated from Derrida's philosophy of language (which I regard as problematic) as well his modes of reading (which I regard as important). I laid out a number of appropriations at the end of Chapter 5, so there is no need to repeat those here. However, after Chapter 5, I appropriated other ideas from Derrida. I showed how deconstruction of arguments can be undertaken by:

- using a number of different manually compiled supplements not just ready-made corpora (chapters 7, 8 and 9);
- revealing where a metaphor betrays the text's intended meaning (Chapter 6).

In further appropriations of Derrida, I showed how:

- deconstructing a public sphere argument via the content of its weblinks was akin to reading a text via its footnote (Chapter 7);
- responding to new possibilities of difference in a text can show how the text exceeds its author's intentions: I highlighted how categories in a public sphere argument can *subsume* and thus obfuscate specific categories and category differentiations important to the SotC which, in turn, can complicate the intentions of the argument (chapters 7 and 9).

In Chapter 9, by drawing on ideas from Deleuze and Guattari, I enriched understanding of digital deconstructive procedures, as well as the method for generating an ethical subjectivity. In line with a Deleuzian outlook, this was produced 'immanently'. In other words, the ethical subjectivity was developed in an emergent manner – I did not employ a pre-existing and thus 'transcendent' ethical subject. Indeed, all the subjectivities of this book have been produced immanently. A key Deleuzian/Guattarian enrichment of the ethical subjectivity is its nomadism. Students roam across the stupendous resource of the web to discover public sphere arguments on topics with which they are (mostly) unfamiliar. In turn, they can compile appropriate digital supplements to explore possible tensions in an argument relative to i) how it describes the standpoint it attacks/characterises or ii) a relevant dissenting standpoint which is ignored in the argument.[1]

10.1.4 Benefits of creating subjectivities to train on arguments

A number of benefits ensue from these kinds of critical argument engagement:

- discovery or expanded awareness of different domains of debate which takes place in a critically focused manner;
- insight through transformation – often a pleasurable experience; we are able to see where our initial reading was naive/shallow relative to the key concerns of a relatively powerless Other and/or normal collocation for discussion of a topic;
- intellectual satisfaction and empowerment from highlighting straw man arguments;
- through deepened ethical responsiveness, our rhetorical sensitivity is sharpened, e.g. we are in a better position to see where categories in the argument are insufficiently specific and differentiated (i.e. they are totalised) relative to the Other and, in turn, where they impede appreciation (whether intended or not) of specific concerns of the Other;
- since the analyst's unpredictable interruption of Self via showing digital hospitality to a (mostly) unfamiliar Other leads to a non-predestined deconstructive reading, this helps to escape routine performance of critical Self;
- consciousness is refreshed/expanded since we have challenged ourselves to decide a position on a new Other;
- knowledge generation: we now have some quantitative facts about what is important to a relatively powerless Other and/or collocation for how a topic is generally discussed regardless of how it is evaluated. This is useful for our contributing, in an informed way, to relevant debate in the future.

What might happen after an argument deconstruction which uses an ethical subjectivity?

10.2 After deconstruction

10.2.1 Ethical responsiveness does not lead to political commitment

We may have started from nomadic and open digital hospitality. We used the resources of the web to expand our horizons and find out about key concerns of a previously unknown socially/economically relatively powerless Other. But having highlighted instabilities in the coherence of a public sphere argument relative to a scrupulously founded ethical subjectivity, perhaps in tandem with discursive subjectivities, it is time for us to assert critical independence. And this might mean the following: while dialectically we derived satisfaction from revealing a straw man argument, and ethically were happy to show hospitality to a new Other and have Self unpredictably interrupted and horizons expanded, all the same we do not

wish to align with the Other's desire for political change. We may have good reasons. Just because texts are produced by a relatively powerless Other or their supporters, this does not necessarily make their reasoning sound. Despite allowing the guest into our home, and bending over backwards to see their point of view, we may conclude that it is time to end the experiment and for our guest to leave. I should say, though, that our unconditional hospitality was not in vain. The benefits flagged in 10.1.4 still apply, particularly that the interruption of Self has refreshed consciousness as well as extended knowledge of debate domains. Moreover, welcoming a challenge of our core values by a different Other is a gesture which can work productively in compelling us to understand and articulate our values better. And, echoing the above, while an ethics of hospitality has an injunction to orient to the Other, this cannot be an absolute injunction. We must be able to act autonomously and make judicious choices, on the basis of extant knowledge, about Others we wish to 'open the door' to, making autonomous decisions about how far we are willing to Self-transform or, the very opposite, about what is non-negotiably core to our values and when we wish to 'shut the door'. In an ethics of hospitality, heteronomy *and* autonomy are in fact constant companions.

10.2.2 Ethical responsiveness leads to political commitment

But what if we have no reason to reject the Other's standpoint? The injunction of this method to show unconditional digital hospitality to a socially/economically relatively powerless Other means direct engagement with an argument from the Other's viewpoint is fostered. And, because Self has been interrupted in a focused manner, there is the prospect of another transformation – we potentially choose a new political commitment. Merely finding out about a socially/economically relatively powerless Other is, I would argue, less likely to lead to this transformation. Political commitment to an Other is more likely to ensue when we make the effort to 'get under their skin' and appreciate what makes 'their skin crawl'. Or put another way, political sympathy may follow when ethical empathy has been instituted. So, we could add another bullet point to 10.1.4:

- the benefit is not just for us. There may be gain for the relatively powerless Other if we end up aligning politically with their outlook.

10.2.3 Ethically enriching an existing political commitment

Instead of starting from fairly open and nomadic digital hospitality, we might begin more narrowly. We choose a public sphere argument because it criticises a relatively powerless Other which we happily align with

politically, but have a weaker ethical responsiveness to. For instance, this describes my earlier position on 'Page 3' (Chapter 7). For a long time, I saw 'Page 3' as tawdry commercialism. But my position lacked ethical responsiveness to the Other. I judged the anti-Page 3 argument via my own pre-formed political subjectivity only, without making myself properly aware of the mass of key motivations of those (primarily women and girls) who opposed it. That would have taken a fair amount of effort before the social web. Now I can do this much more easily.

10.3 The posthuman

10.3.1 Orientation

My morning train journey to Elephant and Castle confirms the everyday foldings of humans in intelligent technology: carriages are tetris-ed with headphoned gamers, e-book readers, mobile phoners, tablet social media checkers, email responders, earphoned music listeners. A mash of work and leisure – often in a single brain. Those who have tapped their work email app are at the virtual office, at work whilst journeying to work. This plugged-in-ness does not, of course, mean we have transformed into cyborgs. But neither are we only human when flesh coadjutes with intelligent machines. In these moments, we are '*post*human'. In this ontological condition, human subjectivity is made different – complicated, distributed, enhanced by the interpenetration of intelligent technology. Derrida's logic of the supplement has grip here. On the one hand, the mobile or wearable device is outside us in being an addition to the human. But they are also 'inside' the human in making up for limitations of human memory, knowledge and skills.

10.3.2 Posthumanism

Contemplation of the posthuman condition is known as *posthumanism*. This emerging outlook considers and explores how advances in intelligent technologies or genetic discoveries – such as the sharing of genes across different species – lead to a decentering of what it means to be human and how we relate to the world. Posthumanism thus rethinks i) *humanism*, the assumption that humans are clearly distinct and autonomous from machines and other animals and that our experience of individual consciousness is distinct from the same; ii) *anthropocentrism*, where it is automatically assumed that *homo sapiens sapiens* is at the centre of the world and thus more important than other animal species and machines; iii) *human instrumentalism*, that humans have the right to exploit the natural world. Posthumanist scholars are critical of humanism and the individualistic subject associated with it. They seek to:

move beyond the traditional humanist ways of thinking about the autonomous, self-willed individual agent in order to treat the human itself as an assemblage, co-evolving with other forms of life, enmeshed with the environment and technology.

(Nayar, 2014: 4)

There is an ethical and political basis to this decentering of the human. The individualistic human subject has made gargantuan capital from the natural world without properly managing the effects of this exploitation. This negligence has led to the Anthropocene – a period on earth where humans have altered the climate for the first time. As one step in helping remedy this potentially catastrophic state of affairs – for both humans and non-humans – posthumanists propose a non-anthropocentric existence on earth in which humans are dynamically interconnected with other species, and also machines, in a complex decentered network.

Posthumanism, like any theoretical outlook, is not homogeneous. This is especially so for posthumanism with its vast scope – 'the human' – and its rich, varied, disparate influences and strands (e.g. alien phenomenology, animal studies, cybernetics, Deleuzian rhizomatics, Derridean deconstruction, evolutionary biology, genetics, microbiology, new material feminism, object-oriented-ontology, post-colonialism, queer theory, speculative realism). It is hardly surprising that posthumanism is 'a concept in motion, an active theoretical assemblage' (Taylor, 2016: 6; 21). Despite the heterogeneity in posthumanism, there are some fairly common principles and perspectives as well as oft-cited sources and thinkers. A touchstone text for posthumanist scholars is Donna Haraway's *A Cyborg Manifesto*. Haraway's (1991) metaphor of the cyborg is an instrument for confronting 'gender essentialism' – that there is an inherent gender identity passed down through biology. The cyborg metaphor also contests more generally the distinctions between the human and inhuman, organism and machine. This metaphor is, in effect, a deconstruction of the category of the human. And, since deconstruction of the binary pair of human/inhuman is a typical feature of posthumanism, it is not surprising that Derrida is referenced frequently in posthuman studies (e.g. Herbrechter and Callus, 2008 and Wolfe, 2010). Once the complicating and inventive presence of Derrida makes an appearance, posthumanism is not going to be a straightforward 'after-humanism'. Rather as Neil Badmington says it can be a recognition that posthumanism 'inhabits' humanism and thus in contaminating the 'human' problematises this notion, potentially opening it up to new actuality (Badmington, 2004: 151). Put another way, posthumanism can be an injunction to appraise those components of humanism which are worth retaining and reinflecting for a posthuman age. It does not have to mean jettisoning humanism wholesale.

Another key source text in posthumanism is *How We Became Posthuman* by N. Katherine Hayles. For her, importantly:

the posthuman view configures human being so that it can be seamlessly articulated with intelligent machines. In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals.

(Hayles, 1999: 3)

Because of manifold interpenetrations of human and intelligent technology in different contexts, she sees the posthuman subject as a fluid, hybrid entity:

an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction.

(Hayles, 1999: 3)

That is to say, the posthuman subject is protean and emergent rather than unified and stable. Rather than being a singular, bounded and distinct individual, the posthuman subject can embody different identities and perlustrate the world from multiple vantages.

Hayles views the posthuman not as the end of the human but as the beginning of a new conception of the human (Hayles, 1999: 286). Holding that the experience of embodiment of the human is still a characteristic of the posthuman, she refers to absorption of the digitalised virtual world into our bodily experience, in our use of intelligent technologies, as 'embodied virtuality'. As Hayles sees it, it is the very 'embodied virtuality' of the posthuman which affords the potential for producing *new subjectivities* (Hayles, 1999: *passim*). Indeed, she views this benefit as the crux of the posthuman. And, importantly, for her these are subjectivities which do not play out the mistakes of the humanist and thus autonomous subject whose 'manifest destiny [is] to dominate and control nature' (Hayles, 1999: 288). In the posthumanism she promotes, human subjectivity is distributed across an assemblage in co-evolution with machines and other animals. Pramod Nayar encapsulates this perspective nicely:

This distributed subjectivity paradigm in posthumanism treats the human form as an *interface* rather than a self-contained structure, closed off and independent.

(Nayar, 2014: 64)

Another theorist who stresses the embodied nature of the posthuman and its technologised capacity for creating novel subjectivities is the Deleuzian philosopher, Rosi Braidotti. Digital technologies:

both capture and process forces and energies, facilitating interrelations, multiple connections and assemblages. They stand for radical relationality and delight as well as productivity.

> The 'becoming-machine' understood in this specific sense indicates and actualises the relational powers of a subject that . . . bears a privileged bond with multiple others and merges with one's technologically mediated planetary environment. The merger of the human with the technological results in . . . radical transversal relations that generate new modes of subjectivity . . .
>
> (Braidotti, 2013: 92)

And, since digital technology allows Self to interface with a multitude of new Others, in Braidotti's notion of the posthuman, bio-mediation of technology leads to the creation of new subjectivities which have an ethical basis:

> technological mediation is central to a new vision of posthuman subjectivity and that it provides the grounding for new ethical claims.
>
> (Braidotti, 2013: 90)

> The ethical imagination is alive and well in posthuman subjects, in the form of ontological relationality. A sustainable ethics for non-unitary subjects rests on an enlarged sense of inter-connection between self and others . . .
>
> (Braidotti, 2013: 190)

10.3.3 Posthuman subjectivities and pedagogy of this book

I concur with Hayles' vision of the posthuman as the affordance of new subjectivities through use of intelligent technologies. This is why I see the discursive and ethical subjectivities of this book as posthuman subjectivities. That is to say, use of the web, digitised corpora and digital text analysis affords the creation of new subjectivities which rely on machinic supplementation – hence *posthuman*. Production of these subjectivities in a pre-web and pre-digital tools era would be very challenging if not impossible. Echoing Braidotti's characterisation of the posthuman, the subjectivities of Part III have 'an enlarged sense of interconnection between self and others' apropos intelligent technologies and ethical imagination; both discursive and ethical subjectivities 'bear a privileged bond with multiple others' since they rely on software to capture and process texts authored by multiple authors, which in turn furnishes insight into habitual 'interrelations' of language use (i.e. collocation, colligation and semantic preference) apropos topic and standpoint.

The stress on 'multiple' is key here, particularly in view of the advance of web-based social media where readers also have the opportunity to be writers and make their opinions publicly available. Ethical subjectivities, thus, do not have to include only the positions of the initiators of a political campaign. They can also include the positions of its supporters who, if the

campaign gains traction, should substantially outnumber initiators. Since the ethical subjectivity is based on the aggregate of a large number of affiliates, this confers quantitative authority on it – much more difficult to achieve before the social web. Discursive subjectivities carry quantitative clout also, afforded by intelligent technologies and the sheer volume of digitised text available on the web.

Given the emphasis on multiple texts, discursive and ethical subjectivities have a breadth which surpasses the range of an 'ordinary' individual reader. They do not coincide with a single reader's subjectivity. Instead, they harmonise with prototypical discourse where single authored texts have been blended into a broad set of voices via the concentrating power of the software. The quantitative clout of these subjectivities thus emanates from the non-human. As *generalised* subjectivities, whose generalisability is dependent on machines, discursive and ethical subjectivities are not individual human subjectivities. Moreover, in the case of ethical subjectivities created from web-based social media, and reflecting what I said above about supporters outnumbering initiators, should the campaign achieve momentum, the motivations and concerns with most weight may not necessarily coincide with those of the campaign's generators. An ethical subjectivity does not automatically harmonise with the subjectivity of one campaign initiator.[2]

While these posthuman subjectivities have a breadth which outstrips real readers, they are necessarily 'shallow' subjectivities. They could not be equivalent to the richness and complexity inherent within the predilections, idiosyncrasies, desires and memories of a single human. They are not intended to be and, indeed, do not need to be so. For the purpose of deconstructive reading of public sphere arguments, the subjectivity of a single human has, by definition, no quantitative authority. Even if the human reader of a public sphere argument possessed accurate intuitions of normal collocation for discussion of the topic they do not (fully) know, or accurate intuitions of the key concerns/motivations of relatively powerless Others they do not (fully) appreciate, they would still need access to relevant corpora to test these intuitions. Otherwise, how would they know they were accurate? Lastly, in making use of posthuman subjectivities in an educational setting for purposes of critically evaluating arguments, this book promotes a posthumanist pedagogy. For other examples of, and reflection on, posthumanist pedagogy, see Gough (2004); Gourlay (2012); Snaza *et al.* (2014); Snaza and Weaver (2015); Knox (2016); Taylor and Hughes (2016).

10.3.4 Machinic liberation from existing subject positions

There is an important flipside to using posthuman subjectivities – they *liberate* us from human(ist) subjectivity:

> Radically immanent philosophical nomadism . . . sponsors a subject
> that is composed of external forces, of the non-human, inorganic or
> technological kind . . . The 'machine-like' in Deleuze's thought refers to
> this dynamic process of unfolding subjectivity outside the classical
> frame of the anthropocentric humanistic subject, re-locating it into
> becomings and fields of composition of forces and becomings.
>
> (Braidotti, 2002: 228–229)

The discursive and ethical subjectivities of this book, based as they are on the
machine of the corpus, dislodge the 'knowing' human(istic) subject as the
centre of its world. Its egoist opining on this, that and the Other – whose
motivations it may not fully know, if it understands them at all – merely
affirms the illusion of this centre.[3]

   The following is important: when I have referred to 'discursive subjectivity'
and 'ethical subjectivity', I may have given the impression that relatively
frequent collocations, keywords and lemmas are equivalent to these subjectivi-
ties. But on their own, these quantitative results are not subjectivities. Instead,
for posthuman subjectivities to be born, a human subject needs to take this
data into Self, to allow Self to be data-driven (Snaza et al., 2014: 50; 52).

10.3.5 Posthuman subjectivity as non-unitary

A posthuman subjectivity is not a unitary subject:

> I define the critical posthuman subject within an eco-philosophy of
> multiple becomings, as a relational subject constituted in multiplicity,
> that is to say a subject that works across differences and is also inter-
> nally differentiated, but still grounded and accountable.
>
> (Braidotti, 2013: 49)

Subjectivities I have created reflect this multiplicity and differentiation
where they are based on the aggregate of many voices and thus different
experiences. For example, the posthuman subjectivity in Chapter 7 contained
two prototypical experiences: the negative experience of women remem-
bering being unnerved as girls by their fathers reading Page 3 as well as the
negative experience of women that Page 3 was objectifying and degrading.

   Braidotti's critique of the unified subject chimes with the anti-humanist
position of earlier thinkers such as Michel Foucault (Foucault, 1970[1966]).
I draw attention to this in order to flag that not everything in posthumanism
is new, especially as other key roots include, for instance, Deleuzian rhizo-
matics, Derridean deconstruction, post-colonialism, feminism and ecopol-
itics. Posthumanists maintain, though, that these established perspectives
'can be better understood by looking through a posthumanist lens'
(Pennycook, 2016: 3).

10.3.6 Super–posthuman subjectivities

Aggregating voices on the web could be used potentially to give substance to a fledgling minoritarian perspective, which could in turn be trained on a relevant public sphere argument. This would be a minoritarian Other which does not have an 'official' website presence yet, since it only exists fragmentarily in comments scattered across social media platforms by posters who communicate in different languages. In the scenario I am painting, posters may be unaware that there is a multitude out there whose opinions overlap with theirs. One 'holy grail' for creating posthuman subjectivities would involve the following: as automated a process as possible where disparate voices can be identified efficiently in a multitude of locations on the web, aggregated into a corpus, translated into a common language, and then analysed for recurrent concepts and collocations in order to index common concerns and outlooks. If it were the case that most, if not all, these posters would never exchange ideas due to language barriers, the subjectivity created would be particularly pronounced in its posthumanity. I mean by this that such a subjectivity would be especially dependent on machines for its development – a 'super-posthuman subjectivity', in effect.

10.4 Methodological issues with tracing cohesion

A reader has to work out the semantic connections between words in a text. The text never yells 'here is a cohesive link'. But this does not make identification of cohesion idiosyncratic. It is a standard literacy skill. You can't read without being able to infer cohesive ties.[4] All the same where texts are long, the reader is unlikely to infer every single possible lexical and grammatical ligature. Long texts can tax us. If we are reading for gist, we skip bits.

Being both sensitive to an argument's specific cohesive structure and tracing major cohesive chains across it are necessary so the analyst can appreciate systematically how the argument has framed its topic and/or the SotC; systematic tracing helps ensure too that subsequent deconstruction of framing is credible. Moreover, it is in an analyst's best interests to identify lengthy cohesive chains *across* the public sphere argument since a local deconstruction is then more likely to have a devastating effect on cohesive structure. Some chains may not be deconstructible. So it is always good to have a number of different chains across the argument to examine.

The labour involved in tracing cohesion is alleviated by digital tools. It is much easier to notice the whole of a lengthy cohesive chain with software assistance than it is on manual reading. In the same way that discursive subjectivities and ethical subjectivities go beyond 'normal human reading', software-assisted tracing of cohesive relations across an argument of at least several hundred words may well be less selective than ordinary human processing of these cohesive relations.

Tracing lengthy cohesive chains *across* an argument is not the same as tracing cohesive chains *comprehensively* in the text. The latter would be very onerous. Any text of reasonable length is saturated with cohesive links as the annotations of even the short fragment from the Tony Blair speech in 2.8.1 show. And, besides, comprehensively tracing the cohesive structure of a public sphere argument may not be necessary if it can be deconstructed on one lengthy cohesive chain. Moreover, choice of cohesive chain(s) to probe for potential deconstruction could be affected by whether or not the analyst is employing a discursive subjectivity or an ethical subjectivity. That is to say, quantitative findings from different corpora may well direct us to focus on different cohesive chains in the argument. Lastly, while use of digital text analysis tools is certainly useful for facilitating systematic tracing of an argument's cohesion, as well as helping to reduce errors in doing so, software can only recognise words and not meaning. Given this limitation, the analyst should eschew subservience to quantitative data when making judgements about meaning, being free instead to group words *semantically* into various cohesive chains.

10.5 Methodological issues with subjectivities

10.5.1 Standpoint (ethical) subjectivities and keyword/lemma selectivity

The reader will have noticed that, for building an ethical subjectivity in Chapter 9, my choice of keywords was selective. This is inevitable given the number of keywords that are habitually generated. This must mean that standpoint subjectivities based on keywords are likely to be partial. And so it follows that different analysts exploring the same corpora could create different ethical subjectivities because they choose different keywords. Though the selectivity and thus partiality of standpoint subjectivities based on keywords is perhaps inevitable, it does not have to follow that these subjectivities are unconvincing. After all, they are based on words which have statistical significance and are common *across* the counter-discourse. By the same token, selectivity of lemmas in construction of a standpoint subjectivity must also be a consideration. Depending on the volume of lemmas generated, the analyst may need to set a threshold for the most common lemmas they will entertain which, in turn, means there may be repeated lemmas which do not make it into the construction of a standpoint subjectivity.

10.5.2 Discursive subjectivities

In Part II, in relation to discursive subjectivities, I was not saying that arguments should *always* use normal collocation when discussing a topic. It is more that if an author avoids doing so – intentionally or not – they run the

risk that bestowal of normal collocation will unravel their argumentative line. It all depends on the topic, the cohesive structure and perspective of the public sphere argument. The first analytical strand is *not* normative then – arguers do not necessarily have to use normal collocation for discussion of a topic. In contrast, the second strand *is* normative since it adheres to the standpoint rule of pragma-dialectics (2.2.3).

10.6 Methodological issues with mapping

10.6.1 Reducing arbitrariness in rhizomatic re-entry into the argument

Mapping of a public sphere argument is necessarily an interpretative procedure. To be as convincing as possible, we need to markedly diminish arbitrariness in our interpretation of faultlines in cohesive structure/ detection of incoherence. The strategies of this book require the analyst to go *outside* the argument to a corpus of texts. The analyst's selection of categories/cohesive chains in the argument for potential deconstruction is directed by the most frequent/statistical results of the corpus analysis. It follows that this selection is not directed by the analyst's own proclivities, and how they happen to play out that day in reading a particular argument, but by relevant *external* quantitative information. In turn, this means that the analyst re-enters the argument non-arbitrarily or, at least, with the chances of this re-entry being arbitrary significantly reduced.

10.6.2 Choice of collocation absence

In a deconstructive analysis, one still has to select from a number of statistically significant collocates from the supplement. Let me consider the analysis in Chapter 5 as illustration. One reason for choosing the statistically significant collocates that I did – *global* (corporate benefits); *environment* (and GM safety); (tried and tested) *technology* – was they were all present as lexis in the argument already; I could see, then, that interventions with these statistically significant collocates were likely to have impact on the argument's cohesion.

10.6.3 Differences in mapping across different analysts

Since analysts are rhizomatically data-driven from outside the public sphere argument, it follows that re-entry points into the same argument may diverge for different analysts. And so different analysts may draw contrasting maps on the same public sphere argument. These could be divergent maps on top of the same categories / cohesive chains or divergent maps

on top of different categories / cohesive chains. Whatever problematising/ deconstruction an analyst conducts, the crucial thing is that it should be semantically justifiable and scrupulously executed so as to diminish arbitrariness as far as possible. And what if the analyst uses more than one digital supplement? Another relevant supplement could just corroborate previous deconstructions. Alternatively, it may open up the argument to further deconstruction. I have stopped at one or two supplements in my analyses because I was, in effect, demonstrating what a student could do for an assignment of a few thousand words. But with the web, there is always the prospect of creating more relevant supplements. In this respect, it could be said that final deconstruction of a public sphere argument is perpetually deferred (*à la* Derrida). Lastly, collaborative deconstruction of an argument by two or more students could result in mapping which is different from what each student working independently might produce. Indeed, through collaborative mapping, students could end up with a rather complex map mash-up.

10.6.4 How much mapping/deconstruction is necessary?

From a scholarly perspective, one might say that the more comprehensive a mapping of a public sphere argument the better. This could mean, as I did in Chapter 8, providing detailed mapping on top of an argument's macro and micro cohesive structure (though it is quite possible that I have not exhausted illumination of faultlines in any of the public sphere arguments in Parts II and III). As I did in chapters 7 and 8, a scholarly approach would also seek to provide *explanation* of where metaphor – as well as relatively general/vague categories – might help to create the impression of cohesive stability through exclusion of specific concepts/collocation normally used by the criticised to express its standpoint.

   From another angle, such comprehensiveness and explanation may not be deemed so necessary by a relatively time-poor reader who has a less scholarly orientation. Consider a reader of an online argument who wants to communicate their critique of it in a short post to the discussion forum underneath that argument. Should the reader produce one deconstruction of the argument which devastates it globally, then the analyst may well experience deconstructive satisfaction. The argument is sufficiently problematised by this killer blow; relative to their time-poor state and specific goals, there is no need to explore the possibility of further deconstruction. In sum, the degree of comprehensiveness of a digital deconstructive analysis will ultimately depend on the expectations of rigour for a particular setting.

10.6.5 Mapping as experiment

Mapping a public sphere argument is an experimental procedure. As with all experiments, failure is a prospect. There is always the possibility of

connecting an argument to a digital supplement and 'nothing comes through'. If the argument discusses the topic using normal collocation or has accurately represented the SotC, then deconstruction is unlikely to be possible. But this failure is a good thing! It means that the argument has passed tests of quality.

10.6.6 Smooth and striated space

A useful complement of the concepts of tracing and mapping is another pair of terms Deleuze and Guattari (1987[1980]) uses – *striated space* and *smooth space*. Striated space is space which is recurrently segmented, criss-crossed with particular ways of thinking, seeing and evaluating associated with the majoritarian. Smooth space is created where striations are disrupted. Crucially, for Deleuze and Guattari, smooth space is where rhizomatic connections are taking place, where becomings are occurring unpredictably and thus striations are disrupted in an unforeseen manner.

Cohesion in a public sphere argument written by a representative of the socially/economically powerful can be conceived as striations across the text. The cohesion of the argument could well striate discussion of the topic and of the relatively powerless Other who opposes the majoritarian view-point and agenda. In tracing the cohesion of a public sphere argument which attacks or characterises a socially/economically relatively powerless Other, or whose outlook potentially affects this Other for the worse, the analyst is thus tracing striated space. For the reader who is not in the know, these striations may appear reasonable – space is thus left striated. In contrast, resisting these striations through the mapping of the argument's cohesive structure leaves smooth space. When I showed how the cohesion of the public sphere arguments of Parts II and III unravelled, as the movement was non-predestined and thus rhizomatic I produced smooth space in these arguments. And, crucially, it was in the creative production of smooth space that I deepened ethical responsiveness to the Other.

Any binary set of terms is never in simple opposition for Deleuze and Guattari. Just like Derrida, Deleuze and Guattari see concepts in terms of *both/and* rather than *either/or*. So, for smooth space and striated space:

> the two spaces in fact exist only in mixture: smooth space is constantly being translated, transversed into a striated space; striated space is constantly being reversed, returned to a smooth space. In the first case, one organises even the desert; in the second, the desert gains and grows; and the two can happen simultaneously . . .
>
> (Deleuze and Guattari, 1987[1980]: 524)

Put another way, any deterritorialisation automatically becomes a *reterritorialisation*. A corollary of this is that analysts should be open to the

possibility that, in time, their mappings of a public sphere argument may need to be refreshed as fresh relevant data comes to light.

10.6.7 Rhizome in practice

For Deleuze and Guattari, the point of philosophy is concept creation (Deleuze and Guattari, 1994[1991]). Philosophical concepts should be 'intensive', meaning that they should lead to the production of new connections and territories. The emphasis in *A Thousand Plateaus* is the stimulus potential of concepts such as rhizome. In practice, however, there are very few pure rhizomes. The horticultural rhizome needs someone to plant it in the first place. Its rhizomatic growth will be hindered by the nature of the soil, which might include chalk, clay, stones and so on. Similarly, the mapping of a public sphere argument cannot be rhizomatic in its purest sense since there needs to be an analyst conducting the mapping. In other words, the mapping is not a completely free, self-generating, wholly unpredictable movement. Still, if the analyst is showing genuine hospitality to a (mostly) unfamiliar Other, the keywords, lemmas, collocations mined from the corpus investigation will data-drive engagements with the argument that they should not have been able to foresee. The mapping of public sphere arguments in this book is well within the spirit of Deleuze and Guattari (1987[1980]).

10.7 Analyst's responsiveness and responsibility

10.7.1 The digital supplement(s)

The digital supplement(s) chosen should always be relevant to the public sphere argument. Analysts need also to be sensitive to the conditions of the counter-discourse. It may be possible that only one digital supplement needs to be mined to ascertain convincingly the counter-discourse. Alternatively, if the ethical subjectivity needs to be built from the counter-discourses of different sub-groups, such as with the 'anti-GM lobby' (Chapter 9), more than one digital supplement will be necessary to mine. To ensure rigour, the publication dates of the texts in the reference corpus should normally be close to when the public sphere argument was written.

It is important also to understand how keywords, lemmas, collocations are being used in the texts of the corpus supplement(s). This is to make sure that what we find in our corpus analyses is fairly well distributed across the texts of our corpus. Otherwise, our argument deconstructions may have a skewed basis if keywords, lemmas, collocations appear recurrently in only one or a few texts of the corpus/corpora.

When we come to mine a digital supplement and compare with the content of a public sphere argument to see if it can be deconstructively mapped, we must be careful to avoid assuming that a lexical absence in the argument is the same as a denotational absence. The public sphere argument may be using different lexis to talk about the same things discussed in the supplement and vice versa.

10.7.2 Justifying qualitative judgements in the deconstructive analysis

Where the analyst highlights how a category in the argument subsumes and thus obfuscates – whether intended or not – a more specific category associated with the standpoint of the Other, they may have to turn to alternative sources of evidence to help their justification. For example, in Chapter 9, I turned to authoritative definitions to justify treating 'biodiversity' as a meronym of 'natural resources'. Moreover, qualitative cotextual judgements may need to be made and justified about which collocate to delete as a surplus meaning. As illustration, in Chapter 5 I deleted 'science' and not 'tried and tested' in 'tried and tested science' because Little explicitly contended that GM had been tried out and seen to work. 'Tried and tested' echoed a key point in his argument and so I retained this phrase.

10.7.3 Corroboration

If we are using a big corpus to create a discursive subjectivity, then corroboration using another large corpus certainly helps. The notions of normal collocation deficit and surplus are not absolute ones since these judgements are performed relative to the corpus employed. So, it is in the interests of the analyst to seek replication where possible. Likewise, if we use a discussion forum as a digital supplement, it is important to seek corroboration of any apparent 'big D' Discourse findings. In Chapter 8, I went to an authoritative encyclopedic source on 'new atheism' to corroborate findings from mining of the discussion forum. Moreover, as I showed in Chapter 9, corroboration may be done via mining of other digital supplements.

One might object that if we have to follow up quantitative analysis of a discussion forum by looking for qualitative corroboration, why bother with quantitative investigation of a digital supplement in the first place? A significant value of the quantitative analysis of a digital supplement, in tandem with quantitative analysis of the preceding argument, is that it can readily alert the reader to potentially relevant conceptual absences or infrequencies in the argument. A qualitative contrast may not throw this into relief so easily. Another advantage of the quantitative contrastive analysis is that, if

a conceptual juncture is revealed between public sphere argument and supplement, this usefully provides the reader with a focused rationale for facilitating potential problematising of the argument. Avoiding keyword/lemma analysis of a relevant supplement and going straight to the outside qualitative data source would mean the reader's focus is more diffuse. They may be less sure of what to look for in the encyclopedia entry, or whatever, in order to enable the argument's problematisation.

10.7.4 Taking account of expert voices

Imagine a public sphere argument denying climate change. Most of us do not have the scientific expertise to credibly contest such an argument and would thus would do well to rely on the testimony of a range of respected climate scientists. Continuing this theme, consider an agricultural community whose land has increasingly vanished through desertification; this community regularly posts online evidence of this desertification and its specific effects on their agricultural livelihoods. Whilst it is important to take account of the voices of communities such as these in opposing an argument denying climate change, cynical self-interested majoritarian voices can always find a way of dismissing the perspective of those without much power. It is far harder to dismiss repeatedly verified scientific measurement, by significant climate scientists, of the retreat of arable land and the increase of desertification as a direct effect of global warming. In creating the most convincing ethical subjectivities apropos certain public sphere arguments, we may need also to give significant weight to the opinions of genuine experts.

10.7.5 Discussion forums and trolling

In discussion forums, where one poster abuses another this is popularly known as 'trolling'. Felicitously, the approach of this book demands taking account of a breadth of response, thus diminishing the significance of individual troll posts. Since keyword analysis of a discussion forum ascertains the critical mass of concepts of *what* posters say, *how* posters communicate – which could include abusive language – should hopefully recede into the background. Basing an ethical subjectivity on multiple texts facilitates an ethics of affirmation which gives the joyless troll a wide berth. All the same, if one does not want to worry about troll posts contaminating a corpus of discussion forum posts, or indeed spam, it is best to choose a forum which employs moderators to remove such posts. Relatedly, the analyst should exercise care over their choice of discussion forum. One attached to a serious and respectable website is more likely to attract thoughtful communication, making it worth mining.

10.8 (Post)human rights, becoming-democratic and ethical responsiveness

10.8.1 Do you need to have left-wing politics to create ethical subjectivities?

Critical Discourse Analysts are usually explicit about their political alignment. Like many in CDA, my econo-politics veer left in that it is clear to me that government has a key role in addressing socio-economic inequality. It is self-evident that there isn't a tight correlation between the effort one invests to develop one's talent and how one is rewarded financially. Some professions cannot be 'monetised' easily (e.g. firefighter). As well as hard work, financial reward is down to the arbitrary behaviour of markets – which can be benevolent for some, but unkind for many others. The accident of having well-off parents with cultural capital, connections and the capacity to finance vocational training which is not funded by the state also plays a large role in financial success in adult life. Ergo, since the wealthy did not become so purely from talent and hard work, they should cherish their good fortune and willingly contribute 'lucky tax' for distribution to the far less fortunate to enable them to realise their potential too. (For instance, a levy on private schools could be redistributed to state schools which serve areas where parents are impoverished and deprived in cultural capital). Everyone should not just be free to fulfil their potential to the best of their abilities, but given the resources to facilitate the greatest possible development. If all children and adults are financially enabled to make the best of their talents and accomplish their goals, including those with great ideas for the creative economy, how could this not benefit a country's GDP? Indeed, the well-off should be relaxed about such a 'lucky tax' since they are beneficiaries of a more successful economy in the long run.

Does the statement above mean that analysts must have left-wing politics to create ethical subjectivities? No. First, the observation that the world is socially and economically unequal is not a political statement. It is a description of life. Politics, at its most impactful, is the action a government takes to change society – which may or may not include addressing inequality. Second, Part III's emphasis was on growing ethical subjectivities, not political subjectivities, in relation to the public sphere argument being engaged with. So, you don't need to have, or take on, left-wing politics to use the approach of this book. You just need to open out to the socially/ economically disadvantaged Other in your engagement with arguments which criticise, characterise or potentially affect the Other's position for the worse. If you espouse econo-politics which lean rightwards, then scrupulously take account of the Other who is / claims to be affected deleteriously by this politics and economics, understand their desire for political change to address their social/economic inequality and/or

understand the motivations of their supporters. This principle applies too to those on the left who claim to know the socially/economically relatively powerless Other which they speak for, when they may be insufficiently knowledgeable about the circumstances of this Other. The web allows us an aggregate and immanent 'in' into the lives affected by the majoritarian. The results of this data mining may surprise and thus off-centre those who veer leftwards such as myself, cueing a rethink if we previously thought we accurately represented the Other in understanding the key issues with their plight.

It might help, at this point, if I say a little about how I teach the creation of ethical subjectivities on a module in CDA. I initially frame the module by spotlighting the social/economic inequality of the planet. This is best done, in my view, 'dryly', marshalling relevant statistics from a variety of reputable bodies to convince the sceptical. Admittedly, it doesn't sound like an exciting way to kick-start a module. But facts about social/economic inequality, early on, give relentless devil's advocates too much to chew on. I don't then pour down anhydrous throats what I regard as valid political solutions to the planet's inequalities. It is hardly right for students to be exhorted to choose a project focus just because it chimes with the educator's ideas for political change. It *is*, though, the role of an educator to encourage students to think for themselves. In line with an ethics of hospitality, students need to make their *own* decisions about which socially/economically relatively powerless group to show empathy to.

So, I hope it is clear that this book's strategies, and how they can be used, are not necessarily connected to my political outlook. Besides, the days of lumpen political identity are long gone if they ever existed. Each of us is a criss-crossing multiple of political, economic and cultural values and identities which shift, to differing degrees, over time as well as mutating in their expression. Painting ourselves as left-wing, centrist or right-wing helps in broadly communicating our outlook. But there is often much more nuance and complexity in our positions (perhaps than we are willing to let on). That should, indeed, be the case because it means we are not being bovine in support of dogma, but are reflecting, rationally engaging and thus progressing. Moreover, not all causes which seek to address social/economic inequality can be politically labelled so neatly. For instance, it doesn't necessarily follow that, in being opposed to media sexualisation of girls, to rampant consumerism, or to how unrestrained hyper-capitalism is destroying the environment, you are left-wing. And it would be patronising as well as plain wrong to claim that all on the political right do not sympathise with the socially/economically disadvantaged (though I usually find their solutions for addressing such inequality – where they exist – either unconvincing or not going far enough). And lastly, it is not as if all those on the left agree. Trying to establish a firm left-wing basis for the creation of ethical subjectivities, or for critical discourse studies more generally, given

the self-evident tensions between racinated and deracinated leftists, between post-Enlightenment universalists and cultural relativists, certainly has its challenges.

10.8.2 Choosing socially/economically relatively powerless groups to build ethical subjectivities around

But if there is no necessarily left-wing grounding for the creation of ethical subjectivities, is choice of socially/economically relatively powerless group to build an ethical subjectivity around arbitrary and worse relativist? Why not, say, choose a fascist organisation or a terrorist group to show empathy to? After all, such groups could be construed as relatively powerless in many places. One way of rebutting a charge of relativism might be to draw up a list of 'authorised' socially/economically disadvantaged groups that I expect students to follow. If I wanted to come over as risibly and megalomaniacally authoritarian, that would certainly do it.

Some orientation I give to students which helps with their decision-making about which ethical subjectivities to create. The first is to focus on the *minoritarian* and not the *minority*. Recall from 9.3.1 that these are not equivalent notions. 'Minority' is quantitative, but 'minoritarian' is qualitative. Fascists and terrorists may be minorities in a particular society. But since they espouse inhospitable, bigoted, non-pluralised politics which would spur the promotion of their becoming at the expense of the becoming of others, they cannot be considered minoritarian. To be minoritarian is not to act in a totalitarian manner once you have achieved greater equality. Moreover, some minorities may not just espouse awful politics; they might engage in pernicious practices, e.g. female genital mutilation. Becoming-minoritarian is to align oneself with progress rather than reactionary forces. The minoritarian is associated with positive transformations, freedom from regressive practices, and new opportunities for self-determination, and especially for reducing inequality as far as possible. It is the seeds of becoming; should the minoritarian be successful, it deterritorialises the majoritarian in pluralising voice.

A second orientation that I give students are the following *parameters* for creating ethical subjectivities:

- secular democracy with a universally applying legal system;
- 'becoming-democratic';
- universal human rights: the 1948 Universal Declaration of Human Rights provides the minimum standard for subsequent national and international legislation such as the 2009 Charter of Fundamental Rights of the European Union;
- the importance of science: rigorous empirical evidence and scientific knowledge are privileged as they should be anyway, and especially

given the importance of genetics and evolutionary theory for post-humanist theorising. Moreover, intelligent technologies whose use by humans has also led to posthumanist contemplation, self-evidently, could not exist without physics, electrical engineering, etc.

With the latitude of these parameters, there is great scope for making ethical subjectivities from the web; at the same time, these parameters help avoid bad choices.

Ethically-directed curiosity is a key orientation for creating posthuman subjectivities: the desire to raise one's awareness of democratic deficits in the wider world, not just on one's doorstep. The minoritarian chimes with the idea of becoming-democratic (9.4.1) since minoritarian gains should lead to greater political representation, diversity, equality and creative participation in the democratic process and, in turn, better forms of democracy. The cliché about democracies – that they are awful political systems, but much better than the alternatives – certainly contains some truth. One only has to see, for instance, how susceptible democratic political parties can be to the vested interests of corporations and media moguls. And, of course, democracies contain glaring social and economic inequalities; what purports to be a democracy may, in fact, be a hybrid of democracy, corporatocracy and plutocracy. Still, this cliché is a rather demotivating way of looking at a political system that, *in principle*, could be good even if its various instantiations, practices and leaders can disillusion. The more positive orientation of 'becoming-democratic' both affirms the principle of democracy and the need to continually transform its practices for the better.

Employing a universal human rights framework assists clear decision-making about which Others to show digital hospitality to and which Others to rebuke. Without a human rights framework, intellectual muddle can ensue with, for example, the Other being fetishised.[5] But, in encouraging the production of posthuman subjectivities against a humanist filter of human rights, am I not committing a contradiction? The following meditation by the posthuman educationalist, Carol Taylor helps appreciate the issues here:

> as soon as we express the desire to 'overcome humanism', we very quickly realize how utterly entwined we are within humanism's afford-ances and problematics, as feminists and post-structuralists already know. Any dis-entangling, therefore, has to be a continuing and incisive critical practice, not one done easily or 'once and for all'. Yet the desire to 'overcome' humanism is urgent and necessary. One only has to think for a moment of the geopolitical suffering, ecological depredation, and epistemological violence that humanism, particularly in its alliance with neo-colonialism and hyper-capitalism, has given rise to, to appreciate the urgency of the task. Thinking for a moment longer, though, might

bring to mind humanism's legacy of universal human rights, communit-
arian politics and disability equality legislation. These are things we
humans would probably not want to do away with, albeit that they
often work as positive guises beneath which humanism seeks to hide its
wreckages. One can appreciate that the larger project of *becoming*
posthuman is fraught with difficulty . . .

<div align="right">(Taylor, 2016: 9)</div>

This book reflects the current transitional hybridity of human/posthuman.
This change is taking place at different speeds and in different contexts; it is
not necessarily continuous. In a single day, we can switch between non-
technologically mediated human subjectivities and technologically mediated
posthuman subjectivities. Such switching is a privilege of living in the
developed world. A very significant portion of the planet still experiences
a relatively technologically impoverished life. Jettisoning human rights
just because they are humanist would not only be philosophical indulgence,
but a reckless eviction of the baby with the bathwater. Posthumanist
thinking requires careful and rigorous probing of what positives of
humanism can be retained/reinflected. While posthuman contexts burgeon,
human rights remain important both outside and inside these contexts. As
Rosi Braidotti says, 'The posthuman era is ripe with contradictions . . .'
(Braidotti, 2013: 51).[6]

   Let me sum up. Given the stress on becoming-minoritarian and the para-
meters of becoming-democratic and human rights, I would not expect
students to empathise with relatively powerless bigoted organisations/indi-
viduals in their construction of posthuman subjectivities. I hope too I have
been clear that opening out to the Other, whilst experimental and ajar to
unforeseen consequences, should also be a critical and rational engagement
which is never so welcoming that our moral compass falls out. I have
espoused an immanent ethics in this book. But I have just endorsed secular
democracy and human rights, that is to say, a set of political, moral and
legal principles. But aren't these principles transcendent notions? And if so,
isn't there another contradiction here?

10.8.3 Immanent universalism and generative (post)human rights

Rights are not divinely conferred. They are always social constructions out
of particular moments and circumstances. Acknowledging their status of
social construct means rights can, in principle, be improved/supplemented
as society changes. When rights become *purely* transcendent – and thus
untouchable – they risk becoming dysfunctional. An example: retention in
the twenty-first century of the second amendment of the United States
Constitution shows in technicolour the idiocy of pure transcendence. The

1791 'right to keep and bear arms' applied to particular historical conditions – 'a well regulated militia being necessary to the security of a free state'.[7] Moreover, the weapons that drafters of the amendment had in mind included muskets, not semi-automatic assault firearms which have been so effective in slaughtering children at US schools. Another example: the universal declaration of human rights emerged from the carnage of the Second World War. Who could criticise such an advance for humankind? And yet, if the human rights of 1948 became a pure untouchable transcendence, there would, for example, be fewer rights than now for people with disabilities whose needs were less well catered for then. And from the vantage of animal rights and posthumanism, the 1948 declaration looks rather anthropocentric (Hanafin, 2014).

Deleuze takes issue with 'transcendent universalism', where a universal perspective never changes and, over time, runs the risk of becoming dysfunctional (Deleuze and Parnet,1996a). In contrast, he espouses what could be called 'immanent universalism', where the expression of universals is altered in accordance with new problems and changing needs. That is to say, with his immanent perspective, what happens 'on the ground' in specific encounters with the Other should always feed into the review and improvement of (the wording of) rights (Deleuze, 1995[1990]: 153; Patton, 2011: 120–121; Patton, 2012: 15–31; Smith, 2012: 158–159). A conception of unchanging human rights which fixes what it means to be human would not do for Deleuze. Crucially, also, he asserts the importance of being free to conjure new rights which open up potential for life and what 'human' can mean. In other words, rights should not just protect, but should enable creative possibilities.

Echoing Deleuze's immanent universalism, and Derrida's ethics too, when I said that choice of Other to build an ethical subjectivity around should be guided by the parameter of universal human rights, this does not entail being lashed to an immobile transcendence of generalised maxims. After all, the minimum standard of the 1948 Universal Declaration of Human Rights is continually supplemented. And in time, this supplementation, will need to facilitate passage to an equitable social and economic posthuman future. Consider a future where bodily alterations from expensive biotechnologies, nanotechnologies and gene therapies lead to a qualitatively different human with superior body and brain performance throughout the lifespan, no possibility of developing cancers, no deterioration of memory, and with the ageing process slowed or even suspended. We will need, at some point, posthuman rights to avert a pernicious state of affairs where the rich are deriving the most health benefit and life enhancement. Posthuman health enhancement should never be just the preserve of the wealthy. Working out the relationship between human rights and posthuman/transhuman rights may, though, prove to be rather a fraught process. The legal scholar, Upendra Baxi:

The relationship of human rights with the posthuman is a troubled one, at least on certain apocalyptic constructions of the emergent posthuman. It may well be, on this register, that human rights as we know them may soon constitute the 'remembrance of things past'. Or, they may survive without the majesty of the humanist vision and remain only available in the future as facilitating human attribute/ trait enhancement or more generally as reinforcing the sovereign logics of trade-related market friendly human rights of global capital. Whether the technoscience-created future worlds are 'accursed' or 'blessed' will remain important questions in any future interrogation of human rights values as informing/misinforming the bases for judgement.

(Baxi, 2007: 237–238)

10.8.4 Aggregating oppressed voices to bypass the clashing of rights

Operationalising a human rights perspective can be tricky when different social groups and organisations, as well as individuals, interpret rights in different ways, or invoke different rights which serve their interests best. To return to Chapter 7, some feminists criticised 'Page 3' because of its unequal sexual objectification of women, thus invoking the right of gender equality. In contrast, *The Sun* at different points said that anti-Page 3 campaigners were seeking to infringe the right of freedom of expression. The nomadic subjectivities of this book get past potential clashing of rights and argumentative stalemate. This is because web-based aggregation of oppressed voices has been emphasised – an ethical injunction that obliges us to seek out and aggregate, on the web, a voice multiple of those afflicted by the majoritarian ideology, policy or cultural object.

An illustration. By mining the www.Change.org comments I discovered that a common issue with Page 3 was that young girls find it disturbing that their fathers looked at that bit of *The Sun*. The family newspaper setting for soft pornography is inappropriate because there is plenty of testimony that it leads to body image problems for girls going through puberty. I didn't evaluate 'Page 3' via the notion that it is sexistly unequal, a notion which can be interpreted differently and contested across individuals and cultural/ political groupings. Indeed, debate about what 'sexism' may or may not mean in relation to female sexual display can lead to argumentative gridlock in my experience. Harvesting a multiple of oppressed voices from the web is an antidote to such paralysis; aggregate at scale the testimony of those who suffer from a majoritarian ideology, policy or cultural object and let the data speak for itself. (Even better take the data into Self and create a posthuman subjectivity).

10.9 Other issues with the creation of posthuman subjectivities

10.9.1 Identifying the socially/economically powerless

The judgement of who has power and who does not can be tricky. As illustration, consider the pro-GM argument which took issue with 'the anti-GM lobby'. In certain countries – such as the UK – anti-GM lobbyists have been effective in helping to restrict GM agriculture. So, one might say vis-à-vis the UK, GM companies are relatively powerless. But this needs to be balanced against the relatively powerless condition of small-scale farmers in the developing world. Another thing that is important to state is that the socially/economically disadvantaged and their *supporters* are not necessarily equivalent. The latter may indeed be quite powerful figures and far from being socially/economically deprived.[8] All the same, any *group* which campaigns for particular social/economic reform is not, by definition, in a position of power apropos their specific aims even if group members are *individually* powerful and socially/economically advantaged.

From a sociological perspective, the dichotomy of socially/economically relatively powerful versus relatively powerless may appear simplistic. It is not a sophisticated and nuanced sociological model of power. But it is not intended to be. Such a model is required if you are seeking to *explain* how power works in society. In offering practical strategies for critically engaging with public sphere arguments, the second strand of this book is not academic explanatory sociology. It is rigorous empathy. When an analyst empathises with those who are seeking to reduce their social/economic inequality, they empathise with how a particular social group sees themselves – as currently lacking in power relative to those that do.

10.9.2 Allow the data to surprise you into 'not-you'; avoiding circularity

The posthumanist principle of finding ways in our study to 'take data into ourselves', so as to drive formation of new subjectivities, entails that 'the "what" of the study must be able to participate, to *surprise* the researcher' (Snaza *et al.*, 2014: 50; 52). The data-driven approach of this book echoes this posthumanist perspective in encouraging an emergent and thus surprising decentering of the analyst via their discovery, and absorbing into Self, of the Other's 'Big D' Discourse. And, in promoting a discovery-based pedagogy, this bypasses the issue of circularity that CDA has been accused of (2.6.2). In other words, since the analyst is corpus-driven, directed by the results of data mining that they could not easily pre-figure, there is no ready-made interpretation to project onto the text and then, in circular fashion, ratify by subsequent analysis.

10.9.3 Deterritorialise!

If you already have a political *and* ethical commitment to the socially/ economically relatively powerless Other criticised in a public sphere argument, then you are probably not showing hospitality if you proceed to a deconstructive analysis. In such an event, there would be no point in exploring possible coherence problems in the argument. Self is not being interrupted. It would be a little like having dinner with one's twin who lives next door – the familiarity might be comforting, but the experience is probably not so extending. The web affords manifold opportunities for deterritorialisation, for discovering democratic deficits which go beyond one's existing knowledge. Why investigate to the *n*-th degree what should be obvious to you already?

10.9.4 Preferring not to create ethical subjectivities

Corpus linguistic method is ethically neutral. The corpus-driven approach of this book could, thus, be used to deconstruct straw man arguments written by the relatively powerless, or their representatives, which criticise the relatively powerful. Just because we are members of a socially/economically relatively powerless group, or a supporter of this group, this does not absolve us of the dialectical obligation to avoid straw man arguments. Besides, it can be revealing to find that our favourite political commentators have distorted the positions of relatively powerful groups/organisations or omitted relevant details from their standpoints. Distortion of any standpoint is always dialectically wrong, being faineant, unrigorous and precluding of meaningful debate. The public sphere is better served when the arguer has taken the time to report accurately the key concerns of the standpoint they attack.[9]

10.10 The Other

10.10.1 Same-isation

Derrida wrote an essay on Levinas' *Totality and Infinity* (Derrida, 1978[1967]). He points out a paradox across Levinas's book. *Totality and Infinity* is dedicated to going beyond the Same into a philosophical articulation of the Other. But it is impossible to discuss the Other philosophically without using the language of philosophy. This means that when Levinas discusses the Other, he is doing so, in part, using the language of philosophical autonomy. It is thus not feasible for Levinas to articulate Otherness without using the language of the Same. Derrida's criticism alerts us to the prospect that we may domesticate the Other without realising; we may be reducing the Other to the categories *we* use to see the world. Logically speaking, this is unavoidable. It cannot be possible for me to read a text

purely from the perspective of the Other since I am not the Other. Any attempt to do so necessarily accommodates the Other into the Same.

So goes the philosophical argument. Does it always have to be like this in practice? Or put another way, how can we reduce the prospect of domestication of the Other? Software-based quantitative analysis helps. Relatively frequent categories in the Other's counter-discourse are objectively generated data. The analyst did not subjectively arrive at these category results. The very objectivity of corpus-generated frequency data *about the Other's categories* helps apply some braking, at least, on the analyst domesticating the Other in accordance with their own social, cultural and political lights.

10.10.2 Totalisation

The ethical subjectivities of this book are necessarily generalised. But this does not mean they do not show sensitivity to plurality. Returning to the anti-Page 3 campaign: the ethical subjectivity was based on a *Sun* reader which explicitly includes girl readers. This is a better state of affairs than the (groundless) totalisation in O'Neill's argument. I acknowledge, though, that I may be glossing over key differences here among girl *Sun* readers.

This acknowledgement is a reminder that there must always be differences within *social* categories no matter how much we divide them. But this does not stymie digitally-driven deconstructive analysis so long as we perform a deconstruction using categories which are *less totalised* than the categories used by the argument's author. It is a matter of degree. That said, use of a fairly totalised standpoint subjectivity may be justifiable. For example, in Chapter 9 the target of Julian Little's argument is the 'anti-GM lobby'. Naturally, there will be differences of opinion and emphasis across different environmental campaigning groups. But since Little has a totalised critical target, I was justified in pulling together convergent key motivations across different anti-GM campaign groups.

10.11 A dialogue with critical voices

10.11.1 What the method does not set out to do . . .

You don't encourage deliberation on the logical structure of a public sphere argument.

It would be odd to ignore an argument's reasons. And, to discuss an argument usually involves giving a summary of it. But to deliberate properly on an argument's logical structure involves its comprehensive and systematic reconstruction; this book obviously takes an alternative approach.

By focusing on cohesion and coherence only, a student can miss significant aspects of an argument's rhetorical dimension as well as fallacies other than straw men.

The focus here is not to understand comprehensively the rhetorical dimensions to a public sphere argument or to spot other fallacies within the argument. Many textbooks in critical thinking already help students to do this. That said, an advantage of importing relevant absences into a public sphere argument and seeing how certain rhetorical dimensions are rendered defective is that this very procedure makes us aware of rhetorical dimensions that we might otherwise not spot.

10.11.2 'Ordinary' reading . . .

How do you know that the deconstructions via discursive/ethical subjectivities actually replicate what an actual reader would do?

These data-driven generalised posthuman subjectivities are not equivalent to individual human subjectivities.

People don't ordinarily read public sphere arguments in the way you propose.

What *is* 'ordinary' reading? We are increasingly positioned by machine-driven, hybridly constructed perspectives. For example, web-based news media habitually aggregate, from social media, individual reactions to an event alongside the news story reporting that event. In a world where non-unitary posthuman addressor subjectivities increasingly position the reader, this book advocates a resistant reading where the human takes charge of creating *their own* posthuman subjectivities.

10.11.3 Reading strategy . . .

Mapping of an argument may vary with different readers. Doesn't that mean mapping is selective, subjectively interpretative and thus a problem?

Selectivity in mapping and subjective interpretation are red herrings. The crucial issue is avoiding arbitrariness as much as possible in order to increase the likelihood that the deconstruction is convincing.

Selectivity: given the rhizomatic nature of mapping, re-entry points into the same argument could well differ for different analysts. The important thing is that re-entry is not done arbitrarily. In other words, the analyst does not locate in the argument something *they* find objectionable, *they* find interesting to comment on that particular day. They fix on something in the public sphere argument having been data-directed towards it by empirical evidence outside the text (2.6.2);

Subjective interpretation: all text interpretation is subjective. How could it be otherwise? To criticise an interpretation of a text for being subjective is to criticise a reader for having their own brain. Crucially in the approach of this book, subjective interpretation is driven by objectively generated corpus data, which reduces arbitrariness in mapping. In providing quantitative authority for the deconstruction, chances are increased that it is acceptable to others. In other words, because it has been rigorously executed,

the deconstruction has a better chance of being inter-subjectively valid (even if it might be a deconstruction another analyst of the same argument did not execute).

If you compare a public sphere argument with a digital supplement, given the variety of texts in the latter, and the size difference between the argument and the supplement, you will always see absences from the argument which are present in the supplement.

This is true, but another red herring. The key question that the analyst needs to ask themselves is whether or not the absences from the argument are *relevant* absences from how the topic is normally discussed and/or how the criticised in an argument habitually discusses its standpoint.

10.11.4 Miscellaneous . . .

You say the second analytical strand is a type of CDA. *But it does not take into account the social-situatedness of the reader.*

That's right. I don't have a fixed idea of what CDA should be, a set of practices which originated in a pre-digital era (see 11.4).

Appreciation of the Other lacks depth.

While the posthuman subjectivities of this book are (unavoidably) shallow, crucially they also have breadth. This is key to these subjectivities; because they are based on multiple texts, they can carry quantitative authority. These subjectivities do not substitute for deeper appreciation of the Other such as might be afforded via ethnographic method, or even just wider reading – which presumably will follow if the analyst's deconstruction leads to political alignment with the Other. The purpose of these subjectivities, ultimately, is to get critical evaluative work done with satisfactory rigour for analysts who were previously not in the know. Figure 10.1 contrasts the posthuman subjectivities of this book and ethnography on this point.

It looks like a lot of work to compile a discursive/ethical subjectivity from the World Wide Web. Why not just read one relevant website, book, etc.?

Similar point: if you did this, your discursive subjectivity and/or ethical subjectivity, would not have quantitative standing and thus would not carry conviction. For example, we may see from one anti-GM website that a writer links 'GM safety' to both 'health' and 'environment'. But without examining multiple relevant texts, we cannot know for sure if this is a common feature across anti-GM counter-discourse. Moreover, basing discursive/ethical subjectivities on the convergences across multiple texts has the advantage of helping to bypass particular biases in how a single author has mediated a topic.

Not all arguers are trying to deceive.

Whether or not distortion/obfuscation of the standpoint of the Other is deliberate, it is still distortion/obfuscation.

contextual breadth

° discursive/ethical subjectivities

contextual
depth
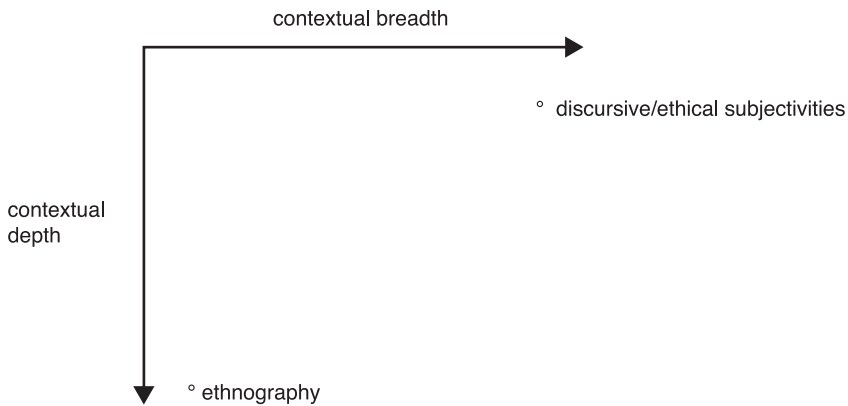
° ethnography

Figure 10.1 Posthuman subjectivities versus ethnography: contextual breadth and depth.

You're expecting readers to spend time and effort which may merely lead to them rejecting a public sphere argument. How negative.

Analysts are encouraged to discover new territories. Whatever subjectivity an analyst grows, borders should be crossed, horizons and knowledge should be extended. Positive things.

Notes

1   In Part III, I focused on public sphere arguments which explicitly attack relatively powerless standpoints. But, I could have focused instead on public sphere arguments which bypass completely – deliberately or through ignorance – the key critical concerns of relevant dissenting groups.

2   An ethical subjectivity, in this book, is a *group* standpoint subjectivity; naturally, not all standpoint subjectivities are group subjectivities. A standpoint subjectivity could just be the standpoint of a *single* individual; the standpoint of one individual who empathises with a socially/economically relatively powerless group is not then, on this book's outlook, equivalent to an 'ethical subjectivity'.

3   Posthumanism is not to be confused with 'transhumanism'. A transhuman would be a human who is dramatically improved with technological implants. The 'bionic man' of the 1970s TV series 'The Six Million Dollar Man' is a fictional transhuman. Posthumanism is regarded as distinct from transhumanism because the latter 'implies that *there is a distinctive entity identifiable as the "human"*, a human "self" or "person" which can do with some improvement'. Unlike posthumanism, transhumanism 'refuses to see the human as a construct enmeshed with other forms of life and treats technology as a means of "adding" to already existing human qualities' (Nayar, 2014: 6). Transhumanism is, then, 'an intensification of humanism' (Wolfe, 2010: xv).

4   Indeed, it is because of such universal inference-making that the applied linguist Guy Cook argues for a broader definition of text than the symbols on a page

which we can form coherence of: 'By 'a text', I mean the linguistic forms in a stretch of language, and those interpretations of them which do not vary with context' (Cook, 1994: 24).

5   The following criticism of the veteran human rights campaigner Peter Tatchell, as racially insensitive, amongst other things, is an example of this confused mindset: http://www.pinknews.co.uk/2016/02/22/academics-and-activists-condemn-bully peter-tatchell-in-open-letter/ [accessed July 2016]. Peter Tatchell's reply to this critique is contained in this weblink.

6   The parameter of universal human rights is echoed in the thinking of the critical discourse analysts Isabela Fairclough and Norman Fairclough on the normative foundations of CDA: 'We want to ground CDA normatively in a set of values that closely approximate a list of universal human rights, or duties/obligations that we have towards our fellow beings [. . .] and more precisely in a list of human capabilities that define a concept of human flourishing or well-being [. . .]. The ethical foundations that we ground CDA with are not relativistic, in the sense that we do not think that one should give recognition to just any value that particular communities happen to hold. Not any difference should be given recognition: in particular those that infringe human rights, hinder human capabilities or violate fundamental duties we have towards each other. . . .' Fairclough and Fairclough (2012: 60).

7   Available at http://www.archives.gov/exhibits/charters/bill_of_rights_transcript.html [accessed July 2016].

8   For example, Prince Charles of the UK royal family is a critic of GM; Richard Dawkins has a global profile as both a biologist and as a critic of religion.

9   Indeed, a broader principle behind this book is its espousal of *slow journalism*. Available at http://niemanreports.org/articles/the-value-of-slow-journalism-in-the-age-of-instant-information/ [accessed July 2016].

Chapter 11

Deterritorialisations

11.1 Orientation

In this last chapter, I show the deterritorialisations of the book. These are broadly in relation to:

- critical thinking
- critical discourse analysis and pedagogy
- Jacques Derrida.

11.2 Posthuman critical thinking

11.2.1 Orientation

This book decentres human subjectivity through encouraging interfacing with machines for the creation of alternative subjectivities. It thus has a *posthuman* framing. In turn, since its critical evaluation of a public sphere argument depends on the creation of *posthuman* subjectivities, the book presents a posthuman critical thinking.

Reconstruction of an argument in critical thinking takes as its starting point what is *inside* an argument such as the reasons supplied for its conclusion. In contrast, and reflecting its posthuman approach to critical thinking, this book has evaluated public sphere arguments on the basis of what is found *outside* them in digital supplements. Some digital supplements will need to be constructed. The approach of this book thus also chimes with the tradition in the digital humanities of 'critical making' where engagement with technology in order to make a material product facilitates critical thinking (Ratto, 2011; Ratto and Boler, 2014). That is to say, critical perspective on a public sphere argument can be achieved through making of a digital supplement to institute otherness.[1]

11.2.2 Deconstructive focus and relationship to formal reconstruction

Given the assumption in critical thinking that an argument's analysis requires comprehensive and systematic reconstruction of its logical structure, another deterritorialisation of this book is its deconstructive approach to critically evaluating arguments. A corollary is the approach of this book leaves the text intact. This does not mean the reconstructive approach is rejected. As I have said repeatedly, if you want to understand the logical dimension of a public sphere argument, if you want to weigh up whether or not it is rationally persuasive, you need to reconstruct its logical structure as best you can. I see the deconstructive approach of this book as complementary to reconstruction. This can work in two ways:

- *'Gatekeeping' strategy*: why bother reconstructing an argument's logical structure if its coherence unravels because it does not accurately characterise the standpoint it criticises, or because it does not discuss and evaluate a topic using standard terms of reference? This deconstructive approach could, then, be used as a gatekeeping strategy.
- *Alternative to reconstruction*: as I flagged in Chapter 2 and showed in Chapter 6, reconstruction is not always a straightforward business. Implicit premises may be tricky to recover; it can be taxing to work out which bits of a public sphere argument are relevant; parts of the argument may be (deliberately) vague. The deconstructive approach of this book could be used as an alternative to reconstruction where the latter is difficult to accomplish.

11.2.3 The above applies to functional reconstruction too

When I reconstructed arguments in chapters 2 and 6 into premises and conclusion, I was in fact engaging in *formal* reconstruction. But reconstruction can be *functional* too. This is where the analyst indicates the role or function of premises. The functional approach to critical argumentation is well established. I provide a little coverage of functional reconstruction below so the reader will appreciate how the approach of this book can also work as a gatekeeping strategy for, or an alternative to, functional reconstruction.

  A major impetus for looking at arguments functionally is Toulmin (1958). Rather than 'premise', Toulmin uses the functional categories of 'claim', 'grounds', 'warrant' and 'backing'. He holds that these categories provide a more realistic account of what we *do* when we justify arguments. As an example, take an argument which makes a *claim* that men are always more likely to go to prison than women. What Toulmin calls the *grounds* is the background information or facts on which we base our argument. For this argument, the grounds would be that there are currently many more men in

prison than women. It's still a leap to claim that men are always more likely to go to prison than women. So, there needs to be some justification for the link between grounds and claim. This is what Toulmin calls the *warrant*. A possible warrant for this argument is that testosterone makes men more prone to violence / risk-taking. A warrant on its own may not be convincing, however. It helps if we can provide support for the warrant – using what Toulmin calls the *backing*. One possible backing for the above warrant might be to invoke a wide range of respected evolutionary psychologists who agree with the warrant. Figure 11.1 shows the functional relationship of this argument:
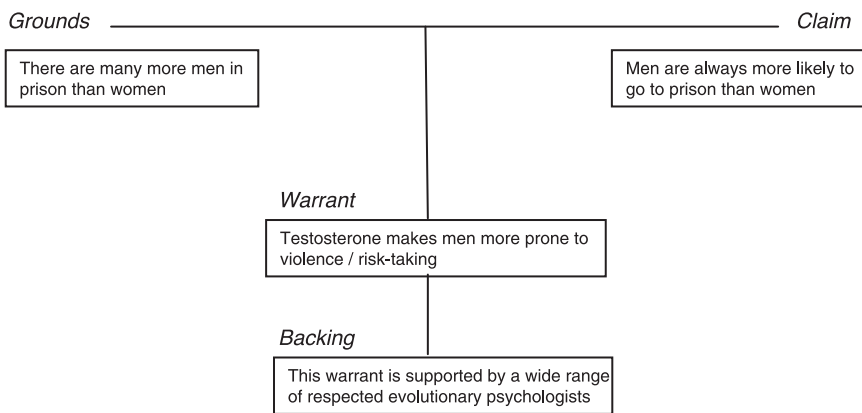
Figure 11.1 A Toulminian functional schematisation of an argument.

With these functional relations schematised, deliberation on the argument is facilitated. In Chapter 6, I could have reconstructed Hitchens' sub-arguments by showing the functional nature of their premises. All the same, similar challenges would have arisen with identifying relevant and/or implicit grounds, backings and warrants.

In 11.3–11.5, I will highlight deterritorialisations of pedagogical CDA. But it is appropriate to flag here a new pedagogical approach in CDA which explicitly depends on the functional reconstruction of argument, and which the deconstructive approach of this book complements. This approach is designed by Isabela Fairclough and Norman Fairclough. What is different from Norman Fairclough's earlier work is that, rather than only focusing on the rhetorical dimension of an argument (or of texts generally), there is a focus on the logical dimension. Echoing the Toulminian tradition, Fairclough and Fairclough (2012) devise a functional framework for the analysis of arguments in order to facilitate deliberation on them. Like Toulmin, they

indicate how premises have different functional roles to play. But with its focus on political argument, their analytical scheme departs from Toulmin's. Fairclough and Fairclough's framework is designed to capture the common functional elements employed by a politician when they seek to persuade an electorate. Typically in a political argument, the politician argues for a solution that, in their opinion, will remedy the social or economic *circumstances* that the politician has identified as problematic and represented in a particular manner to suit their political purposes. The politician will not only assert they have the *means* to achieve their particular *goal* of alleviating these problematic circumstances, but will press home the importance of their *values*, which the electorate will need to buy into if the politician is to gain office to achieve their aim. In Fairclough and Fairclough's analytical scheme, what I have italicised are all functional premises in the politician's argument. The *solution* that the politician offers – what they claim is the action that needs to be taken to realise their goal – is the conclusion to the argument. Figure 11.2 is a simplified version of the functional schematisation found in Fairclough and Fairclough (2012):
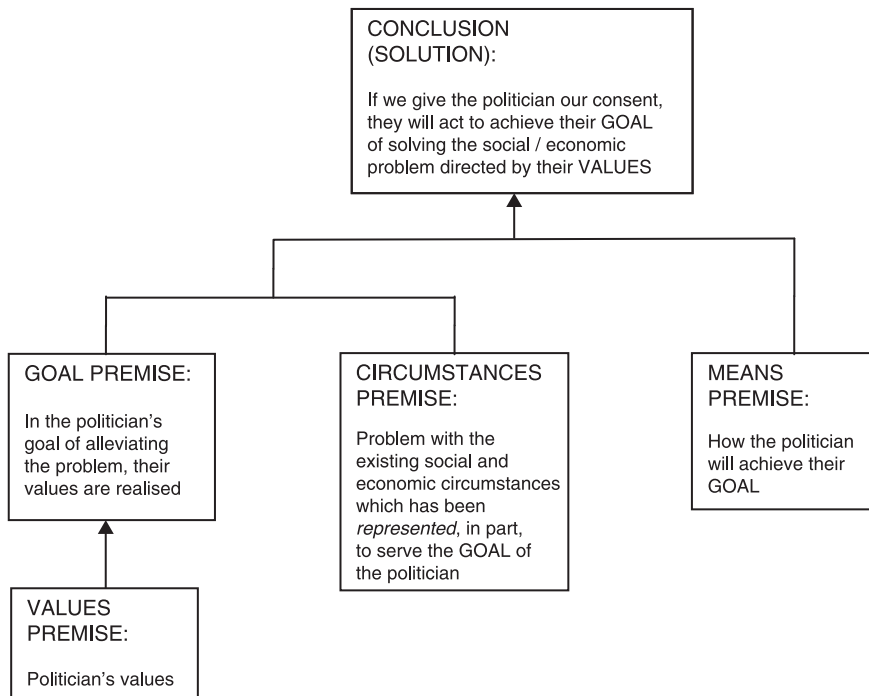
Figure 11.2 Fairclough and Fairclough's (2012) analytical scheme for practical argumentation analysis; adapted from Fairclough and Fairclough (2012: 45).

Echoing what I said earlier, I see the deconstructive approach of this book as complementary to Fairclough and Fairclough's reconstructive scheme, potentially working as a 'gate-keeping' strategy, or as an alternative strategy, when functional reconstruction is challenging to operationalise.

11.2.4 Public sphere arguments and online behaviour

A peruser of discussion forums will struggle to encounter recurrent reconstruction of arguments which posters have executed in order to facilitate deliberation on their logical structure. While there are a variety of ways of responding to public sphere arguments in online discussion forums, one is particularly salient in my experience. Relative to their knowledge, the poster contends that the argument has omitted something crucial. The argument thus unravels in the poster's opinion – in the sense that it cannot be taken seriously without consideration of what has been omitted. As illustration, here is an online comment which quotes and responds to a fragment from a public sphere argument:

> *Fragment from argument*: "Given that Istvan Csurka admitted that he was an informant for the Hungarian communist authorities . . .".
>
> *Response from poster commenting on this fragment*: Csurka was forced into this role and never spied on anybody. Being forced into becoming an informant was a common fate under communist-socialist rule in Hungary. This would have been worthwhile mentioning, just to get the facts right.[2]

It is not surprising that this kind of online response to a public sphere argument is so common and much more frequent than reconstruction (even if the poster knows how to perform reconstruction). Identifying a relevant absence on the basis of one's knowledge is an immediate and non-labour-intensive way of assessing an argument's credibility.

In conclusion, given that highlighting absences from a public sphere argument on the basis of relevant knowledge is the cornerstone of this book's strategies, there is a relationship between these strategies and this habitual form of online engagement with arguments. Though the strategies of this book go further in insisting on quantitative authority for deconstruction, thus reducing arbitrariness in what the analyst regards as a relevant absence, there is all the same a *continuum* from this form of online behaviour to the behaviour of the posthuman deconstructive analyst.

11.3 Critical linguistics and pedagogy

11.3.1 Critical linguistics and locating distortion/ obfuscation as a first-order operation

The reader will recall, from Chapter 2, that Critical Linguistics is a branch of CDA (and, more generally speaking, a branch of Critical Discourse Studies). Critical Linguistics draws on systemic functional grammar (SFG) to *explain* in rigorous detail how language (often the language of media texts) distorts and obfuscates. I highlight 'explain' because use of SFG can't actually *reveal* distortion or obfuscation in a text. To disclose where a text has distorted the agency of an action it reports, we need to know what happened in the event. We need relevant knowledge. As I wrote in Chapter 2, a corollary of this is the following: when critical linguists use SFG to explain how language distorts and obfuscates, this is a second-order operation. The critical linguist most likely explains the linguistic basis for distortion and obfuscation they can already intuit.

The strategies of this book are different from Critical Linguistics because they stress the importance of non-predestined readings. In contrast, the analyst *discovers* distortion and obfuscation of which they were previously unaware and thus couldn't intuit. Stressing this becoming of the analyst makes the deconstructive approach of this book a first-order operation for revealing distortion and obfuscation in public sphere arguments.[3]

11.3.2 Metalinguistic-liteness

Unlike Critical Linguistics, the deconstructive approach offered here does not require very much metalanguage. Cohesive metalanguage *is* needed – after all, the analyst cannot deterritorialise unless they know the territory of the text and thus how the topic and/or SotC have been framed. But there is no need for comprehensively tracing the text with SFG metalanguage (or any other metalanguage) as promoted in CDA textbooks. Concept-light corpus linguistic method powers the argument's evaluation rather than being ancillary to an evaluation which is conducted with detailed metalinguistic description. That is to say, where this book employs ethical subjectivities (optionally in tandem with discursive subjectivities), it is not a corpus-based form of CDA, but a *corpus-driven* one.

11.3.3 Treating a text as an 'interior' hinders transformative reading

Labour-intensive metalinguistic tracing of a text in Critical Linguistics to explain how a text distorts and obfuscates social actors – something we probably intuited already – is a booby prize from a Deleuzian perspective. This is because, echoing the quotation from Deleuze and Guattari (1987[1980]: 13–14) in Section 9.7.1, tracing the text 'always comes back

"to the same" ' in showing what competent analysts we are. Text description in Critical Linguistics is not a rhizomatic mapping which enables genuine becoming – *discovering* that a public sphere argument distorts or obfuscates the standpoint it criticises.

Part of the reason, Critical Linguistics merely explains how a text obfuscates or distorts social actors is because it treats a text as an 'interior'. It looks at the text in its own terms, tracing it with labels, rather than *relating the text to something else*. In contrast, connecting the interior of a public sphere argument to the exterior of a digital supplement leads to seeing the argument in a fresh manner. The very act of connecting an interior to an exterior facilitates 'betweeness'. And, as I flagged in Chapter 9, it is between things that transformative insight is generated for Deleuze.

11.3.4 Critical metaphor analysis

The analysis of metaphor has been important in CDA since early writings in Critical Linguistics. CDA has to a large extent taken its cues from Lakoff and Johnson (1980). In this approach, metaphor is not an adornment. It can frame the way we think about things and, in turn, obscure or downplay alternative perspectives. For example, Fairclough (2015: 137) draws attention to how youth riots are described, in a newspaper, as a 'cancer'. As Fairclough sees it, this frames the riot as something that needs to be 'cut out' rather than, say, encouraging an understanding of its underlying causes.[4]

I have also been interested in how metaphor impedes and obscures, but have explored different implications of this. In Chapter 6, I showed how an argument's use of apparent metaphor may unwittingly deconstruct its coherence. Recall that Hitchens writes vis-à-vis Iraq, in the early twenty-first century, of a 'country's collapse'. This is a vague formulation – Hitchens does not specify what kind of collapse he has in mind. Moreover, 'collapse' seems to fit with Hitchens' extended medical metaphor where the US as 'doctor' intervened in the life and death struggle of its 'patient', Iraq. Using a large corpus, we can inspect normal collocation for (what looks like) a metaphor. I showed how 'collapse' vis-à-vis a country most commonly collocates with 'economic' as well as words from the same semantic field such as 'financial'. In other words, 'a country collapses' in Hitchens' argument can be read as shorthand for the rapid deterioration of an economy. This conflicted with the extended medical metaphor that Hitchens used, with negative ramifications for his argument. To negate this reading, Hitchens could just have been clearer about what he meant by 'a country collapses'. Because he was not, his vagueness is hoist by its own petard.

This book has had another focus on metaphor. I have shown how metaphors can – intentionally or not – be said to hide collocative norms of Big 'D' discourse for a particular standpoint. In Chapter 8, I showed how

metaphors such as 'God crashing down to earth' hide normal collocation for how 'new atheists' express their standpoint. 'Believe/belief in God' is normal collocation that features in 'new atheist' critique. Since normal collocation had a deleterious effect on the cohesive stability of the anti-new atheism argument of Chapter 8, I contended in turn that the occluding metaphors helped to sustain the impression that the argument's cohesion is stable – whether this was intended or not.

11.4 Posthuman Critical Discourse Analysis

11.4.1 Orientation

As I said at the beginning of Chapter 10, I regard this book as a contribution to critical thinking in helping evaluate public sphere arguments via discursive and standpoint subjectivities. Since an ethical subjectivity is a type of standpoint subjectivity, I thus see the CDA focus of this book as falling under critical thinking. And, continuing this logic, in conducting a posthuman critical thinking apropos creation and use of ethical subjectivities, I have conducted, then, a posthuman critical discourse analysis.

11.4.2 Rhizomatic use of posthuman subjectivities

My orientation point in this section is Figure 2.2. The interpretation stage in Fairclough's model involves the analyst trying to get into the heads of the target constituency and appreciating how they might consume a text intended for them. The analyst thus needs to understand the context of the text's consumption; they need to understand the social-situatedness of non-critical target readers. A comprehensive CDA would thus involve empirical analysis of what target readers do with a text. Put another way, it would find out, rather than just interpret, the kinds of 'little d' discourse made from a text by actual target readers. In turn, on the basis of empirical evidence, it would critically explain how 'big D' Discourse helps to shape this production of 'little d' discourse in the social conditions of these readers.

   The deconstructive approach of this book is not a socially situated form of by-proxy analysis; it is not a form of 'little d' discourse analysis. The analyst is not trying to understand how a target reader consumes a text in their ordinary contextual conditions. Indeed, the non-critical target reader is not a concern. This is because the emphasis is on *change in the analyst*. This change can happen because the analyst creates 'big D' Discourse contexts, with which to evaluate a public sphere argument, which should ideally go beyond the analyst's existing knowledge. As the reader will know by now, the contexts that the analyst generates could be either or both of the following:

- 'big D' Discourse I: concepts and collocation used in habitual discussion of the topic of the public sphere argument regardless of how the topic is evaluated;
- 'big D' Discourse II: concepts and collocation used by adherents in habitual discussion of their standpoint criticised in the public sphere argument.

So, while the deconstructive approach I put forward does not involve 'little d' discourse analysis, it does involve 'big D' Discourse analysis. And since these 'big D' Discourses are not inhabited by the analyst – they did not know them (in any depth) before – they are *extradiscursive* to the analyst's original reading of the argument.

Figure 11.3 shows how this book deterritorialises Fairclough's model in Figure 2.2. At the centre is an active reader who i) exploits the affordances of the World Wide Web in order to create posthuman subjectivities; ii) puts these posthuman subjectivities to work in rhizomatically mapping an argument. This is different from traditional (critical) discourse analysis, which would not seek to disturb the existing discursive conditions of the reading process since this would hinder understanding of 'little d' discourse – the 'ordinary' socially situated reading or listening taking place. Rhizomatic mapping of a text via posthuman subjectivities is not ordinary reading. The rhizomatic reader is *extra*-ordinary because their starting point is extradiscursivity. They produce a data-driven critical reading of an argument via big 'D' Discourses they do not usually inhabit.

11.4.3 Deleuze and Wittgenstein

Underpinning the distinction I have just flagged between this book and traditional CDA is a philosophical difference – one between the outlooks of Gilles Deleuze and Ludwig Wittgenstein. The latter's thinking in *Philosophical Investigations* (Wittgenstein, 1953) is a significant set of roots for discourse analysis, and thus CDA, in emphasising the importance of context in understanding language (Chouliaraki, 2008: 674–676). Indeed, Wittgenstein (1953) influenced scholars (Austin, Grice, Searle) associated with the branch of linguistics known as pragmatics, an important reference for discourse analysis generally (Cook, 2011: 434–435). For Wittgenstein, social reality is constituted by a multitude of different language-based activities. Each of these activities is structured by norms specific to their contexts (Wittgenstein, 1953 sec.23). Analogous to a game of chess, every single linguistic utterance only makes sense as part of the whole activity. The need in (critical) discourse analysis to understand one instance of language use as part of the whole socially situated communicative context chimes with this Wittgensteinian maxim.

Text of argument

Description – cohesion tracing

Interpretation – mapping

'little d' discourse   Discourse practice   Explanation

'big D' Discourse   Sociocultural practice

analyst's becoming
allows mapping
of a public sphere
argument and
transformative
insight into the
argument via its
deconstruction

EXTRADISCURSIVE DIGITAL SUPPLEMENTS aggregated from the
web enable generation of posthuman subjectivities

'big D' Discourse I – how the topic is habitually discussed
regardless of how it is evaluated

'big D' Discourse II – how the criticised normally expresses
its standpoint

Figure 11.3 De/re-territorialisation of Figure 2.2. Diagonal lines and crossing out indicate
which portions of Figure 2.2 do not apply.

Deleuze's view of context is, in contrast, diametrically opposed to the
orientation to context in (critical) discourse analysis:

Deleuze's philosophy is anti-contextual. *Recognising* our culture, our
discourses, or our 'construction of reality' is just one more way of allowing
ourselves to remain who we are, enslaved to an 'image of thought'.
Confronting non-human, machinic, or disconnected forces beyond our

recognition is, for Deleuze, *active* thinking: a thinking that is not defined by an image it creates of itself, but that reforms itself over and over again, eternally.

(Colebrook, 2002a: 66)

Underpinning Wittgenstein's approach to context is the need to register its different 'forms of life'. But this is the antithesis of a Deleuzian way of living. Acknowledging the different contexts of life keeps life as it is rather than transforming it.[5] Deleuze was rather unrestrained when he was asked to discuss Wittgenstein:

Pour moi, c'est une catastrophe philosophique . . . c'est une réduction de toute la philosophie, une régression massive de la philosophie. C'est très triste . . .

(Deleuze and Parnet, 1996b)

Since this book stresses the utility of digital supplementation for analysis of public sphere arguments, it emphasises 'active thinking' in 'confronting non-human, machinic, or disconnected forces beyond our recognition'. Yet, Wittgenstein is not completely ostracised from Figure 11.3. The deconstructive analyst finds out 'big D' Discourse for the topic or standpoint being criticised in an argument. However, even though these 'big D' Discourses should ideally be (mostly) new for students, they already exist. And, since that is the case, this book is not the purest possible instantiation of the thinking of Deleuze (and Guattari). The most thorough-going Deleuzian pedagogy would, instead, encourage the *invention* of 'big D Discourse'. In other words, students would create thoroughly novel ways of talking and standpoints to use as critical lenses on an argument. A tall order though for most of us.[6]

11.5 Ethical versus political reading

11.5.1 Normativity

The deconstructive approach I put forward subscribes to the normative rule of pragma-dialectics that an argument should accurately describe the standpoint it is criticising. This is the normativity that applies when this strategy is situated within critical thinking. When the second analytical strand is situated, more specifically, within CDA another normativity applies: the student should embrace an 'ethics of otherness' towards minoritarian groups, seeking to understand restrictions on their self-determination. Another deterritorialisation of CDA, then, is the emphasis placed on the dialectical in relation to the ethical. In other words, it is not just a dialectical fallacy to create a straw man – to flout the standpoint rule in pragma-dialectics. The second strand is both dialectical and ethical or 'dialethical'.

11.5.2 Avoiding a predestined political reading

In his book *Infinitely Demanding: Ethics of Commitment, Politics of Resistance*, the philosopher Simon Critchley makes a distinction between ethical subjectivity and political subjectivity. Critchley is in part inspired by the ethics of Levinas, with Critchley contending that ethical subjectivity is the most important of Levinas' concepts (Critchley, 2007: 62). Critchley is concerned with showing how a heteronomous ethics – which involves the formation of an ethical subjectivity – can lead to the creation of a political subjectivity which engages in resistance to majoritarian structures sustaining, amongst other things, inequality. Political subjectivity for Critchley is then wrapped up with taking political *action*.

Equating political subjectivity with taking political action is hardly news in CDA (or elsewhere). Still, the concept of ethical subjectivity is *not* traditionally found in CDA. In my view, Critchley's simple distinction between ethical subjectivity and political subjectivity can be used to complicate productively the idea of 'political reading' in pedagogical CDA. One can't do CDA without political commitments. This means that CDA pedagogy is guided by a political subjectivity. If a student already has concrete political commitments, then it is self-evident that they will critique a text from these commitments. Why do they need to perform a labour-intensive linguistic analysis of a text or texts that they find politically objectionable in order to affirm with the utmost rigour what they knew already? With this predestined reading, they do not *become* – their political reading is treading of water. Taking my cue from Critchley's associating of political subjectivity with political action, the student would have better spent their time using their extant political subjectivity to campaign for the cause they are committed to. In contrast, if the student creates an ethical subjectivity in relation to a socially/economically relatively powerless group that they did not previously know (so well), then they have *become*. Their reading of an argument which criticises this Other is not predestined. The pedagogy has extended their consciousness. They are not treading water, but swimming to new shores. And, as I said in Chapter 10, if the analyst is convinced ultimately by the perspective of this Other, political support/resistance on behalf of the Other may ensue. In other words, an ethical subjectivity in argument analysis may lead to a political subjectivity of action.

I should build in a caveat. There may be occasions when we need to produce political readings of our favourite bête noire texts because we wish to persuade others of our cause. I am thinking, for example, of the 'TYBOP3 / OBJECT' joint submission to the UK Leveson inquiry (Chapter 7). So, I do not think there is no need at all for political reading. But to reiterate, I question its validity in a CDA pedagogy. Lastly, let me entertain a challenge to my argument: 'not all students have mature political subjectivities, so CDA pedagogy is useful because it helps students either to

find or to develop political subjectivities'. The problem with this stance is that it is open to the charge that CDA pedagogy indoctrinates students into a left-wing perspective. Which brings me to a well-known critique of CDA.

11.5.3 Charges of political inculcation

The applied linguist, Henry Widdowson, highlights that critical discourse analyses are 'paradoxically, seductively persuasive' (Widdowson, 1995: 169), since they could politically influence the consumer of these analyses. Or as Widdowson puts it elsewhere:

> students are subjected to precisely the kind of hegemonic process that CDA sets out to expose.
>
> (Widdowson, 2004: 173)

If the force of Widdowson's critique is felt, then the pedagogical use of CDA is in a double-bind: one cannot do politically committed text analysis unless one has political commitments. But one cannot teach political commitments – since this is to reproduce an ideological perspective – the very thing that the critical discourse analyst is seeking to expose! One way round this difficulty is for the lecturer to institute a sensitive and balanced mediation of CDA textbooks in seminars, encouraging students to think independently, and devoting time to debating the validity of political readings by CDA scholars. Those suspicious of CDA might say in response, I suppose, that in reality this could be time spent reinforcing the validity of a left-wing perspective.

This book has argued for a different way of doing things, where such suspicions should not apply. Insisting, for at least the duration of an analysis, on the construction of an ethical subjectivity from which a student reads a public sphere argument avoids the charge that CDA pedagogy inculcates political commitments. The student chooses which argument to explore for possible deconstruction (albeit in line with the broad parameters mentioned in 10.8). In other words, it is the student – not the lecturer – who selects which socially/economically relatively powerless Other to show ethical responsiveness to. If the student goes on to align politically with the Other following on from their deconstructive analysis, then that is their choice for they have 'indoctrinated' themselves.

11.5.4 Orientation to social problems

Another difference from traditional CDA, in relation to the ethical/political division, is apropos social problems. CDA is a problem-oriented form of discourse analysis (Wodak and Meyer, 2016). It seeks, for example, to ascertain how d/Discourse can reinforce the problem of social inequality. I am

certainly not taking issue with such an important focus. Rather, I am flipping it. The digital deconstructive analyst's starting point for text evaluation is not what they perceive as a social problem. Instead, their starting point is what *the relatively powerless Other regards as a social problem*. Reflecting the quotation from van Dijk at the start of Chapter 7, traditional CDA *sympathises* with the oppressed's problems as a precursor to critical analysis. However, this sympathising is not the basis of the text evaluation since the analyst ultimately critical engages with the text from their own political subjectivity. In contrast, the approach of this book uses rigorous *empathising* with the oppressed's problems as the very basis of its critical analysis.

11.5.5 Emergent posthuman (ethical) subjectivities and embedded critique

Since a posthuman subjectivity emerges from convergences of opinion across multiple Others in their specific contexts, this means that it is an embedded or immanent subjectivity rather than a transcendent subjectivity. [Rosi Braidotti's version of a posthuman subjectivity, for example, is embedded and situated (Braidotti, 2013: 49; 94)]. A posthuman subjectivity emerges through the particularity of its connections rather than being imposed from outside. It follows that critique from the perspective of an embedded subjectivity is less 'rarified' than critique based on a political subjectivity deeming something as sexist, racist, disablist and so on. Should the ethical subjectivity be grounded in an aggregate of the opinions of those who have suffered disadvantage in their specific contexts, not only does use of this subjectivity make for a situated critique, it can also carry conviction because it is based on concrete testimony of the multiple rather than the political subjectivity of one analyst.

Since a posthuman subjectivity emerges from a set of particular situational embeddings, it follows also that it may only be temporary, e.g. if it is attached to a political campaign. Moreover, posthuman subjectivities – in being reliant on the digitised contributions from a multiple of people – are necessarily partial. That is to say, these subjectivities, if they are based on social data, can of course only be constructed from the data of those who have contributed.

11.6 Teaching and researching via posthuman subjectivities

11.6.1 Pedagogical advantage of adopting a posthuman (ethical) subjectivity

In my teaching of CDA, I have encountered students whose political outlook is not yet so crystallised (though, I have encountered many students who

are the opposite). Encouraging the adoption of ethical subjectivities and/
or discursive subjectivities – rather than expecting fully fledged political
subjectivities – can be a more doable form of critical discourse analysis for
this kind of student.

11.6.2 Cognitive intervention, political participation and student assessment

Where CDA has been successful in intervening in discourse, this is usually
as a result of substantial empirical investigations by experienced researchers,
using a variety of complex research methods which study human beha-
viour and discourse production such as ethnography (e.g. Wodak, 1997).
Undergraduates cannot be expected to handle effectively methods like
ethnography, and thus cannot realistically be expected to intervene in
discourse in ways possible for experienced CDA researchers. In contrast,
corpus linguistic method does not involve the study of human behaviour
and is relatively straightforward to use, making it a more suitable research
method for undergraduate employment. In facilitating disruption of Self
through responsiveness to the Other, use of corpus linguistics in deconstruc-
tion of public sphere arguments leads to a different form of intervening –
'cognitive intervention' – since new perspectives and rigorous empathies are
afforded. For many undergraduates, I would argue, this is a more realistic
form of intervention.

Nevertheless, echoing what I said earlier, a byproduct of ethical respons-
iveness could be the development of (some) political commitment to a socially/
economically relatively powerless Other with ensuing politically resistant
action. This could be the simple political action of students linking on social
media to their deconstructive analysis of a public sphere argument – which
they conducted for an assignment. A CDA of direct rebuttal. Or students
could participate in the Other's political campaign by making a protest video
for coursework. For example, they might collaborate on a video which shows
how they were able to deconstruct several prominent arguments opposing the
campaign they are showing ethical responsiveness to. The video could take
the viewer through all the stages of the project such as the data harvesting, the
corpus analysis, and discussion between the students on where valid decon-
structions occur. If the intention is to disseminate the videos on social media,
using short segments of arguments opposing a particular campaign would
work best to help ensure the videos are engaging and accessible. Finally,
students could also offer the results of their data mining to the campaign.
This may help campaign initiators understand better supporter motivations
for joining, possibly leading to an enhanced framing and advertising of the
campaign.

11.6.3 Extending data-driven minoritarian CDA

The procedure for creating minoritarian corpora to enable critique of majoritarian public sphere arguments could be extended for a longer assignment, such as an undergraduate dissertation, by creating a large corpus of related majoritarian public sphere arguments. In this way, the student would also be able also to understand with rigour the 'big D' Discourse of the majoritarian perspective. Critique would be in two parts. In the first part, students would use the recurrent aspects of the minoritarian corpus to critically engage with recurrent aspects of the majoritarian corpus. The second part would narrow on a particular majoritarian public sphere argument and probe it for potential deconstruction. An advantage of having created a large corpus of related majoritarian public sphere arguments is that we can ascertain a *prototypical* one, e.g. on the basis of keywords and collocations which are prototypical in the corpus. We would not, then, be deconstructing just any argument, but one which is fairly representative of the majoritarian Discourse. This would put us in a stronger position to resist challenges to our selection of argument data such as 'well that author is a rather marginal or maverick figure and hardly representative'.

Some students may want to go beyond public sphere arguments and look at texts which, while opinion and value-driven, are less obviously argumentative. Company mission statements is one genre which can fit this description. Mission statements may, for example, disingenuously respond to previous criticisms of ethical practices, responding indirectly whilst ignoring other criticisms.

The focus of this book on public sphere arguments reflects their salience and significance in potentially shaping public opinion; the focus on straw man arguments reflects their ubiquity and thus their usefulness for a critical pedagogy. I did think of looking at other text-types, but decided it was better to try to create a focused and integrated book. All the same, I can imagine ethical subjectivities being used to enable critique of other text-types. What about news media texts and how they represent relatively powerless Others such as refugees, (im)migrants and asylum seekers? Given the rise of social media usage, in principle at least, there is the possibility for aggregating the voices of Others such as (im)migrants, refugees and asylum seekers from their use of social media. Ascertaining, at scale, commonalities across how particular migrant groups *represent themselves* facilitates the creation of a generalised ethical subjectivity and, in turn, the following: a posthumanised rebuttal of the characteristically dehumanising reporting of migrants.[7]

11.7 Future posthuman subjectivities

It is inevitable that the current embryonic posthumanities are imbricated with humanism, meaning in turn that this book must reflect the current

hybridity. No doubt in time the posthumanist readings of this book will appear less posthumanist / more humanist. Imagine a scenario, for instance, where a machine initiated the creation of a minoritarian subjectivity and the reader's contribution was to supplement the machine's 'human lack'. Another point: the posthuman subjectivities that I created were assemblages of me and data mining results. They do not reflect the assemblages of authors engaging with their machinic environments and how, in turn, these engagements impinge upon their subject formation and language design. A generalised subjectivity which aggregated not just the language product of different online authors, but the increasingly posthuman *processes* of their language production, would also make for a more posthuman form of subjectivity.

Posthumanist studies are moving at pace. All of us in the humanities will need to work out where we stand vis-à-vis the deconstruction of humanism, the implications of this for the humanities and for supplementing/ reinflecting/enhancing human rights. I have found the posthumanist/ Continental thinkers included in this book a fascinating stimulus. But, inevitably, there are things to take issue with. For example, in putting forward her posthuman ethics, Rosi Braidotti rejects moral universalism (Braidotti, 2013: 190–191). I understand the philosophical basis of the rejection, but am somewhat anxious about what seems an undervaluing of universal human rights – positive legacies of the much caricatured Enlightenment. Consider, for instance, the need in the posthuman future to prevent the sale of potentially harmful biotechnology or the need to institute legal barriers to the super-rich becoming the major beneficiaries of expensive health enhancement. Such legal scenarios imply universalist moral evaluation, i.e. all humans should be protected from harmful technologies; new developments in health enhancement should be available for all. It doesn't necessarily follow that moral universalism is jettisonable just because it is (inconveniently for some) associated with humanism or the Enlightenment (and moral universalism does not have to be transcendent as I have argued (10.8.3).

The philosopher Quentin Meillassoux isolates what he refers to as 'correlationism' as a background humanist assumption of living. On this perspective, the world exists via the correlation of our thinking in the world and our being in the world – in short, the world exists to the extent that it exists for humans (Meillassoux, 2008[2006]). On Meillassoux's argument, correlationism applies an anthropocentric brake on thinking the posthuman. So ingrained is this assumption that it seems preposterous to try to think other than human (11.8.2). Similarly, it appears hare-brained to perplex over, what another thinker, Eugene Thacker, refers to as, 'the world-without-us' (Thacker, 2011). Humans are impressive in how they afford meaning and value to the planet so as to render it the best possible exploitable 'world-for-us' (another of Thacker's coinages). But this has led directly to the Anthropocene. Cogitating what the planet might look like without

humans – which can hardly be a worse planet – is a thought experiment for conjuring the paradoxical adjustments that humans need to make to ensure posthuman survival.

Correlationism, most probably, has its roots in our biological hard-wiring for short-term advantage. A survival mechanism from the Pleistocene motors a calamitous short-term advantage in the present: edacious desire for financial profit. As should be self-evident, hyper-capitalism, being dependent on continual growth in production, requires vast energy resources. It cannot function either without willing consumption of the things it produces, many of which draw on the same energy resources. With much of our energy still deriving from fossil fuel combustion, the planet glows from CO_2 fallout. Worse, the algorithm of the hyper-capitalism machine perpetually instructs greater fossil fuel wrenching in an insane geometric progression. Not everyone is a major agent of this ruination, but dwellers in major economies are implicated in their day-to-day affirmation of this system. Needless to say I have played my own part in beckoning the Anthropocene. Thinking posthumanly in order to institute, in Haraway's (2008: 38) term, a *becoming-with* our biosphere once again and ensure it is habitable for the *un*reproduced of all species (bar the very harmful, e.g. viruses) and their co-evolution means also the following: humans trying to suppress their own biological heritage. As if thinking other than human, or a 'world-without-us', were not hard enough already.

There is one more deterritorialisation. This relates to the work of Jacques Derrida.

11.8 Jacques Derrida

11.8.1 Digital transformation of the humanities

As I highlighted, corpus linguistics shows that the starting point for making meaning is the semi-fixed, semi-abstract phraseology. This means that when we make meaning, we instantiate phraseologies. Conversely, whatever meaning we make, the semi-abstract, semi-fixed phraseology remains as a reasonably stable orientation point semantically speaking. A corollary of this corpus-driven insight is that non-deliberate ambiguity in an individual word is rare since word meaning is dependent on the meaning of other words in the phraseology. Semantic ambiguity arises when you take a word out of its habitual phraseology. Derrida's perspective that all meaning is inherently undecidable is thus not credible. It is important to be clear that Derrida always emphasised the importance of co-text and context in understanding meaning-making. All the same, in much of his work his starting point is the individual sign – as reflected in his reading of the word *pharmakon* – going on to explore what it means in the co-text and context of Plato's *Phaedrus*. This is very different from taking as a starting point the semi-fixed, semi-abstract phraseology.

Since it relies on electronic data, the digital humanities, of which corpus linguistics is a part, is necessarily an empirical form of study. This may seem a footling point. In fact, it reflects a profound shift in humanities scholarship and teaching. As the humanities become more and more digitised, (post) humanities scholarship increasingly has an empirical basis. This makes it less likely that (post)humanities scholarship can get away with speculative and unproven statements about how the world is and, more specifically, how language is. In fact, once pharmakon, trace, etc. are rejected, we see that some of what is regarded as radical or unsettling in Derrida's approach to language and meaning is rather commonplace. The Derridean scholar, Nicholas Royle says:

> [Derrida's] conception of language is evidently troubling to some people. One is never entirely in control or ownership of what one is saying.
>
> (Royle, 2009: x)

But the proposition of the second sentence is fairly uncontroversial. It is the means which Derrida uses to justify it which are problematic. If we take literary texts, it is normal for different readers to have interpretations which exceed what the writer intended. This is especially so when we are reading a literary text written a long time ago. Given the effort to imagine the past fully and accurately, if indeed this is ever completely possible, more than likely we will end up intruding into the literary text with our understandings of themes from more recent times. With non-literary texts, interpretation may not coincide with authorial intention for fairly prosaic reasons. For example, the writer did not construct their meaning lucidly; there are cultural differences between audience and author; the audience lacks relevant background knowledge; the audience does not restrain their prejudices to enable a fair, careful and balanced reading (see House, Kasper and Ross, 2003).

11.8.2 Rejecting Derrida's philosophy of language does not mean rejecting Derridean deconstruction

By rejecting Derrida's philosophy of language, however, I am certainly *not* rejecting Derridean deconstruction. In this respect, my position is similar to that of the Derridaphile, Simon Critchley:

> I was never a structuralist and always found Saussure's linguistics a deeply improbable approach to language, meaning and the relation of language and meaning to the world. Therefore, Derrida's early arguments in this area . . . always left me rather cold . . . So, in assessing Derrida's influence, I would want to set aside a series of notions famously associated with him – like *différance*, trace and archi-writing . . .
>
> (Critchley, 2008: 1)

Like me, Critchley values Derrida, and deconstruction generally, for highly original readings of philosophical, literary and cultural texts. But, as reflected in the quotation, Critchley does not value Derrida's 'unproven philosophy of language' (Critchley, 2008: 1) nor its 'improbable' roots, the linguistics of Ferdinand de Saussure. This segregation of Derrida's unsubstantiated philosophy of language from his inventive practice(s) of reading is something I concur with. This is particularly because many of Derrida's readings, and many readings in Derridean deconstruction generally, do not depend on his philosophy of language. For example, in Chapter 3, I flagged Derrida's posthumanist deconstruction of the human/animal binary via his invention of 'animot'. And, in rejecting Derrida's philosophy of language, it becomes clear that Derrida is always the agent of his deconstructions, not language. Another type of deconstruction where Derrida is insightful and convincing is where he uncovers paradoxes – what he refers to as 'aporiae'- in a number of everyday concepts, e.g. forgiveness, the gift, hospitality. Rather than seeing embarrassment in these concepts, Derrida's 'aporetic' reading embraces their paradoxical nature in an inventive way. I showed, in Chapter 7, Derrida's aporetic reading of the concept of 'hospitality' which, in turn, leads to him using the paradox in this concept as the basis of a productive ethics. An ethics which I have absorbed into this book.

Derrida's aporetic approach has inspired many creative deconstructive readings. Again, many of these bypass his philosophy of language. One such deconstruction can be found in Herbrechter and Callus (2008). They perform a series of critical posthumanist readings of classic sci-fi films. The purpose of the readings is to probe the degree to which films such as *Blade Runner* and *The Matrix*, which seemingly deal with a posthuman future, in fact, have a conservative humanism at their core. This humanism may not be so apparent until the challenging effort is made to read these films from the Other of the posthuman. Just like Derrida, Herbrechter and Callus (2008) do not sweep under the carpet the paradox inherent in their mode of reading – a human trying to read as not (wholly) human. They embrace it for the possibilities it opens up for a new kind of reading – 'critical posthumanism':

> to be 'human' . . . helps set up or underscore hierarchies which in turn determine certain (accepted) ways of reading 'as a human,' so that it becomes pertinent rather than ridiculous to ask how one can read *not* as a human. How can one read in a manner that does not take 'as read' the humanity from which one reads? It is precisely this 'as read' that critical posthumanism reads and deconstructs.
> (Herbrechter and Callus, 2008: 96)

While this book also offers a posthumanist form of reading, there are differences from Herbrechter and Callus' critical posthumanism. My orientation

to critical reading is not aporetic. It does not embrace a paradox because it does not involve a human trying to read a text as a non-human. Rather, a public sphere argument is read by a human who has been machinically supplemented.

And, finally, one other aspect of Derrida's scholarship which is important and is not necessarily connected to his language philosophy. His orientation to the future, attempting to remove conceptual blockages to its arrival, is necessary if we are interested in progress. That is to say, it is healthy to adopt a deconstructive attitude to concepts and practices previously stimulating of positive change, but which may have become dysfunctional because they are (inadvertently) inhibiting advance.

11.8.3 Overlap between this book and Derridean deconstruction

While I have critically appropriated much from Derridean deconstruction for different ends, I have also, more straightforwardly, lifted elements from it into the strategies of this book. So, there are differences and overlaps. The following are common to both approaches: showing hospitality to the Other; allowing the Other to speak; critically engaging with a text from the vantage of its supplement; opening up a text to new possibilities of difference or to 'suppressed' differences; emphasising non-predestined readings; unsettling the borders of the text; that the stability of a text's structure can be dependent on what it excludes. Where the approaches diverge are as follows: the deconstructive approach I offer *is* a method – a responsive and responsible one – for critically engaging with a public sphere argument. Derridean deconstruction can never be a method since inventiveness is key to its practices, and there is no magic formula for that. The critical procedures of this book are not inventive in this sense (though they involve the creation of subjectivities). Neither do they engage in aporetic reading, nor have Saussurean roots.

11.9 To create is to resist

I return to a quotation fronting this book:

> The notion of the non-human, in-human, or post-human emerges as the defining trait of nomadic ethical subjectivity.
>
> (Braidotti, 2012: 172–173)

I have tried to show how posthuman subjectivities can be conjured via the non-human of the corpus and its software sifting. These data-driven subjectivities derive from nomadic travels on the web. On the approach offered, the role of the critical thinking or CDA teacher is as follows: showing students the tools and software to enable them to create ethical

subjectivities and/or discursive subjectivities, facilitating their own becoming in relation to the public sphere argument they have chosen for analysis, and putting them in a position to resist an argument which otherwise they might deem reasonable through lack of knowledge of the topic and/or the stand-point being attacked. In line with the increasing commonplaceness of data harvesting, it is not inconceivable that techniques of web corpora aggregation will become more mainstream and easier to execute, making it easier to spot, in a public sphere argument, lack of addressing of key oppositional concerns. Such an eventuality would be welcome since it could oblige an arguer to engage with these concerns rather than evade them, with a more principled 'dialogic' form of argumentation a potential outcome.

Opining on an Other whilst not understanding their motivation, opining on an issue whilst being ignorant of relevant dissenting voices, especially when their critique derives from personal suffering, is mere ego-broadcast. With no interruption of Self, there is no deterritorialisation and thus no cognitive growth. But we have the stupendous resources of the World Wide Web and digital text analysis tools. Together they enable a concentrated heteronomous wandering and discovery which embraces the productive paradox that comes from showing hospitality to the Other. Freedom of Self is infringed; simultaneously Self is freed from chasing its tail.

Notes

1 In Rosalyn Diprose's words: 'It is the other's alterity that makes me think, rather than ideas I live from and that seem to make me what I am'. Diprose (2002: 141).
2 Available at http://www.guardian.co.uk/commentisfree/2013/feb/05/hungary-right-political-abyss?commentpage=5#comment-21101985 [accessed July 2016].
3 To be clear, in teaching critical language awareness, it is certainly a good thing to make students sensitive to the presence or absence in texts of social actor agency. But, students don't need a detailed grasp of SFG clause analysis (see 2.5) to facil-itate this awareness. Where I see functional clause analysis as particularly useful is when it can be conducted at scale. To discover how different newspapers treat different social actors in any one year, say in the Israel / Palestine theatre, is time well spent since we cannot easily intuit this.
4 On some problems with use of Lakoff and Johnson (1980) in CDA, see O'Halloran (2007a; 2007b).
5 For further differences between Deleuze and Wittgenstein, see Due (2011).
6 For other use of Deleuzian ideas to reconfigure pedagogy, see Masny (2013); Semetsky (2006); Semetsky and Masny (2013).
7 On use of social media by refugees, see: http://www.ft.com/cms/s/0/09625b90-56f.c-11e5-a28b-50226830d644.html#axzz3sLtY1P7g [accessed July 2016].

Glossary

Annotation   The process of appending labels ('tags') to words, chunks of text or other data such as images in order to facilitate a focused investigation of a dataset. Annotation (or 'tagging') can be manual or automated.

Coherence   The way in which a TEXT holds together through meanings both within the text, and in relation to the wider CONTEXT, including the background knowledge of the listener or reader. Coherence is a mental property. Compare COHESION.

Cohesion   The way in which a TEXT holds together through grammatical and lexical features which link one part of the text with another. This can take place through reiteration, i.e. the repeating of grammatical and lexical words. Or it can take place through use of different lexis from the same SEMANTIC FIELD. Cohesion is a textual property. Compare COHERENCE.

Cohesive device   Cohesive devices are specific grammatical and lexical features which link one part of the text with another, e.g. 'What does **your wife** do?''**She**'s an electrician'.

Colligation   The tendency for words from different grammatical categories to co-occur, e.g. the verb *want* colligates with the preposition 'to' when it is the beginning of an *infinitive* such as in 'I want to break free'. Each word in a colligation is said to be a 'colligate' of the other(s).

Collocation   A combination of LEXICAL WORDS which frequently occur together, e.g.: *little* + *baby*, *small* + *amount*. Each word in a collocation is said to be a 'collocate' of the other(s).

Concordance lines   An index to a place in a text where particular words and phrases occur. Concordance lines show the co-texts for the NODE word in a corpus of texts.

Context   Factors relevant to the interpretation of a TEXT other than its words – e.g. the situation and background knowledge. It is sometimes used in a sense which includes CO-TEXT, and sometimes in a sense which means only SOCIOCULTURAL PRACTICE.

Co-text   The linguistic context of a stretch of language, i.e. TEXT, which occurs before and/or after the word or expression under consideration.

Corpus (plural Corpora) A collection of naturally occurring language data in the form of written and spoken TEXTS.

Corpus linguistics The systematic analysis and description of extensive CORPORA to reveal facts such as word frequencies, collocations.

Delexicalisation The process by which the words that occur within a collocation lose their independent meaning. For example, in the collocation *a slap-up meal*, *slap* has lost association with the action of slapping.

Discourse Has at least two meanings:

1) It refers to 'language in use'. For example, the discourse of a conversation refers to the whole of the meanings made in interaction with features of CONTEXT which are deemed relevant by participants, e.g. tone of voice, facial movements, hand-gestures. (The TEXT would be the transcription of this conversation.)

2) In (Critical) Discourse Analysis, it refers to a way of talking about the world which is intricately bound up with a way of seeing and understanding it, e.g. religious discourse, scientific discourse, political discourse. James Paul Gee makes a memorable distinction between the two senses. He refers to sense 1) as 'little d' discourse and sense 2) as 'big D' Discourse.

Discourse practice When we use language, we are within specific social contexts, e.g. arguing with a friend's choice of music as background for a party; gossiping about the boss in a pub; taking vows at a wedding ceremony. Critical Discourse Analysis uses the expression 'discourse practices' to refer to such activities (see SOCIOCULTURAL PRACTICE).

Ellipsis Ellipsis occurs when elements of a CLAUSE or PHRASE are not expressed. These ellipted elements can be reconstructed from the CONTEXT (e.g. A: I have to appease you. B: No you don't <. . .>).

Grammatical word Expresses a grammatical relationship and classification, e.g. determiners (a, one, the, three), conjunctions (and, if, when), prepositions (at, in, on), pronouns (he, she, him, its), auxiliary verbs (be, do, have). Compare LEXICAL WORD.

Head The central element of a PHRASE, e.g. the oldest *woman* in the world.

Hyponymy The relation between a general class and individual members of that class: 'Roses' and 'lilies' are hyponyms of 'flower'. See also SUPERORDINATE.

Keyword A word that occurs with a frequency that is statistically unusual relative to a REFERENCE CORPUS norm. A keyword with a positive value is one that is unusually frequent in a text; a keyword with a negative value is unusually infrequent. The statistical value of a keyword is referred to as its 'keyness'. The LOG LIKELIHOOD statistical metric is often used to establish the keyness of a word.

Lemma   The 'family term' for a set of word forms which are related through meaning and, usually, WORD CLASS, e.g. the verb word forms *leave, leaves, left, leaving* belong to the lemma LEAVE. To distinguish from word forms, lemmas are represented conventionally in small capitals.

Lemmatise   The process of analysing the words of a text on the basis of lemmas rather than word forms; e.g. in a lemmatised text, *go, goes, went, gone, going* would be counted together as the lemma GO.

Lexical word   Carries the main information content of a spoken or written text, and belongs to four grammatical classes: nouns (dictionary); lexical verbs (walk), adjectives (hot) and adverbs (beautifully). Compare GRAMMATICAL WORD.

Linguistics   The academic discipline concerned with the study of language.

Log likelihood   A metric used as a test of statistical significance. Log likelihood is a common metric for establishing KEYWORDS.

Meronymy   The relation between a whole and the parts that make up the whole, e.g. 'wheels', 'chassis' and 'engine' are meronyms of 'car'.

Metalanguage   Language for talking about language. For example, 'noun' is a metalinguistic term.

Metalinguistic   The adjective from METALANGUAGE.

Node word   In concordancing, the node word is the word or PHRASE that is searched for.

Noise word   A word, typically grammatical, that has so little meaning or significance that its presence in a word list can be considered 'noise' for some purposes. Such words are sometimes eliminated from consideration in corpus analysis.

Part of speech   See WORD CLASS.

Phrase   A structural unit built from words, consisting of a HEAD plus (optionally) modifiers. A phrase may consist of one word or several. For example, 'the most beautiful woman in the world' is a noun phrase containing the head, 'woman'; it is pre-modified by the determiner 'the' and the adjectival phrase 'most beautiful' (containing the head, 'beautiful') and post-modified by the prepositional phrase 'in the world' (containing the head, 'world').

Phraseology   Regular language patterns can be longer than collocations or colligations, consisting of strings of lexical and grammatical words, e.g. 'the first time I saw'. Such patterns, which may or may not correspond to complete grammatical units, are known as phraseologies.

Pragmatics   The study of the way language users make meaning in CONTEXT or what is known as 'pragmatic meaning'. Compare SEMANTICS.

Reference corpus   A large body of electronic textual data that provides a point of comparison for the smaller body of data which is to be investigated. Establishing the 'keyness' of a word relies on such a comparison

(see KEYWORD). In order to be used rigorously as a norm, reference corpora need to be balanced in their composition, consisting of more or less equal amounts of texts from different common genres (e.g. conversation, news).

Semantics   The study of the meaning of language forms or what is known as 'semantic meaning'. Compare PRAGMATICS.

Semantic field   Words that can be grouped together through similar meaning. For example, 'tank', 'soldier', 'army' can be grouped under the semantic field of 'war'.

Semantic preference   This refers to a set of different, frequently occurring collocates which are from the same semantic field, e.g. collocates all about sport. It is a more abstract notion than collocation or colligation.

Sociocultural practice   A term used in Critical Discourse Analysis to refer to the wider social and cultural context, e.g. the political and economic structures of a society as well as its major institutions. See also DISCOURSE PRACTICE.

Specialised corpus   A corpus consisting of texts from one particular text type, e.g. all speeches by the President of the USA in 2015.

Superordinate   A general class to which instances of that class belong. 'Furniture', for example, is a superordinate of 'chair', 'bed' and 'table'. 'Hypernym' is an alternative term for superordinate. See HYPONYMY.

Tagging – see Annotation.

Text   Any sample of language in a form that can be analysed (including transcripts of spoken language).

Textual collocation   Hoey (2005) uses the expression 'textual collocation' to refer to words in a text which frequently co-occur within a wider wordspan than $n\pm4$.

T-Score   A statistical measure of the likelihood that two or more words occur together by chance.

Word class   A class of words based on grammatical and semantic properties. Two major families of word classes are LEXICAL WORD classes (nouns, verbs, adjectives, and adverbs) and GRAMMATICAL WORD classes (auxiliary verbs, conjunctions, determiners, prepositions, pronouns). A word class is sometimes called a PART OF SPEECH.

Word span   The number of words chosen either side of the NODE WORD to determine the scope of a concordance investigation of a corpus is known as the word span. Four places to the left of a node word, and four places to the right of it, is the standard span for searching for collocation in corpus linguistics (Jones and Sinclair 1974). This standard span is referred to, in short, as an $n \pm 4$ span (where n = node word).

Appendix

A. Software tools used in this book and where to find them

AntConc:
http://www.laurenceanthony.net/software/antconc/.
AntConc is a freely, downloadable tool. In the above link, there are video tutorials for the different functions as well as other useful information.

Sketchengine:
http://www.sketchengine.co.uk/.
Sketchengine is an online tool. It comes with a variety of reference corpora in many different languages. Users can load up their own text or corpora and conduct analyses. In this book, I have used Sketchengine principally for accessing reference corpora. But it contains a diverse set of functions, e.g. it can be used to lemmatise, to calculate keywords and to tag for part-of-speech.
For video tutorials, see:
https://www.youtube.com/user/TheSketchEngine/.

WMatrix:
WMatrix is an online tool which also comes with some English language reference corpora. Like Sketchengine, users can load up texts and corpora for executing analyses. It has a part-of-speech tagger and a semantic tagger.
http://ucrel.lancs.ac.uk/wmatrix/.
In this link, there are video tutorials for the different functions as well as other useful information.

These aren't the only software tools available for analysing texts/corpora. There are many others. See: 'Digital Research Tools Directory' http://dirtdirectory.org/about/.

B. Plain text

Corpus linguistic tools work well, and some only work with, unformatted text; so the tools may not work effectively with, say, Word documents. The same can apply to texts taken from the web since these will contain formatting (e.g. HTML). Unless you know that the tool can work with formatted text, you will need to convert to 'Plain text', a straightforward conversion using any word processing software.

C. Cleaning corpora

Corpora may need 'cleaning' before they can be analysed. One type of corpora cleaning involves discarding material which is extraneous to research goals. For example, if you are creating a corpus of discussion posts, you would need to delete names of the posters and dates of posts if these are irrelevant to your goals. Otherwise this information could skew results. Cleaning could also mean removal of images from webtext which will hinder efficient processing of the corpus by the software. For example, if you are analysing a discussion forum thread, you will also need to clean avatars used by posters. An easy way to do this is to copy web-based material and paste into software such as Notepad (Windows). All formatting and icons will vanish. (This operation basically amounts to conversion to 'Plain text').

D. Building corpora

The following provides useful information on creating corpora:

http://www.ahds.ac.uk/creating/guides/linguistic-corpora/.
http://www.lancaster.ac.uk/fss/courses/ling/corpus/blue/diy_top.htm/.

Bibliography

Aikin, S. and Casey, J. (2011) 'Straw men, weak men, and hollow men', *Argumentation* 25(1): 87–105.

Andrews, R. (2005) 'Models of argumentation in educational discourse', *Text* 25(1): 107–127.

Anthony, L. (2011) AntConc (Version 3.2.4) [Computer Software]. Tokyo: Waseda University. Available at http://www.antlab.sci.waseda.ac.jp/. [Accessed November, 2015].

Argamon, S. and Olsen, M. (2009) 'Words, patterns and documents: Experiments in machine learning and text analysis', *Digital Humanities Quarterly* 3(2). Available at http://www.digitalhumanities.org/dhq/vol/3/2/000041/000041.html/. [Accessed 9 November 2016].

Aristotle (2004) *The Art of Rhetoric*, trans. H.C. Lawson-Tancred, London: Penguin.

Arthur, P.L and Bode, K. (eds) (2014) *Advancing Digital Humanities*, Basingstoke: Palgrave Macmillan.

Attridge, D. (2008) 'Derrida's Singularity: Literature and Ethics', in S. Glendinning and R. Eaglestone (eds), *Derrida's Legacies*, Abingdon: Routledge, pp. 12–25.

Badmington, N. (2004) *Alien Chic: Posthumanism and the Other Within*, London: Routledge.

Baker, P., Gabrielatos, C., KhosraviNik, M., Krzyzanowski, M., McEnery, T. and Wodak, R. (2008) 'A useful methodological synergy? Combining critical discourse analysis and corpus linguistics to examine discourses of refugees and asylum seekers in the UK press'. *Discourse and Society*, 19(3): 273–306.

Baker, P., Gabrielatos, C. and McEnery, T. (2013) *Discourse Analysis and Media Attitudes: The Representation of Islam in the British Press*. Cambridge: Cambridge University Press.

Barnbrook, G. (1996) *Language and Computers*, Edinburgh: Edinburgh University Press.

Baxi, U. (2007) *Human Rights in a Posthuman World*, Delhi: Oxford University Press.

Beaugrande, R. de, (2001) 'Interpreting the discourse of H.G Widdowson: A corpus-based critical discourse analysis', *Applied Linguistics* 22(1): 104–121.

Beaugrande, R. de, and Dressler, W. (1981) *Introduction to Text Linguistics*, London: Longman.

Bennington, G. (1993[1991]) 'Derridabase', in G. Bennington and J. Derrida, *Jacques Derrida* (trans. G. Bennington), Chicago: University of Chicago, pp. 3–316.

Berber Sardinha, A.P. (2004) *Lingüística de Corpus*, Barueri SP, Brazil: Manole.

Berry, D.M. (2012) *Understanding Digital Humanities*, Basingstoke: Palgrave Macmillan.

Blair, J.A. (2012) 'Rhetoric, dialectic, and logic as related to argument', *Philosophy and Rhetoric* 45(2): 148–164.

Blair, J.A. and Johnson, R. (1987) 'The current state of informal logic', *Informal Logic* 9(2): 147–151.

Blommaert, J. (2005) *Discourse*, Cambridge: Cambridge University Press.

Bloor, M. and Bloor, T. (2007) *The Practice of Critical Discourse Analysis*, London: Hodder Arnold.

Bowell, T. and Kemp, G. (2015) *Critical Thinking*, 4th edn, Abingdon: Routledge.

Bradley, A. (2008) *Derrida's Of Grammatology*, Edinburgh: Edinburgh University Press.

Braidotti, R. (2002) *Metamorphoses*, Cambridge: Polity.

Braidotti, R. (2006) 'The ethics of becoming imperceptible', in C. Boundas (ed.), *Deleuze and Philosophy*, Edinburgh: Edinburgh University Press, pp. 133–159.

Braidotti, R. (2013) *The Posthuman*, Cambridge: Polity.

Braidotti, R. (2012) 'Nomadic Ethics', in D.W. Smith and H. Somers-Hall (eds), *The Cambridge Companion to Deleuze*, Cambridge: Cambridge University Press, pp. 170–197.

Brink-Budgen, R., van den (2010) *Critical Thinking for Students: Learn the Skills of Analysing, Evaluating and Producing Arguments*, 4th edn, London: How to Books.

Butterworth, J. and Thwaites, G. (2013) *Thinking Skills: Critical Thinking and Problem Solving*, 2nd edn, Cambridge: Cambridge University Press.

Callinicos, A. (2008) 'Jacques Derrida and the New International', in S. Glendinning and R. Eaglestone (eds), *Derrida's Legacies*, Abingdon: Routledge, pp. 80–89.

Caputo, J. (1997) 'A Commentary', in J. Caputo (ed.), *Deconstruction in a Nutshell*, New York: Fordham University Press, pp. 29–202.

Carter, R. and Nash, W. (1990) *Seeing through Language*, Oxford: Blackwell.

Chouliaraki, L. (2008) 'Discourse Analysis', in T. Bennett and J. Frow (eds), *The SAGE Handbook of Cultural Analysis*, London: SAGE Publications, pp. 674–698.

Coffin, C. and O'Halloran, K.A. (2006) 'The role of APPRAISAL and corpora in detecting covert evaluation', *Functions of Language* 13(1): 77–110.

Colebrook, C. (2002a) *Gilles Deleuze*, Abingdon: Routledge.

Colebrook, C. (2002b) *Understanding Deleuze*, Crows Nest, NSW: Allen & Unwin.

Cook, G. (1994) *Discourse and Literature*, Oxford: Oxford University Press.

Cook, G. (2004) *Genetically Modified Language*, London: Routledge.

Cook, G. (2011) 'Discourse Analysis', in J. Simpson (ed.), *The Routledge Handbook of Applied Linguistics*, Abingdon: Routledge, pp. 431–444.

Cottrell, S. (2011) *Critical Thinking Skills: Developing Effective Analysis and Argument*, 2nd edn, Basingstoke: Palgrave Macmillan.

Critchley, S. (2004) 'Levinas', in J. Reynolds and J. Roffe (eds), *Understanding Derrida*, London: Continuum, pp. 127–134.

Critchley, S. (2007) *Infinitely Demanding: Ethics of Commitment, Politics of Resistance*, London: Verso.

Critchley, S. (2008) 'Derrida: The Reader', in S. Glendinning and R. Eaglestone (eds), *Derrida's Legacies*, Abingdon: Routledge, pp. 1–11.

Dawkins, R. (2006) *The God Delusion*. London: Black Swann.

Dawkins, R., Dennett, D., Harris, S. and Hitchens, C. (2007) *Four Horsemen: Discussions with Richard Dawkins*, Episode 1 (transcript). Available at http://www.richarddawkinsfoundation.org/fourhorsementranscript/. [Accessed July 2016].

Deleuze, G. (1990[1969]) *The Logic of Sense*, trans. M. Lester, ed. C. Stivale, New York: Columbia University Press.

Deleuze, G. (1991[1966]) *Bergsonism*, trans. H Tomlinson and B. Habberjam, New York: Zone Books.

Deleuze, G. (1995[1990]) *Negotiations 1972–1990*, trans. M. Joughin, New York: Columbia University Press.

Deleuze, G. (2004[1968]) *Difference and Repetition*, trans. P. Patton, London: Continuum.

Deleuze, G. and Guattari, F. (1987[1980]) *A Thousand Plateaus*, trans. B. Massumi, London: Continuum.

Deleuze, G. and Guattari, F. (1994[1991]) *What is Philosophy?* trans. G. Burchell and H. Tomlinson, London: Verso.

Deleuze, G. and Guattari, F. (2004[1972]) *Anti-Œdipus*, trans. R. Hurley, M. Seem and H.R. Lane, London: Continuum.

Deleuze, G. and Parnet, C. (1996a) 'G for Gauche', in *L'abécédaire de Gilles Deleuze*, directed by Pierre-André Boutang, Paris: Vidéo Editions Montparnasse.

Deleuze, G. and Parnet, C. (1996b) 'W for Wittgenstein', in *L'abécédaire de Gilles Deleuze*, directed by Pierre-André Boutang, Paris: Vidéo Editions Montparnasse.

Dennett, D. (2006) *Breaking the Spell*, London: Penguin.

Derrida, J. (1976[1967]) *Of Grammatology* [trans. G.C. Spivak], Baltimore, MD: Johns Hopkins University Press.

Derrida, J. (1978[1967]) 'Violence and Metaphysics', in *Writing and Difference*, trans. A. Bass, London: Routledge, pp. 97–192.

Derrida, J. (1981a) [1968]) 'Plato's Pharmacy', in *Dissemination*, trans. B. Johnson, London: Continuum, pp. 67–186.

Derrida, J. (1981b[1972]) *Positions*, trans. A. Bass, Chicago: University of Chicago Press.

Derrida, J. (1982a[1971]) 'White Mythology', in *Margins of Philosophy*, trans. A. Bass, Chicago: University of Chicago Press, pp. 207–271.

Derrida, J. (1982b[1968]) 'Ousia and Grammē: Note on a Note from Being and Time', in *Margins of Philosophy*, trans. A. Bass, Chicago: University of Chicago Press, pp. 29–67.

Derrida, J. (1982c[1968]) 'Différance', in *Margins of Philosophy*, trans. A. Bass, Chicago: University of Chicago Press, pp. 1–27.

Derrida, J. (1982d[1972]) 'Signature Event Context', in *Margins of Philosophy*, trans. A. Bass, Chicago: University of Chicago Press, pp. 307–330.

Derrida, J. (1987a[1978]) *The Truth in Painting*, trans. G. Bennington and I. McLeod, Chicago: University of Chicago Press.

Derrida, J. (1987b)[1980]) *The Post Card*, trans. A. Bass, Chicago: University of Chicago Press.

Derrida, J. (1988a[1977]) 'Limited Inc a b c . . . ', in *Limited Inc*, trans. S. Weber, Evanston, IL: Northwestern University Press, pp. 29–110.

Derrida, J. (1988b[1988]) 'Afterword', in *Limited Inc*, trans. S. Weber, Evanston, IL: Northwestern University Press, pp. 111–160.

Derrida, J. (1989[1988]) *Mémoires for Paul de Man*, rev. edn, trans. C. Lindsay, J. Culler and E. Cadava, New York: Columbia University Press.

Derrida, J. (1991[1983]) 'Letter to a Japanese Friend', in P. Kamuf (ed.), *A Derrida Reader*, trans. D. Wood and A. Benjamin, New York: Columbia University Press, 270–276.

Derrida, J. (1992) From: 'Psyche – Invention of the Other', in D. Attridge (ed.), *Acts of Literature*, London: Routledge, pp. 310–343.

Derrida, J. (1997) 'The Villanova Roundtable: A Conversation with Jacques Derrida', in J. Caputo (ed.), *Deconstruction in a Nutshell*, New York: Fordham University Press, pp. 3–28.

Derrida, J. (1998) 'I'm going to have to wander all alone: Gilles Deleuze', *Philosophy Today*, Spring 1998: 3–4.

Derrida, J. (1999a) *Adieu*, trans. P.-A. Brault and M. Nass, Stanford, CA: Stanford University Press.

Derrida, J. (1999b) 'Hospitality, Justice and Responsibility: A Dialogue with Jacques Derrida', in R. Kearney and M. Dooley (eds), *Questioning Ethics*, London: Routledge, pp. 65–83.

Derrida, J. (2000) *Of Hospitality*, trans. R. Bowlby, Stanford, CA: Stanford University Press.

Derrida, J. (2001a) *On Cosmopolitanism and Forgiveness*, trans. M. Dooley and M. Hughes, London: Routledge.

Derrida, J. (2001b) 'Affirmative Deconstruction', in P. Patton and T. Smith (eds), *Jacques Derrida*, Sydney: Power Publications, pp. 86–104.

Derrida, J. (2002a) 'The Animal That Therefore I Am (More to Follow)', trans. D. Wills, *Critical Inquiry*, 28(2): 369–418.

Derrida, J. (2002b) *A Taste for the Secret*, interviewed by M. Ferraris, trans. G. Donis, Cambridge: Polity.

Derrida, J. (2004a[1979]) 'Living On / Border lines', in H. Bloom, P. de Man, J. Derrida, G. Hartman, and J.H. Miller (eds), *Deconstruction and Criticism*, London: Continuum, pp. 62–142.

Derrida, J. (2004b[1981]) 'Deconstruction and the Other', trans. R. Kearney, in R. Kearney (ed.), *Debates in Continental Philosophy*, New York: Fordham University Press, pp. 139–156.

Derrida, J. (2004c) 'Enlightenment past and to come', trans. G. Cragg, *Le Monde Diplomatique*. 6 November. Online. https://mondediplo.com/2004/11/06derrida/. [Accessed July 2016].

Derrida, J. (2005) *Rogues*, trans. P.-A. Brault and M. Naas, Stanford, CA: Stanford University Press.

Dijk, T. van (2001) 'Multidisciplinary CDA: A Plea for Diversity', in R. Wodak and M. Meyer (eds), *Methods of Critical Discourse Analysis*, London: SAGE Publications, pp. 95–120.

Diprose, R. (2002) *Corporeal Generosity*, Albany, NY: SUNY Press.

Due, R.A. (2011) 'At the margins of sense: The function of paradox in Deleuze and Wittgenstein', *Paragraph* 34(3): 358–370.

Dunning, T. (1993) 'Accurate methods for the statistics of surprise and coincidence', *Computational Linguistics*, 19(1): 61–74.

Eagleton, T. (1996) *Literary Theory*, 2nd edn, Oxford: Blackwell.

Eemeren, F. van and Grootendorst, R. (2004) *A Systematic Theory of Argumentation: The Pragma-Dialectical Approach*, Cambridge: Cambridge University Press.

Entman, R. (1993) 'Framing: Toward clarification of a fractured paradigm', *Journal of Communication* 43(4): 51–58.

Eugenides, J. (2011) *The Marriage Plot*, London: Fourth Estate.

Fairclough, I. and Fairclough, N. (2012) *Political Discourse Analysis*, Abingdon: Routledge.

Fairclough, N. (1989) *Language and Power*, 1st edn, Harlow: Longman.

Fairclough, N. (1992) *Discourse and Social Change*, Cambridge: Polity.

Fairclough, N. (2000) *New Labour, New Language?*, London: Routledge.

Fairclough, N. (2001) *Language and Power*, 2nd edn, Harlow: Longman.

Fairclough, N. (2003) *Analysing Discourse*, London: Routledge.

Fairclough, N. (2010) *Critical Discourse Analysis*, 2nd edn, Abingdon: Routledge.

Fairclough, N. (2015) *Language and Power*, 3rd edn, Abingdon: Routledge.

Fairclough, N. and Wodak, R. (1997) 'Critical Discourse Analysis', in T. Van Dijk (ed.), *Discourse as Social Interaction. Discourse Studies: A Multidisciplinary Introduction*, vol. 2, London: SAGE Publications, pp. 258–284.

Fairclough, N., Mulderrig, J. and Wodak, R. (2011) 'Critical Discourse Analysis', in T. van Dijk (ed.) *Discourse Studies*, 2nd edn, London: SAGE Publications, pp. 357–378.

Ferraresi, A., Zanchetta, E., Baroni, M. and Bernardini, S. (2008) 'Introducing and evaluating UKWaC', in *Proceedings of the 4th Web as Corpus Workshop*, LREC, pp. 47–54. Available at http://clic.cimec.unitn.it/marco/publications/lrec2008/lrec08-ukwac.pdf [Accessed November 2016].

Fisher, A. (2011) *Critical Thinking*, 2nd edn, Cambridge: Cambridge University Press.

Flowerdew, J. and Richardson, J. (eds) (forthcoming) *The Routledge Handbook of Critical Discourse Studies*, Abingdon: Routledge.

Foucault, M. (1970[1966]) *The Order of Things*, trans. A. Sheridan, London: Tavistock.

Foucault, M. (1972[1969]) *The Archaeology of Knowledge*, trans. A. Sheridan. London: Tavistock.

Fowler, R. (1991) *Language in the News*, London: Routledge.

Fowler, R. (1996) *Linguistic Criticism*, 2nd edn, Oxford: Oxford University Press.

Fowler, R., Hodge, R., Kress, G. and Trew, T. (1979) *Language and Control*, London: Routledge and Kegan Paul.

Gee, J.P. (2014) *An Introduction to Discourse Analysis*, 4th edn, Abingdon: Routledge.

Gough, N. (2004) 'RhizomANTically becoming-cyborg: Performing posthuman pedagogies', *Educational Philosophy and Theory* 36(3): 253–265.

Gourlay, L. (2012) 'Cyborg ontologies and the lecturer's voice: A posthuman reading of the 'face-to-face" ', *Learning, Media and Technology*, 37(2): 198–211.

Govier, T. (2012) *A Practical Study of Argument*, 7th edn, Belmont, CA: Wadsworth Publishing.

Gramsci, A. (1971) *Selections from the Prison Notebooks*, ed. and trans. Q. Hoare and G. Nowell Smith, London: Lawrence & Wishart.

Groves, C. (2001) 'Deleuze's Kant: Enlightenment and education', *Philosophy Today*, 45(1): 77–94.

Habermas, J. (1987) *The Philosophical Discourse of Modernity*, trans. F. Lawrence, Cambridge, MA: The MIT Press.

Halliday, M. and Hasan, R. (1976) *Cohesion in English*, Harlow, UK: Longman.

Halliday, M. and Matthiessen, C. (2014) *Halliday's Introduction to Functional Grammar*, 4th edn, Abingdon: Routledge.

Hanafin, P. (2014) 'Law's Nomadic Subjects: Towards a Micropolitics of Posthuman Rights', in B. Blaagaard and I. van der Tuin (eds), *The Subject of Rosi Braidotti*, London: Bloomsbury Academic, pp. 214–219.

Haraway, D. (1991) 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century', in *Simians, Cyborgs and Women*, New York: Routledge, pp. 149–181.

Haraway, D. (2008) *When Species Meet*, Minneapolis: University of Minnesota Press.

Harland, R. (1993) *Beyond Superstructuralism*, London: Routledge.

Harris, S. (2006) *The End of Faith*, New York: Free Press.

Hart, C. and Cap, P. (eds) (2014) *Contemporary Critical Discourse Studies*, London: Bloomsbury.

Hayles, N.K. (1999) *How We Became Posthuman*, Chicago: University of Chicago Press.

Heidegger, M. (1978[1927]) *Being and Time*, trans. J. Macquarrie and E. Robinson, Oxford: Blackwell.

Herbrechter, S. and Callus, I. (2008) 'What is a posthumanist reading?', *Angelaki: Journal of the Theoretical Humanities* 13(1): 95–111.

Hidalgo Tenorio, E. (2009) 'The Metaphorical Construction of Ireland', in K. Ahrens (ed.), *Politics, Gender and Conceptual Metaphors*, Houndmills and New York: Palgrave Macmillan, pp. 112–136.

Hitchens, C. (2004) *Love, Poverty and War*, New York: Nation Books.

Hitchens, C. (2007) *God is not Great*, New York: Atlantic Books.

Hoey, M. (2005) *Lexical Priming*, London: Routledge.

House, J., Kasper, G. and Ross, S. (eds) (2003) *Misunderstanding in Social Life*, Pearson Education.

Huckin, T., Andrus, J. and Clary-Lemon, J. (2012) 'Critical discourse analysis and rhetoric and composition', *College Composition and Communication* 64(1): 107–129.

Hunston, S. (2001) 'Colligation, Lexis, Pattern, and Text', in M. Scott and G. Thompson (eds) *Patterns of Text: In Honour of Michael Hoey*, Amsterdam: John Benjamins, pp. 13–33.

Hunston, S. (2002) *Corpora in Applied Linguistics*. Cambridge: Cambridge University Press.

Hunston, S. and Francis, G. (2000) *Pattern Grammar*, Amsterdam: John Benjamins.

Jackson, D. and Newberry, P. (2016) *Critical Thinking*, 2nd edn, Stamford, CT: Cengage Learning.

Jacobs, S. (2000) 'Rhetoric and dialectic from the standpoint of normative pragmatics', *Argumentation* 14(3): 261–286.

Jacobs, S. (2009) 'Nonfallacious Rhetorical Design in Argumentation', in F. van Eemeren and B. Garssen (eds), *Pondering on Problems of Argumentation*, Berlin: Springer, pp. 55–78.

Johnson, R.H. (1992) 'The Problem of Defining Critical Thinking', in S.P. Norris (ed.), *The Generalizability of Critical Thinking*, New York: Teachers College Press, pp. 38–53.

Johnson, R.H. (2003) 'The Dialectical Tier Revisited', in Frans H. van Eemeren, J.A. Blair, C.A. Willard and A.F. Snoeck Henkemans (eds), *Anyone Who Has a View*, Dordrecht: Kluwer Academic Publishers, pp. 41–54.

Johnson, R.H. (2009) 'Revisiting the Logical/Dialectical/Rhetorical Triumvirate', in J. Ritola (ed.), *Argument Cultures: Proceedings of OSSA 09*, CD-ROM, Windsor, ON: OSSA, pp. 1–13.

Jones, S. and Sinclair, J. (1974) 'English Lexical Collocations', *Cahiers de Lexicologie* 24: 15–61.

Jørgensen, C. (2014) 'Rhetoric, dialectic and logic: The wild-goose chase for an essential distinction', *Informal Logic* 34(2): 152–166.

Joyce, J. (1992[1922]) *Ulysses*, Harmondsworth: Penguin.

Jun, N. (2011) 'Deleuze, Values and Normativity', in N. Jun and D.W. Smith (eds), *Deleuze and Ethics*, Edinburgh: Edinburgh University Press, pp. 89–107.

Kant, I. (2003[1785]) *Groundwork for the Metaphysics of Morals*, trans. A. Zweig, Oxford: Oxford University Press.

Kilgarriff, A. (2007) 'Googleology is bad science', *Computational Linguistics*, 33(1): 147–151.

Knox, J. (2016) *Posthumanism and the MOOC*, Abingdon: Routledge.

Kock, C. (2009) 'Choice is not true or false: The domain of rhetorical argumentation', *Argumentation* 23: 61–80.

Kress, G. (1985) *Linguistic Processes in Sociocultural Practice*, Oxford: Oxford University Press.

Kress, G. and Hodge, R. (1979) *Language as Ideology*, 1st edn, London: Routledge & Kegan Paul.

Kristeva, J. (1980) *Desire in Language*, New York: Columbia University Press.

Lakoff, G. and Johnson, M. (1980) *Metaphors We Live By*, Chicago: University of Chicago Press.

Levinas, E. (1969[1961]) *Totality and Infinity: An Essay on Exteriority*, trans. A. Lingis, Pittsburgh, PA: Duquesne University Press.

Levinas, E. (1989[1984]) 'Ethics as First Philosophy', trans. S. Hand and M. Temple, in S. Hand (ed.), *The Levinas Reader*, Oxford: Blackwell, pp. 76–87.

Levinas, E. (2004[1981]) 'Ethics of the Infinite', trans. R. Kearney in R. Kearney (ed.), *Debates in Continental Philosophy*, New York: Fordham University Press, pp. 65–84.

Lu, X. (2014) *Computational Methods for Corpus Annotation and Analysis*, Berlin: Springer.

McEnery, T. and Hardie, A. (2011) *Corpus Linguistics*, Cambridge: Cambridge University Press.

McQuillan, M. (2000a) 'A Map of this Book', in M. McQuillan (ed.), *Deconstruction*, Edinburgh: Edinburgh University Press, pp. xii–xv.

McQuillan, M. (2000b) 'Introduction: Five Strategies for Deconstruction', in M. McQuillan (ed.), *Deconstruction*, Edinburgh: Edinburgh University Press, pp. 1–43.

McQuillan, M. (2001) *Paul de Man*, Abingdon: Routledge.

Marks, J. (2010) 'Ethics', in A. Parr (ed.), *The Deleuze Dictionary*, rev. edn, Edinburgh: Edinburgh University Press, pp. 87–89.

Masny, D. (ed.) (2013) *Cartographies of Becoming in Education*. Rotterdam: Sense Publishers.

Mautner, G. (2016) 'Checks and Balances: How Corpus Linguistics can Contribute to CDA', in R. Wodak and M. Meyer (eds), *Methods of Critical Discourse Studies*, 3rd edn, London: SAGE Publications, pp. 154–179.

May, T. (2005) *Gilles Deleuze*, Cambridge: Cambridge University Press.

Meillassoux, Q. (2008[2006]) *After Finitude*, trans. R. Brassier, New York: Continuum.

Meyer, E. and Schroeder, R. (2015) *Knowledge Machines*, Cambridge, MT: The MIT Press.

Miller, J. H (1991) *Theory Now and Then*, Hemel Hempstead: Harvester.

Naas, M. (2014) 'Derrida and Ancient Philosophy (Plato and Aristotle)', in Z. Direk and L. Lawlor (eds), *A Companion to Derrida*, Oxford: Blackwell, pp. 231–250.

Nayar, P. (2014) *Posthumanism*, Cambridge: Polity.

Nerlich, B. and Clarke, D.D. (2001) 'Ambiguities we live by: Towards a pragmatics of polysemy', *Journal of Pragmatics* 33: 1–20.

O'Halloran, K.A. (2007a) 'Critical discourse analysis and the corpus-informed interpretation of metaphor at the register level', *Applied Linguistics* 28(1): 1–24.

O'Halloran, K.A. (2007b) 'Casualness vs Commitment: The Use in Critical Discourse Analysis of Lakoff and Johnson's Approach to Metaphor', in C. Hart and D. Lukeš (eds), *Cognitive Linguistics in Critical Discourse Analysis*, Newcastle: Cambridge Scholars, pp. 159–179.

O'Halloran, K.A. (2009) 'Inferencing and cultural reproduction: A corpus-based critical discourse analysis', *Text and Talk* 29(1): 21–51.

O'Halloran, K.A. (2011) 'Critical Discourse Analysis', in J. Simpson (ed.), *The Routledge Handbook of Applied Linguistics*, Abingdon: Routledge, pp. 445–459.

O'Halloran, K.A. (2014) 'Corpus-Assisted Literary Evaluation', in D. Hoover, J. Culpeper and K.A. O'Halloran (eds), *Digital Literary Studies*, Abingdon: Routledge, pp. 120–145.

O'Halloran, K.A. and Coffin, C. (2004) 'Checking Overinterpretation and Underinterpretation: Help from Corpora in Critical Linguistics', in C. Coffin, A. Hewings and K.A. O'Halloran (eds), (2004) *Applying English Grammar*, London: Hodder Arnold, pp. 275–297.

O'Keeffe, A. and McCarthy, M. (eds) (2010) *The Routledge Handbook of Corpus Linguistics*, Abingdon: Routledge.

O'Sullivan, S. (2010) 'Fold', in A. Parr (ed.), *The Deleuze Dictionary*, rev. edn, Edinburgh: Edinburgh University Press, pp. 107–108.

Paglieri, F. (2009) Commentary on Frank Zenker's 'Reconstructive Charity, Soundness and the RSA-Criteria of Good Argumentation', in Juho Ritola (ed.), *Argument Cultures: Proceedings of OSSA 09*, CD-ROM, Windsor, ON: OSSA, pp. 1–8.

Partington, A. (1998) *Patterns and Meanings*, Amsterdam: John Benjamins.

Partington, A. (2014) 'Mind the gaps: The role of corpus linguistics in researching absences', *International Journal of Corpus Linguistics* 19(1): 118–146.

Patton, P. (2003) 'Future Politics', in P. Patton and J. Protevi (eds), *Between Deleuze and Derrida*, London: Continuum, pp. 15–29.

Patton, P. (2007) 'Derrida, politics and democracy to come', *Philosophy Compass* 2(6): 766–780.

Patton, P. (2008) 'Becoming-Democratic', in I. Buchanan and N. Thoburn (eds), *Deleuze and Politics*, Edinburgh: Edinburgh University Press, pp. 178–195.

Patton, P. (2011) 'What is Deleuzian political philosophy?', *Crítica Contemporánea. Revista de Teoría Politica* (1): 115–126.

Patton, P. (2012) 'Immanence, Transcendence, and the Creation of Rights', in L. de Sutter and K. McGee (eds), *Deleuze and Law*, Edinburgh: Edinburgh University Press, pp. 15–31.

Patton, P. and Protevi, J. (eds) (2003) *Between Deleuze and Derrida*, London: Continuum.

Peeters, B. (2013[2010]) *Derrida*, trans. A. Brown, Cambridge: Polity.

Pennycook, A. (2016) 'Posthumanist applied linguistics', *Applied Linguistics*, Advance Access, published 20 June 2016, pp. 1–18 doi:10.1093/applin/amw016.

Phillips, M. (1989) *Lexical Structure of Text*, Discourse analysis monographs 12, Birmingham: University of Birmingham.

Plato (1960) *Gorgias*, trans. W. Hamilton, Harmondsworth: Penguin.

Powell, J. (2006) *Jacques Derrida*, London: Continuum.

Ramsay, S. (2011) *Reading Machines*, Urbana: University of Illinois Press.

Ratto, M. (2011) 'Critical making: Conceptual and material studies in technology and social life', *The Information Society: An International Journal*, 27(4): 252–260.

Ratto, M. and Boler, M. (eds) (2014) *DIY Citizenship: Critical Making and Social Media*, Cambridge, MA: The MIT Press.

Rayson, P. (2009) 'Wmatrix: A web-based corpus processing environment', Computing Department, Lancaster University. Available at http://ucrel.lancs.ac.uk/wmatrix/. [Accessed November 2016].

Rayson, P. (2013) 'Corpus Analysis of Key Words', in C.A. Chapelle (ed.), *The Encyclopedia of Applied Linguistics* [online], Chichester: Wiley Blackwell Publishing.

Rayson, P., Charles, O. and Auty, I. (2012) 'Can Google count? Estimating Search Engine Result Consistency', in A. Kilgarriff and S. Sharoff (eds), *Proceedings of the Seventh Web as Corpus Workshop* (WAC7), pp. 23–30. Available at https://sigwac.org.uk/raw-attachment/wiki/WAC7/wac7-proc.pdf/. [Accessed July 2016].

Richardson, J., Krzyzanowski, M., Machin, D. and Wodak, R. (eds) (2013) *Advances in Critical Discourse Studies*, Abingdon: Routledge.

Roffe, J. (2004) 'Ethics', in J. Reynolds and J. Roffe (eds), *Understanding Derrida*, London: Continuum, pp. 37–45.

Roffe, J. (2010) 'Exteriority/Interiority', in A. Parr (ed.), *The Deleuze Dictionary*, rev. edn, Edinburgh: Edinburgh University Press, pp. 97–99.

Royle, N. (2000) 'What is Deconstruction?', in N. Royle (ed.), *Deconstructions*, Basingstoke: Palgrave Macmillan, pp. 1–13.

Royle, N. (2009) *In Memory of Jacques Derrida*, Edinburgh: Edinburgh University Press.

Sarup, M. (1988) *An Introductory Guide to Post-Structuralism and Postmodernism*, Hemel Hempstead: Harvester Wheatsheaf.

Saussure, F. (1974[1916]) *Course in General Linguistics*, trans. W. Baskin, London: Fontana.

Schmitt, N. (2013) 'Formulaic Language and Collocation', in C.A. Chapelle (ed.), *The Encyclopedia of Applied Linguistics* [online], Chichester: Wiley Blackwell Publishing.

Schmitt, N., Grandage, S. and Adolphs, S. (2004) 'Are Corpus-Derived Recurrent Clusters Psycholinguistically Valid?', in N. Schmitt (ed.), *Formulaic Sequences*, Amsterdam: John Benjamins, pp. 127–151.

Schreibman, S., Siemens, R. and Unsworth, J. (eds) (2004) *A Companion to Digital Humanities*, Oxford: Blackwell. Available at http://www.digitalhumanities.org/companion/. [Accessed July 2016].

Scott, M. (1997) 'PC analysis of key words – and key key words', *System* 25(2): 233–245.

Scott, M. and Tribble, C. (2006) *Textual Patterns*, Amsterdam: John Benjamins.

Semetsky, I. (2006) *Deleuze, Education and Becoming*, Rotterdam: Sense Publishers.

Semetsky, I. and Masny, D. (eds) (2013) *Deleuze and Education*, Edinburgh: Edinburgh University Press.

Sinclair, J. (1991) *Corpus, Concordance, Collocation*, Oxford: Oxford University Press.

Sinclair, J. (2004) *Trust the Text*, London: Routledge.

Sinclair, J., Jones, S. and Daley, R. (2004) *English Collocation Studies: The OSTI Report*, ed. R. Krishnamurthy, London: Continuum.

Sinclair, S. and Rockwell, G. (2015) *Voyant Tools*. Available at http://voyant-tools.org/. [Accessed July 2016].

Smith, D.W. (2003) 'Deleuze and Derrida, Immanence and Transcendence: Two Direction in Recent French Thought', in P. Patton and J. Protevi (eds), *Between Deleuze and Derrida*, London: Continuum, pp. 46–66.

Smith, D.W. (2011) 'Deleuze and the Question of Desire: Towards an Immanent Theory of Ethics', in N. Jun and D.W. Smith (eds), *Deleuze and Ethics*, Edinburgh: Edinburgh University Press, pp. 123–141.

Smith, D.W. (2012) 'The Place of Ethics in Deleuze's Philosophy: Three Questions of Immanence', in *Essays on Deleuze*, Edinburgh: Edinburgh University Press, pp. 146–159.

Smith, G.S. (2015) 'Americans are deeply religious, so will we ever see an atheist president? Here's what we know', *Washington Post*, 23 March 2015. Available at http://www.washingtonpost.com/news/acts-of-faith/wp/2015/03/23/americans-are-deeply-religious-so-will-we-ever-see-an-atheist-president-heres-what-we-know/. [Accessed July 2016].

Snaza, N., Appelbaum, P., Bayne, S., Carlson, D., Morris, M., Rotas, N., Sandlin, J., Wallin, J. and Weaver, J. (2014) 'Towards a posthumanist education', *Journal of Curriculum Theorizing* 30(2): 39–55.

Snaza, N. and Weaver, J. (eds) (2015) *Posthumanism and Educational Research*, Abingdon: Routledge.

Sperber, D. and Wilson, D. (1995) *Relevance*, 2nd edn, Oxford: Blackwell.

Stubbs, M. (1996) *Text and Corpus Analysis*, Oxford: Blackwell.

Stubbs, M. (1997) 'Whorf's Children: Critical Comments on Critical Discourse Analysis', originally published in A. Ryan and A. Wray (eds), *Evolving Models of Language*, British Studies in Applied Linguistics 12, Clevedon: Multilingual

Matters, pp. 100–116. Available at https://www.uni-trier.de/fileadmin/fb2/ANG/Linguistik/Stubbs/stubbs-1997-whorfs-children.pdf/. [Accessed November 2016].

Stubbs, M. (2001) *Words and Phrases*, Oxford: Blackwell.

Stubbs, M. (2007) 'Quantitative Data on Multi-Word Sequences in English: The Case of the Word *World*', in M. Hoey, M. Mahlberg, M. Stubbs and W. Teubert (eds), *Text, Discourse and Corpora*, London: Continuum, pp. 163–189.

Stubbs, M. (2009) 'The search for units of meaning: Sinclair on empirical semantics', *Applied Linguistics*, 30(1): 115–137.

Talisse, R. and Aikin, S. (2006) 'Two forms of the straw man', *Argumentation* 20(3): 345–352.

Taylor, J.E. (2010) 'The New Atheists', in *Internet Encyclopedia of Philosophy*. Available at http://www.iep.utm.edu/n-atheis/. [Accessed July 2016].

Taylor, C.A. (2016) 'Edu-crafting a Cacophonous Ecology: Posthumanist Research Practices for Education', in C. Taylor and C. Hughes (eds), (2016) *Posthuman Research Practices in Education*, New York: Palgrave Macmillan, 5–24.

Taylor, C. and Hughes, C. (eds) (2016) *Posthuman Research Practices in Education*, New York: Palgrave Macmillan.

Terras, M., Nyhan, J. and Vanhoutte, E. (eds) (2013) *Defining Digital Humanities*, Farnham: Ashgate.

Thacker, E. (2011) *In the Dust of this Planet*, Winchester, UK: Zero Books.

Thomassen, L. (ed.) (2006) *The Derrida-Habermas Reader*, Edinburgh: Edinburgh University Press.

Tognini-Bonelli, E. (2001) *Corpus Linguistics at Work*, Amsterdam: John Benjamins.

Toole, J.K. (2004[1980]) *A Confederacy of Dunces*, Baton Rouge: Louisiana State University Press.

Toulmin, S. (1958) *The Uses of Argument*, Cambridge: Cambridge University Press.

Underwood, G., Schmitt, N. and Galpin, A. (2004) 'The Eyes Have It: An Eye-Movement Study into the Processing of Formulaic Sequences', in N. Schmitt (ed.), *Formulaic Sequences*, Amsterdam: John Benjamins, pp. 153–172.

Walton, D. (2005) *Abductive Reasoning*, Tuscaloosa: University of Alabama Press.

Walton, D. (2006) *Fundamentals of Critical Argumentation*, Cambridge: Cambridge University Press.

Warwick, C., Terras, M. and Nyhan, J. (eds) (2012) *Digital Humanities in Practice*, London: Facet Publishing.

Wenzel, J. (1990) 'Three Perspectives on Argument', in R. Trapp and J. Schutz (eds), *Perspectives on Argumentation*, Prospect Heights, IL: Waveland Press, pp. 9–16.

Widdowson, H.G. (1978) *Teaching Language as Communication*, Oxford: Oxford University Press.

Widdowson, H.G. (1995) 'Discourse analysis: A critical view', *Language and Literature* 4(3): 157–172.

Widdowson, H.G. (2004) *Text, Context, Pretext*, Oxford: Blackwell.

Widdowson, H.G. (2007) *Discourse Analysis*, Oxford: Oxford University Press.

Willatt, E. and Lee, M. (eds) (2009) *Thinking Between Deleuze and Kant*, London: Continuum.

Wittgenstein, L. (1953) *Philosophical Investigations*, trans. G. Anscombe, Oxford: Basil Blackwell.

Wodak, R. (1997) 'Critical Discourse Analysis and the Study of Doctor-Patient Interaction', in B.-L. Gunnarsson, P. Linell and B. Nordberg (eds), *The Construction of Professional Discourse*, London: Longman, pp. 173–200.

Wodak, R. (ed.) (2013) *Critical Discourse Analysis*, 4 vols, London: SAGE Publications.

Wodak, R. and Meyer, M. (2016) 'Critical Discourse Studies: History, Agenda, Theory and Methodology', in R. Wodak and M. Meyer (eds), *Methods of Critical Discourse Studies*, 3rd edn, London: SAGE Publications, pp. 1–22.

Wodak, R., De Cillia, R., Reisigl, M. and Liebhart, K. (2009) *The Discursive Construction of National Identity*, 2nd edn, Edinburgh: Edinburgh University Press.

Wolfe, C. (2010) *What is Posthumanism?*, Minneapolis: University of Minnesota Press.

Wolfreys, J. (2001) 'Deconstruction, What Remains Unread', in J. Wolfreys (ed.), *Introducing Literary Theories*, Edinburgh: Edinburgh University Press, pp. 117–151.

Wolpert, L. (1992) *The Unnatural Nature of Science*, London: Faber and Faber.

Wray, A. (2002) *Formulaic Language and the Lexicon*, Cambridge: Cambridge University Press.

Žukauskaitė, A. (2011) 'Ethics between Particularity and Universality', in N. Jun and D.W. Smith (eds), *Deleuze and Ethics*, Edinburgh: Edinburgh University Press, pp. 188–206.

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