Discourse analysis and digital practices

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Chapter One

Discourse Analysis and Digital Practices

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Digital technologies have given rise to a host of new ways for people to communicate, manage social relationships, and get things done, which are challenging how we think about love and friendship, work and play, health and fitness, learning and literacy, and politics and citizenship. These new practices are also challenging the ways discourse analysts think about texts, social interactions, and even the nature of language itself. The affordances digital media provide for the production of multimodal texts, for example, call into question analytical paradigms that focus only on written or spoken language. Interactive writing spaces such as blogs and social network sites make possible very different forms of social interaction than those found in face-to-face conversation and traditional written texts. And practices of remixing and 'curating' raise questions about the status of authorship. Even analytical tools designed to examine the ideological dimensions of discourse need to be adapted to contend with discursive environments in which the loci of power are much more diffuse and the instruments of ideological control and discipline are more subtle and complex.

Although there have been numerous attempts in discourse analysis (see for example

Herring 2007), and sociolinguistics more broadly (see for example Androutsopoulos 2011), to formulate new analytical frameworks especially designed for the study of digital communication, the range of social practices associated with digitally mediated discourse, and the rapid pace at which new technologies are being introduced, make it difficult for any single framework to meet the challenge of understanding all of the complex relationships between discourse and digital practices. In order to cope with the fast-changing landscape of digital media, discourse analysts need to both draw upon the rich store of theories and methods developed over the years for the analysis of 'analogue' discourse, and to formulate new concepts and new methodologies to address the unique combinations of affordances and constraints introduced by digital media.

This book brings together thirteen eminent scholars in linguistics and literacy studies to consider how various practices people engage in using digital media can be understood using tools from discourse analysis. The methods adopted represent a range of approaches to discourse, form more traditional analyses of textual coherence and interactional turn-taking to newer approaches such as corpus-assisted discourse analysis, mediated discourse analysis, and multimodal discourse analysis. Each chapter focuses on a particular social practice associated with digital technology and shows how tools from a particular approach to discourse, or combination of approaches, can help us to understand that practice.

What are digital practices?

The focus of this volume on digital *practices* is in line with recent approaches in applied

linguistics (Pennycook 2010), literacy studies (Gee 2012), and discourse analysis (Norris and Jones 2005) which take as their starting point not discourse *per se*, but rather, the situated social practices that people use discourse to perform.

The orientation towards social practice taken by contributors has its roots in a number of intellectual traditions, including the critical sociology of Bourdieu (1977), who sees practice in terms of the way social conventions become submerged into people's habitual dispositions, and the cultural critique of Foucault (1972) and his followers, who see it in terms of the regimes of knowledge which define what sorts of behaviours, identities and relationships are considered normal. But it is most closely informed by the understanding of practice articulated in the new literacy studies (Barton 2006; Gee 2012) and mediated discourse analysis (Norris and Jones 2005; Scollon 2001), in which practice is seen less as a matter of dispositions or regimes of knowledge and more as a matter of the concrete, situated actions people perform with particular mediational means (such as written texts, computers, mobile phones) in order to enact membership in particular social groups. In these approaches, practice is nearly always used as a countable noun ('practices') and refers to 'observable, collectable and/or documentable…events, involving real people, relationships, purposes, actions, places, times, circumstances, feelings, tools, (and) resources' (Tusting, Ivanic and Wilson 2000: 213). It is difficult, from this perspective, to speak of the 'practice' of social networking, or the 'practice' of 'video gaming' without considering the ways these practices are performed by real people in real situations. Indeed, as many of the chapters in this volume dramatically illustrate, practices (such as 'tagging') can have very different meanings and very different social purposes, and, in

fact, involve very different actions, in different contexts (for example Twitter vs. Flickr) (see Barton this volume). Practices are, in this way, often hard to 'pin down', always changing to meet the demands of new circumstances or to respond to the affordances and constraints of new cultural tools. Complicating this is the fact that practices are almost never engaged in in isolation, but are always mixed in complex ways with other practices. Practices such as purchasing animals to decorate one's language learning garden on Busuu (described by Chik), keeping track of one's calories with MyFitnessPal (described by Jones), reading to children with an iPad (described by Merchant), or attending online parties held by 'elite' Club Penguin Music Video production teams (described by Marsh) all involve multiple overlapping practices such as shopping, gardening, dieting, story-sharing and socialising, which have long histories independent of the digital practices into which they have been recruited. Digital practices are always 'nestled' or 'nested' (Marsh this volume) with other cultural practices, some new and some old, to form what Scollon (2001) has referred to as a 'nexus of practice', a configuration of tools and actions with various conventions and histories associated with them which come together to form recognisable sequences of actions and to make available to actors recognisable social identities.

What we mean by 'digital practices', then, are these 'assemblages' of actions involving tools associated with digital technologies, which have come to be recognised by specific groups of people as ways of attaining particular social goals, enacting particular social identities, and reproducing particular sets of social relationships. The assumption is that digital technologies, because of the different configurations of modes and materialities

they make available, both make possible new kinds of social practices and alter the way people engage in old ones. The practices dealt with in this volume include the tagging of pictures by users of Flickr, the use of iPhone apps by 'self-quantifiers', and the creation of music videos by participants in an online virtual world. Our definition of 'tools associated with digital technologies', however, is not limited to software or websites, but includes hardware (physical objects) and semiotic tools (such as conventional ways of talking or writing that have grown up around digital media). Therefore, the practices considered are not limited to those that occur 'online' or within the borders of the screen, but also include practices that have developed around the handling of physical artefacts like iPhones and iPads, and even practices of urban signage which appropriate linguistic features of computer-mediated communication. In fact, none of the practices described in this book can be said to reside in strictly defined 'online' or 'offline' spaces. Digital practices always transverse boundaries between the physical and the virtual, and between technological systems and social systems.

What is discourse analysis?

What, then, do we mean by 'discourse analysis', and what is its utility in helping us to understand digital practices? 'Discourse' is a term that is used in a variety of different fields and can mean a variety of different things. It can refer to the formal properties of semiotic artefacts that make them 'hold together' as certain types of 'texts', it can refer to the ways people use language and other semiotic systems to accomplish particular social actions, or it can refer to broader systems of knowledge which act to regulate what people can say, write or think. For the purposes of this volume, we will define discourse broadly

as the ways people build and manage their social worlds using various semiotic systems. This definition, of course, places discourse in an intimate relationship with social practices. On the one hand, all social practices are to some extent mediated through discourse — that is, discourse is used as a tool for performing social practices. And on the other hand, discourse plays an important role in maintaining, reproducing and transmitting social practices. 'Discourse analysis', then, is the study of the way different 'technologies of entextualisation' (Jones 2009) (including semiotic systems like languages, as well as media like televisions and computers) affect the kinds of meanings people can make in different situations, the kinds of actions they can perform, the kinds of relationships they can form, and the kinds of people they can be. In order to engage in such study, discourse analysts usually pay attention to four things:

- *Texts*: how different technologies of entextualisation allow us to combine semiotic elements to form socially recognisable texts that can be used to perform different kinds of socially recognised actions.
- *Contexts*: The social and material situations in which texts are constructed, consumed, exchanged and appropriated.
- *Actions and interactions*: What people do with texts, especially what they do with and to each other.
- *Power and ideology:* How people use texts to dominate and control others and to create certain 'versions of reality'.

Different approaches to discourse, of course, emphasise these aspects of discourse to

different degrees, but all of them, in one way or another, take into account all four of these elements, and strive to understand how they work together: how, for example, contexts influence the form and meaning of texts, how different kinds of texts make possible different kinds of actions and interactions, and how the ways people use texts to act and interact in specific contexts both reflect and help to reproduce certain ideologies and power relationships. In other words, all approaches to discourse seek in some way to understand the relationship between the 'micro' level of discourse (having to do with the way texts are put together and used to take specific actions in specific situations), and the 'macro' level of discourse (having to do with the way texts reflect and help perpetuate certain social orders).

As we mentioned above, the particular configurations of modes and materialities that digital media make available present considerable challenges to the way analysts approach each of these four aspects of discourse. In some cases, the tools that have been developed for face-to-face conversation and writing in print media can be easily adapted to analyse online conversations and texts. In other cases, new concepts and new methods need to be developed. The real issue, however, goes beyond just the applicability of particular analytical tools to the analysis of digitally-mediated communication to the fact that digital media in some ways force us to rethink our very definitions of terms such as text, context, interaction, and power.

Texts

By texts, of course, we don't just mean written texts in the traditional sense, but include

conversations—both written and spoken—videos, photographs, drawings, paintings, street signs, websites, software interfaces, video games, and any other aggregate of semiotic elements that can function as a tool for people to take social action. Despite the breadth of this definition, discourse analysts do have some fairly strong opinions about what constitutes a text and what does not. Most agree that for a collection of semiotic elements (words, sentences, images, sounds, etc.) to be considered a text, it must have what is known as 'texture'. Texture is a property of connectedness that is created through *cohesion*, that is, the way different parts of the text are held together using the syntactic and semantic resources of whatever semiotic system is being used, and *coherence*, the way different parts of the text are ordered sequentially so that it can be recognised by readers as logical and meaningful (Halliday and Hasan 1976; Schegloff and Sacks 1973).

Although texts like computer games, social networking sites, and iPhone apps are in many ways very different from the written texts and face-to-face conversations from which these principles were developed, they are also characterised by texture. This is one of the main points Gee makes in the chapter immediately following this introduction, that to be amenable to discourse analysis, a semiotic aggregate must exhibit properties of what he calls 'packaging' and 'flow'—the combination of different elements using principles of syntax and semantics, and the arrangement of these elements in some kind of temporal patterning. He illustrates this by analysing how the various elements in a computer game fit together and are arranged in meaningful sequences. Another important point Gee makes is that texture is there for players to *use*. It is not just about abstract meaning or form. The way players approach games (and the way people approach written

texts and conversations, for that matter) is in terms of how they can use these principles of combination and sequencing in order to enable certain kinds of actions. And so, for discourse analysts, syntax and semantics are not just about rules and structures — they provide the basic textual resources people use to enact social practices.

The way texture is manifested in different kinds of texts, of course, varies considerably. Halliday and Hasan (1976) for example, distinguish between texts that have a 'tight' texture, that is, most of the connections between the parts are explicit, and those that have a loose texture, that is, the connections between parts are less explicit, depending more on the active efforts of readers to hold them together. Much of the early discourse analytical work on computer-mediated communication focused on the relatively loose texture of computer-mediated texts. In her classic article on coherence in text only chat, for example, Herring (1999) discusses how phenomena such as disrupted agency, overlapping exchanges and topic decay give to some forms of computer-mediated communication a much looser texture than found in face-to-face conversations or print-based written texts, but she also argues that this apparent incoherence can actually facilitate increased interactivity and creativity. A similar point is made by Barton in his chapter on the practices of tagging on Flickr: even though they might at first appear to be loose collections of words, lists of tags associated with pictures often exploit properties of syntax and semantics in ways that allow users to transform a form of discourse originally intended for simple classification into a tool for communication and storytelling. A similar kind of loose texture seems to characterise the YouTube comments analysed by Benson, but, as he shows so convincingly, an underlying coherence of the comments can

be revealed through attention to 'sequential implicativeness' (Schegloff and Sacks 1973).

While many digitally-mediated texts are loosely textured, many others are rather tightly textured, giving users little choice as to how elements can be connected up or sequenced. Many choices about 'packaging' and 'flow' in computer-mediated discourse, in fact, as Jones points out in his chapter, are not made by people, but by computer programmes. Sometimes the texture imposed on discourse by algorithms can amplify users' abilities to perform certain actions, form certain relationships, and construct certain identities, but at the same time, these 'algorithmically imposed' textures can also create constraints on people's ability to take action, interact with others, or be the kinds of people they want to be. In addition, sometimes the texture imposed on discourse by a particular set of algorithms can create confusion as to how users are supposed to read texts. One of the most interesting points Benson makes about YouTube comments, for instance, is that, despite the fact that they are produced through sequential implicativeness, the site's algorithm displays them (by default) in descending order based on the number of 'likes' they have received, imposing an entirely different pattern of texture on them.

Another important property of texts that discourse analyst are interested in is the way they create connections with other texts. Of course, intertextuality and interdiscursivity are properties of all texts. Digital media, however, because of its technological affordances for hypertextual linking, embedding, copying and pasting, combining and curating, make it much easier to connect texts with other texts and to mix and mash texts together. The fundamental intertextual and herteroglossic (Androutsopoulos 2011;

Bakhtin 1981) nature of new media texts doesn't only change practices of reading and writing (Jones and Hafner 2012), but also has the effect of disturbing comfortable notions of textual boundaries and authorship. In marvelling at these new forms of linking, mixing and mashing made possible by new media, however, it is sometimes easy to ignore the more conventional ways people create intertextuality in digitally-mediated texts using purely linguistic resources. In the only chapter in this volume which focuses exclusively on intertextuality, Vásquez demonstrates some of the more 'low tech' ways participants in the digital practice of online reviewing use to create linkages with other texts and creatively mix the conventions of different genres. The most important point about intertextuality that Vásquez makes, a point that can just as strongly apply to the examples given by Marsh and Snyder, is that intertextuality is essentially a *social* process through which people not only create linkages between texts, but also create relationships between themselves and other users of texts, showing themselves to be competent members of particular communities by using the conventions of intertextuality of those communities.

A third important quality of digitally mediated texts that the contributors to this volume take up is their dialogic character. Again, just as all texts are to some extent intertextual, they are also to some extent dialogic, in that they respond to previous texts and create the conditions for subsequent texts (Bakhtin 1981). The difference with new media texts is that this dialogism is much more dynamic than it is with conventional written texts. Reading and writing have become much more like having a conversation, with readers being able to 'write back' to writers, and writers shaping their texts in anticipation of an

almost immediate response from readers. The responsiveness of digital texts, however, not only involves the interaction between writers and readers, but also involves interaction between human users and machine algorithms which automatically alter texts based on the ways users use them or on certain characteristics of users such as location, pre-defined user settings. This is what Jones means when he points out that, more and more, texts are able to 'read' us and, in many ways, to 'write' us as certain kinds of people. This, of course, has important implications for issues like human agency and the status of texts as socially shared objects. It also calls into question what it actually means to read and write a text, when our media has acquired the ability to read texts without us and to take actions on our behalf, and when physical actions like eating at a restaurant, making a purchase or going for a run automatically become acts of writing.

Finally, one of the most conspicuous characteristics of digital texts that present challenges to discourse analysts is the fact that they are almost always multimodal, consisting of rich combinations of semiotic modes like writing visuals and sound. This has consequences for the way discourse analysts approach issues like cohesion and coherence, intertextuality and dialogicality, since the affordances and constraints of different modes affect how they fit together, how they connect to other texts, and how readers can interact with texts. The most important thing about multimodality is that, because of the inherent dynamism of digital texts, meanings are rarely expressed in stable configurations of modes, but rather travel across modes and combinations of modes in ways that alter them, sometimes subtly, sometimes dramatically, a process Jones (this volume, after Iedema 2001) refers to as resemiotisation. Through processes of

resemiotisation, actions like walking or drinking water are transformed into graphs and images, photos on Flickr are transformed into lists of tags which combine to form narratives, and videos on YouTube become the initiating moves in written conversations.

Related to multimodality are the dramatic ways digital technologies have changed how we relate to texts as material objects. Webpages are different from newspapers not just textually, but also physically. iPads are very different kinds of material objects than books. The new forms of materiality texts take has important consequences for things like the kinds of access people have to texts, the physical and social contexts into which they can be appropriated, and the ways we physically manipulate texts. Merchant, for example, points out how tablet computers have made reading into a much more *haptic* activity, requiring readers to master actions like tapping, dragging, swiping and pinching. Similarly, Carrington shows how teenagers use their mobile phones not just as tools to access texts, but as texts themselves, objects through which they communicate things like their identities, their affiliations, and their orientations towards others.

Contexts

The second important component of discourse analysis is an attention to the material and social *contexts* in which texts are produced, consumed, and used to take social actions. The meaning and utility of texts reside not just in their textual elements, but also in how these elements are 'situated' within actual contexts of communication. In fact, an analysis of texts that 'gets stuck' in the examination of formal textual elements like syntax, semantics, and sequentiality does not really count as discourse analysis, since discourse is

all about how texts and conversations 'fit into' the real world.

Understanding the effect of context on language and other semiotic systems is complex enough when dealing with more traditional spoken and written texts, since such an understanding must take into account multiple aspects of context including spatial and temporal aspects, as well as those aspects of context (both material and cognitive) that are 'brought along' by social actors (van Dijk 2008), and those aspects that are 'brought about' (Auer 1992) by people's actions and interactions. Furthermore, a consideration of context must also take into account what Malinowski (1923) calls 'the context of culture', the wider sets of expectations about how people are supposed to behave in different situations.

Digital technologies have made all of these aspects of context much more complicated. They have altered our experience of the spatial and temporal aspects of context by creating complex 'layerings' of online and offline spaces. They have altered our experience of social contexts, allowing us to participate in a wide range of different kinds of synchronous and asynchronous social gatherings with different configurations of participants (Jones 2004). And they have altered our experience of the 'context of culture' by enabling new and complex global flows of cultural products and ideas.

Much of the early work on computer-mediated discourse made a clear differentiation between online and offline contexts, however, more recent work (see for example Jones 2010), including many of the chapters in this volume, recognise that in considering the

contexts of digital practices we must come to terms with the ways physical and virtual spaces, times, interaction orders and cultures interact. As the children described in Hafner's chapter travel through different online spaces and engage in different activities with other players of Moshi Monsters, they also inhabit the material spaces of their home, where they must negotiate different activities with other co-present individuals, including their researcher-father. As the joggers described in Jones's chapter move across physical spaces, the routes that they transverse appear on the computer and smart phone screens of their Nike+ followers situated in other physical spaces. And as the characters in the digital children's stories described in Merchant's chapter appear and move across the screens of iPads, they affect the configuration of spaces and bodies in the physical environments in which they are read.

Under these circumstances, one of the most important issues facing discourse analysts is developing methods to trace the way texts (and the meanings, social relationships, and identities associated with them) change as they travel from context to context, moving across virtual and physical spaces, being (sometimes automatically) 'synced' across multiple devices, and being appropriated into situations which their producers may never have anticipated. Just as intertextuality and multimodality are defining features of digitally-mediated discourse, so is recontextualisation (Bauman and Briggs 1990). Much of the way we craft our texts and utterances depends on how we take into account the contexts in which they will be interpreted—that is, much of our meaning making is based upon some expectation of what Nissenbaum (2009) calls 'contextual integrity'. The complex overlapping and internested networks of contexts that digital technologies have

created makes it much more difficult to maintain contextual integrity.

For analysts this is not just a theoretical issue, it can also be an ethical one as well, as King points out in his chapter on analysing the conversations of gay men in a 'public' chatroom. Just because these conversations are available to the public, King argues, does not necessarily make them 'public'. Most online communication in contexts like chatrooms and social networking sites, he argues, 'is neither inherently public nor private; rather it depends on how each participant sees the context of communication.' Seeking informed consent is, for him, a way to discover how participants feel about that context. This argument should give any researcher of digital practices pause to consider their relationships with and responsibilities towards the people they are studying. It should also serve to remind us that contexts are not simply pre-fabricated, but rather are to a large degree 'brought about' through the practices that people engage in.

Finally, this discussion of decontextualisation and recontextualisation reminds us that any study of digital practices must, as Merchant puts it, not just 'reach down' into embodied, material and situated contexts of digital practice, but 'reach up' to consider the broader global contexts in which technologies and information are produced, circulated, and valued. There is, for example, something fundamental not just in the technology of the internet but also in the *economy* of the internet, that works against contextual integrity (Lanier 2013), making it more difficult for participants in gay chatrooms, users of commercial self tracking apps, learners in online language learning sites, and children in virtual worlds to maintain control over the texts they produce.

Actions and interactions

Perhaps the most important thing that distinguishes discourse analysts from other kinds of linguists is their focus not just on the structure and meaning of texts, but also on how people use texts to perform concrete social actions. From their early concern with how people 'do things with words' (Austin 1976) to their more recent interest in language as a 'mediational means' (Norris and Jones 2005), discourse analysts have long been preoccupied not just with language but with 'language in use'. In turning their attention to digital media and the forms of discourse it makes possible, then, a central question for contributors to this book is how these new 'technologies of entextualisation' and the kinds of texts they result in allow people to *do* different things, or to do old things in different ways.

In nearly every chapter of this volume you will find the word 'affordances' used to refer to the particular ways digital media make certain kinds of actions possible. The term comes from the work of the perceptual psychologist James J. Gibson, who used it to describe the potential that environments, substances, places, events, other creatures, and artefacts (such as technologies and texts) have for serving as tools to perform certain actions. One of the problems with the way people often speak of the affordances of digital media is that they talk about them as if they are properties of technologies, downplaying the agency of users and encouraging a kind of technological determinism. Gibson, however, is quite clear that affordances have as much to do with users as with technologies. In his classic work, *The Ecological Approach to Visual Perception* (1986:

127) he writes of the term 'affordance': 'I mean by it something that refers to both the environment and the animal in a way that no existing term does. It implies the complementarity of the animal and the environment.' This complimentarity between technologies and users is a theme emphasised in many of the chapters, starting with Gee's explanation of how, in playing video games, players search for affordances in the rules of the game or in the various tools the game provides that align with their own 'effective abilities' (or those of their avatars) (see also Gee 2014), a phenomenon which is further illustrated in the chapters by Hafner and Marsh. Similarly, Jones describes how the effectiveness of smart phone apps for diet and exercise depends upon on how users interact with them at various stages of inputting data and interpreting output, so that users themselves become fused with technologies to form what he refers to as 'servomechanisms'. One of the best examples of the negotiated character of affordances can be seen in in Barton's description of the affordances users of Flickr have found in the tagging function of the website that allow them the do things the designers of the site 'probably never dreamed of'. 'It is this creative space between the designer and the user,' writes Barton, 'where the unexpected can happen which constitutes the affordances.'

The key point of these observations is that digital technologies (like all cultural tools) are not determinative of their use. Although they influence what we can do in many important ways, amplifying or diminishing different aspects of our perception and action, people also regularly adapt technologies to different circumstances or different goals, appropriate them into different contexts, modify them, and mix them with other tools in ways that alter the affordances we can find in them (Jones and Hafner 2012). Lee, for

example, shows how the affordances of linguistic forms associated with texting and instant messaging change when they are appropriated into the new contexts of urban signs, and Snyder shows how the affordances the web introduces for gathering and 'curating' information are exploited differently by marketers and educators. The way people use digital technologies, and the different social practices that come to be associated with these uses, are the result of an active process of matching the kinds of things people want to do with the kinds of things that technologies allow them to do.

When people take actions using technologies and texts, they rarely do so alone. They are almost always acting with and/or on other people. And so a subclass of action that is of crucial interest to discourse analysts is *inter*action, which discourse analysts define as the 'joint action' (Clark 1996) people engage in to create their social worlds. From the earliest forms of computer-mediated communication, however, digital technologies have challenged the ways discourse analysts approach the analysis of interaction. There are three main reasons for this: First, the differences in the way computer interactions are synchronised alters the way analysts must deal with issues like turn taking, adjacency, and topic management. Second, the different material and semiotic tools that digital technologies make available both change the ways people manage things like mutual monitoring and contextualisation and make available a range of new forms of 'low friction' instrumental and phatic communication like text messaging and 'liking' (Jones and Hafner 2012). Finally, digital technologies facilitate a range of new participation frameworks (Goffman 1981) for interaction, allowing people to inhabit different sorts of roles and responsibilities *vis-à-vis* their interlocutors and providing new ways to

accomplish things like 'audience segregation' (Goffman 1959) and 'ambient intimacy' (Carrington this volume).

The chapter that takes up these issues most explicitly is that by Benson, which explores how tools developed for the analysis of face-to-face interaction can be adapted to understanding interactions on YouTube, but they are also relevant to Barton's argument regarding the interactive function of tags on Flickr, Hafner's discussion of how participants in virtual worlds for children interact with each other and with their avatars, Marsh's exploration of the interaction between producers of Club Penguin Music Videos and their fans, and Jones's discussion of how self-tracking apps convert things like exercise and diet into forms of social interaction. Meanwhile, both Carrington and Merchant demonstrate how digital technologies don't just alter the ways people interact online, but also the ways they interact in the physical spaces in which these technologies are used.

One important question that emerges in these discussions is what actually constitutes an interaction in digitally-mediated environments. Benson, citing Rafaeli and Ariel (2007), distinguishes between two kinds of interactivity, one, which Rafaeli and Ariel refer to as 'responsiveness', having to do with the ways technologies interact with humans, and the other having to do with the ways technologies facilitate human to human interaction. In other chapters, however, this distinction appears much less cut and dried. When the self-trackers described by Jones interact with apps which respond based on the aggregated behaviour of all of their other users, does this constitute interaction with the app or with these other users? And when the children described by Hafner interact with their own or

other players' monsters in the virtual world of Moshi Monsters, who exactly are these interactions taking place with—people, monsters, or the software that is controlling them? In fact, often when we are using digital technologies, we are involved in multiple interactions with other humans, with avatars, with algorithms, and with institutions. One important point that Hafner makes is that any interaction with technologies also constitutes a conversation with the designers of these technologies (see also Gee), a point which reinforces the observation about 'affordances' we made above—affordances are not just a matter of what technologies allow us to do—they are a form of *communication* between the designers and the users of technologies (de Souza 2005).

Another important question raised by contributors has to do with how technological tools act to shape the ways people interact, and the kinds of social relationships and social identities they can produce through their interactions. Hafner presents one of the most dramatic illustrations of this question in his exploration of the different 'positions' (Davies and Harré 1990) participants in Moshi Monsters can take in relation to their monsters, sometimes treating them as versions of themselves, sometimes treating them as pets, and sometimes treating them as tools for accomplishing actions in the game world. Chik also uses positioning theory in her discussion of the different kinds of identities and relationships online language learning sites make available for their users. Both of these chapters show how the kinds of relationships and identities websites encourage contribute to creating and maintaining certain social practices by reinforcing what Davies and Harré call 'story lines'. Similarly, Marsh shows how interactions in the peer-to-peer networks that form around Club Penguin music videos serve to reproduce story lines of

recognition, status and competition that replicate the celebrity-fan relationships in more mainstream media. Perhaps the most important observation that can be made about actions and interactions, then, is how they serve as the building blocks for social practices and for the formation of maintenance of communities associated with these practices (see also the chapters by Carrington, King, and Vásquez).

Ideology and Power

The last important component of discourse analysis is a concern with the way discourse helps to construct certain 'versions of reality' (ideologies) and certain relationships of power between individuals and groups. This concern is not just a feature of critical discourse analysis, as discussed in the chapters by Snyder and Selwyn, or Foucaultian discourse analysis, as practiced by Marsh in her chapter, but is also evident in, for example, Chik and Hafner's application of positioning theory, Jones's application of mediated discourse analysis, Benson's analysis of the organisation of online interactions, and Barton's consideration of tagging. In fact, all of the chapters in this volume, in one way or another, shed light on the ways digital technologies affect how people understand the world and treat one another, and how this affects how social goods (both material and symbolic) get distributed.

One place where we can see the workings of power and ideology is in ideological agendas and biases expressed in the discourse that circulates through digital media. Numerous scholars over the years (see for example Herring 1993; Nakamura 2002) have demonstrated how, despite its 'newness' and the promises of 'democracy' and 'equality'

associated with it, new media often reflect and reinforce many of the same biases and ideological assumptions as 'old media'. And so, as Marsh points out, despite the new and creative opportunities peer-to-peer social networks provide for young people to produce and share their own creative products, these processes often serve to reproduce old media values of fandom and celebrity. And despite the promises of 'free forever' learning on the language learning sites analysed by Chik, learners are constantly 'sorted' based on whether or not they have paid for a 'premium membership'. Virtual worlds like Moshi Monsters don't just provide spaces for children to have fun, but also teach them how to value certain forms of consumption, social relationships and notions of privacy and safety (Hafner this volume; Jones and Hafner 2012), and apps like Nike+ don't just encourage users to exercise, but also turn them into virtual advertisements for Nike products (Jones 2014, this volume). As much as the digital practices discussed in this book facilitate things like creating, learning, and self-improvement, what many of them seem to facilitate best are commercial practices and the promotion of dominant values of competition and conspicuous consumption.

Often these values and relationships are not so much expressed in texts, as they are in the more subtle ways that software and web interfaces channel users into certain kinds of actions and interactions. Small incremental actions, like clicking one thing rather than another, filling in a text field in a certain way, agreeing to 'terms and conditions', creating a hashtag that will make content (and people) searchable, or 'liking' a photo or video, are, as we mentioned above, the building blocks of social practices and social identities, and they often come with consequences that users may not be entirely aware

of. One way in which the analysis of the workings of power and ideology is complicated when it comes to digital technologies is the fact that ideological assumptions and social relationships are not just inscribed in texts, but often submerged in algorithms that operate beneath the surface of texts and fundamentally affect the way we experience the world (i.e. what kind of information we have access to, what kind of behaviour is rewarded and reinforced, and what sort of people are considered normal), a point made by Jones in his discussion of health and fitness apps, but also hinted at in other chapters (for example, those by Barton, Benson, Chik, Gee, Marsh, and Snyder).

Another important place discourse analysts can look for ideologies and power relationships associated with digital practices is in the ways digital technologies and practices are represented in public discourse, a topic taken up by Lee, Snyder and Selwyn. Lee, for example, discusses how the appropriation of 'netspeak' in offline commercial discourses represents a shift from a 'language ideology' in which the textual practices of (mostly young) internet users were marginalised, to one in which these same practices are being 'enregistered' (Agha 2003) and commodified. Snyder examines the different ways the digital practice of 'curation' is represented in the fields of digital marketing, online communication, online education and digital literacy studies, revealing how the ideological biases of these different fields can lead to very different understandings of what it means to create a text, own a text, and distribute a text. Curation, she argues, is 'always ideological, always rhetorical, and often political.' Finally, Selwyn analyses what he calls the 'discourse of disruption' that dominates media and policy discussions of the impact of digital technologies on education. While much of

the public discourse about technology focuses on its power to disrupt 'old-fashioned practices' and introduce new and better ways to do things, what this promise often masks, says Selwyn, is the promotion of the same old free market values and neo-liberal agendas that have dominated education in the past several decades. These chapters serve as a reminder that, despite the promises that digital technologies will level the discursive playing field by putting into the hands of ordinary people the power to create and broadcast texts, the rules of the game are still set by a relatively small group of powerful players (see also Lanier 2013).

Conclusion: Discourse analysis as a digital practice

As much as the chapters in this volume shed light on all of the various digital practices discussed, they also shed light on the practice of discourse analysis itself, and the affordances and constraints of the different analytical and theoretical tools we make use of to engage in this practice. In this regard, a number of important themes emerge. One of the most consistent themes is the inadequacy of approaches that focus solely on textual data removed from the context of its use. It is not surprising, then, that many of the contributors opt for more ethnographic approaches to data gathering, combining the collection of texts with interviews and sustained observations of users. Different contributors go about this in different ways, using such techniques as in-depth face-to-face interviews (Carrington), online interviews (Barton, Marsh), focus groups (Jones), stimulated recall sessions (Hafner), video observations (Merchant), the gathering of photographic data (Lee), auto-ethnography (Jones and Chik), and object-ethnography (Carrington). Another important theme that emerges is the role of digital technology not

just as an object of research but also as a research tool. For some of the contributors, such as King in his use of corpus tools, Lee in her use of Flickr, and Merchant in his use of digital video, the appropriation of digital technologies as research tools is quite conscious, but, in fact, all of the studies in this volume are conducted through the researchers themselves engaging in digital practices (including searching for and curating web content, trying out different kinds of applications, and interacting with participants through social network sites, email or chat programmes). And just as we must ask how practices like digital self-tracking, tagging photos on Flickr, conversing in gay chatrooms, caring for virtual monsters, and all of the other practices described in this book are affected by the affordances and constraints of digital technologies, and how these practices contribute to the formation of certain kinds of social relationships, social identities and social realities, we must also contemplate how these same technologies affect the kinds of data we can collect, the kinds of relationships we can develop with those whom we are studying, the kinds of identities we can cultivate as researchers, and the 'versions of reality' our studies end up promoting.

While, as we have tried to argue in this introduction, many of the social practices made possible by digital technologies force us to re-evaluate our analytical tools and theoretical assumptions, we don't wish to frame these studies in a 'discourse of disruption' of the type described by Selwyn. As much as these chapters demonstrate how sometimes we need to alter and adapt our tools to new circumstances, they also demonstrate the reliable potency of the tools of discourse analysis—tools for the analysis of texts, contexts, actions, interactions, power and ideology—to increase our understanding of the practices

people engage in with digital technologies in ways that other analytical frameworks cannot.

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