

Before and After the Internet

Introduction

The nature of culture and society changed at the end of the twentieth century, as novel forms of communication dependent on internet technologies came into widespread use. With the internet came not just email, electronic discussion boards, social networking, the world wide web and online gaming but across these, and other similar socio-technical artefacts, also came different identities, bodies and types of messages that changed the nature of communication and culture. The following arguments explore interrelations between the rise of the internet and different identities, bodies and messages in communication and examine their effects on twenty-first-century cultures and societies. The focus is on the practices that make the sending and receiving of messages possible and how these practices have changed. This will be done by comparing a case study of pre-internet communication using early nineteenth-century letters with a case study of deeply immersive internet communication using online virtual world gaming. This will lead to consideration of the meaning of changes in communication brought by internet technologies for wider cultural and social change, particularly in the normalization of communicative anxiety.

Such a project explores the nature of communication after the rise to mass use of internet technologies. In this sense, being 'after the internet' is not the same as being without the internet but instead refers to how communication operates once internet technologies are integrated into it. The first step of this project is to consider the claim that there has been social and cultural change related to internet technologies, and, to do this, it is useful to look at

a puzzle about metaphors and analogies between the non-virtual world and virtual phenomena. Such metaphors are nearly always based on a familiar phenomenon from the non-virtual world (e.g. letters) that is then applied to an aspect of the virtual world (e.g. email) to explain or introduce the latter. The puzzle is that such metaphors often appear obviously and intuitively clear, allowing what seemed novel and puzzling to be understood as familiar and obvious, yet after some consideration such metaphors usually turn out to be significantly misleading. What at first seems to be an insight turns into a failed interpretation, and in doing so offers an indication of cultural and social changes that have come with mass use of the internet. To see this, we can look at two examples of the difficulty of comparing what seem, at first glance, to be the same acts conducted in the online and offline worlds; burglary and street protest.

Metaphors and their failures: the metaphor of burglary

Hacking, or to some cracking, refers to the act of breaking into someone else's computer remotely.¹ As has often been said in computer security circles, the only way to be certain someone cannot access your computer illicitly is to lock it in a secure room that has no access to the internet and then allow no one else access to the room. Once a computer is connected in some way that allows other computers to access it then the chance that someone can break into that computer is always there, whether it is secured by password or firewall or these and all manner of other computer locks.

The history of cracking offers many varied and increasingly complex ways of breaking into a computer (Goldstein, 2008). These range from the cracker who gained access to the Duke of Edinburgh's email account by guessing that the password would be 1234, to the production of a program that automated breaking into accounts on Microsoft networks, to the 'playful' types who break into websites and rename them (the Central Intelligence Agency renamed to the Central Stupidity Agency, for example) (Taylor, 1999, p. 72; Jordan and Taylor, 2004, pp. 111–14). From the beginning of cracking, it seemed that an obvious metaphor for it was burglary. The success

and failure of this metaphor can be examined drawing on a formative time in the history of hacking and the internet; the 1990s period of cracking, which is now sometimes called its 'golden age,' before the more criminal and geopolitical phase of the early twenty-first century (Sterling, 1994; Menn, 2010; Poulsen, 2011).

Burglary makes sense as a metaphor for cracking because it captures its key characteristics. There is the sense of the illicit and the need to break something to pass a boundary, and it further captures the sense of an invasion of space by someone not meant to be there who is gaining some advantage. Most important of all, burglary is well known and easily understood and can thus make the strange into something commonplace. The burglary metaphor was popularized primarily by computer security professionals, who were often desperate to explain to the internet-illiterate in the 1990s what cracking meant. It was therefore an advantage that burglary not only explained what cracking meant but also rang the alarm bells that many felt were necessary. For all these reasons, burglary became during the 1990s, and remains, an oft-used metaphor for cracking. However, when more closely examined, the metaphor begins to appear confusing and, under sustained analysis, misleading. Examining this makes clear that the burglary metaphor for cracking does not work as an accurate representation of cracking but instead its inaccuracy functions to establish moral judgements about cracking.

What criminal breaks into someone's home and steals their television by taking an exact copy of that television, leaving both the victim and the criminal with a television? No burglar does this of course, it is impossible, but this is what a cracker does. Crackers do not, usually, remove digital objects, they copy them. This point has often been noted when criticizing burglary as a metaphor, and it is the first step in seeing that digital burglary is not really like physical burglary. There are some other differences that quickly appear as more is found out about cracking. For example, crackers hold publicly advertised conferences, which is not a usual practice for burglars or criminals, and crackers sometimes ring up the sites they have cracked to advise systems administrators on their failures and how to fix the problem, which is again not a usual or familiar criminal practice. The latter is a practice still alive in 2011 when the hacking group LulzSec broke into part of Nintendo but reported the breach to Nintendo

because of their proclaimed love for Nintendo gaming (Winterhalter, 2011). Both in the types of actions taken – copying versus taking – and in their attitudes to what is done – open discussion versus secrecy – crackers do not seem to fit an obvious understanding of what a burglar does.

The recognition of such inaccuracies sometimes leads to the reformulation or extension of the metaphor of burglary to try and make it stick. A computer-systems manager Bernie Cosell offered the following adjustment:

There is a great difference between trespassing on my property and breaking into my computer. A better analogy might be finding a trespasser in your high-rise office building at 3am and learning that his back-pack contained some tools, some wire, a timer and a couple of detonation caps. He could claim that he wasn't planting a bomb, but how can you be sure? (Cosell, cited in Jordan and Taylor, 1998, p. 772)

We can note that this retains many elements of burglary, breaking and entering, particularly, but shifts the sense of what occurs after breaking in. A then-UK-government official, Mike Jones, attempted a similar adjustment both trying to retain the sense of threat and danger involved in burglary but acknowledging that burglary and cracking are dissimilar.

Say you came out to your car and your bonnet was slightly up and you looked under the bonnet and somebody was tampering with the leads or there looked like there were marks on the brake-pipe. Would you just put the bonnet down and say 'oh, they've probably done no harm' and drive off, or would you suspect that they've done something wrong and they've sawn through a brake pipe (Jones, cited in Taylor, 1999, p. 111)

Warming to his adjustment of the metaphor, Jones enunciated a second reinterpretation of cracking as burglary shifting it further to forms of illicit access that carry an implied threat, this time moving from cars to airplanes.

Say a maintenance crew arrived at a hanger one morning and found that somebody had broken in and there were screw-driver marks on the outside casing of one of the engines, now would they look in side and say 'nothing really wrong here' or would they say, 'hey, we've got to take this engine apart or at least look at it so closely the we can verify that whatever has been done hasn't harmed the engine.' (Jones, cited in Taylor, 1999, pp. 111–12)

From a house to an office to a car and then a plane, the metaphorical position of the computer that is being cracked shifts as each attempt tries to retain an ethical sense of what a 'crack' means while failing to equate the physical and digital realms.

The difficulty with these metaphors points towards two conclusions. First, in this case the metaphors are primarily a means of establishing an ethical view of cracking, not of representing cracking accurately (Jordan and Taylor, 1998, pp. 770–5). Second, and this is the key present point, a metaphor that seems obviously and intuitively correct between acts in physical space and acts in digital space does not work and is significantly misleading. Things appear to be different when a seemingly similar action is taken over the internet and in a house. However intuitively similar these acts are, they are in fact quite distinct. A second example will help further explore this point in the creation by hacktivists of mass civil disobedience on the internet using the model of the street protest.

Metaphors and their failures: the metaphor of protest

In the mid-1990s, a number of political activists began to explore the consequences for civil disobedience of the emergence of the internet. Activists had not only adopted email, electronic fora and other communication possibilities produced by the internet to help organize but had also begun to think about how to take direct action online. Activists began to explore and develop ways in which familiar offline protests such as boycotts, blockades and other forms of non-violent direct action could be recreated in online environments, leading to a politics called 'hacktivism.' Out of this came one particular strand of online direct action in an attempt to recreate mass street demonstrations online. The logic was that if information flows have become as important to centres of power as physical flows, then there needed to be a way of blocking information flows that was equivalent to the ways street demonstrations obstructed physical flows (CAE 1996, 10–15; Jordan and Taylor 2004, 67–74).

The equivalence between mass street and mass online demonstrations can most clearly be seen in examples where a virtual demonstration is timed

to coincide with street demonstrations. The anti-World Trade Organization demonstrations in Seattle in 1999 were both virtual and non-virtual. The actions that made most of the headlines were those in the streets, where demonstrators sought to block roads with the mass of many bodies so that conference delegates were unable to get into the conference building. For example, early in the morning of 30 November, demonstrators took over the main intersections around the conference venue, several different marches then brought more demonstrators into the area. With numbers of demonstrators much higher than expected, they had effectively blocked all the streets and the key intersections around the conference venue, blocking some police inside a ring of protesters. This meant that conference delegates could not pass through the demonstrators. Police attempted to break the encircling demonstration and join up with police already trapped inside. Beginning as a non-violent demonstration, its very success led to police attempts to forcibly break the lines to remove demonstrators. The presence of violent protesters also contributed to the emergence of the now-iconic pictures of destruction and fighting that led to the demonstration being called 'The Battle in Seattle' (Gautney, 2010).

Here is a classic street demonstration which effected its politics using human bodies, and ingenuity, to physically block space and to prevent others using those spaces. At the same time, human ingenuity was being used to block the electronic wires supporting the WTO conference. A protest group called the 'Electrohippies' (also Ehippies) set up an action to run concurrently with the street demonstrations that would allow anyone unable to physically be in Seattle's streets to attend virtually. The Electrohippies set up a means of bombarding the WTO computer network with requests; essentially anyone could participate by going to a website set up by the Electrohippies and by clicking on a link that then automatically repeated requests for certain pages from the WTO site. The Electrohippies claim that this was a successful action, believing that they stopped the WTO servers on 30 November and had 450,000 uses of their links (Jordan and Taylor 2004, pp. 74–9). And such actions continue having now entered the repertoire of political activists. For example, in March 2010, the Electronic Disturbance Theatre organized a virtual sit-in at the President of the University of California's online portal to coincide with

street demonstrations against fee increases and other issues at the University of California (Goodin 2010).

Yet the validity of such political actions was challenged by other online activists who did not accept the equation of an online blockade with an offline blockade. These activists rejected the metaphor and in so doing exposed its confusions. The fundamental criticism was that the body that helps constitute a blockage in a street is not the same as the 'body' that blocks connections on the internet. One way of seeing this is to note that it is easier for one person to block connections to a particular site on the internet than it is for thousands of people to do so. Attacks on websites that flood them with data and so block their connection to the internet making them disappear are well known as denial of service (dos) attacks and have rendered invisible many major online presences. Most of these attacks are conducted by one person or a few automating the production of information requests to the target, for example, by infecting a wide range of computers with 'zombies' that can be set to suddenly produce large flows of requests to connect to the one target at the one time. All this can be done by a single person. Such attacks are characteristic of the dos attacks in 2010 orchestrated by activist group Anonymous to strike back at organizations they felt were attacking WikiLeaks. Though several Anonymous members participated – for example, five were arrested in the United Kingdom in late 2010 for their alleged participation – each attack utilized a massive reproduction of information, reputedly based on the software package LOIC, and thus multiplied information hugely over the number of bodies participating. In this way, such sites as MasterCard were claimed to have been slowed and taken down for short periods (Addely, 2010).

But the actions of those like the Ehippies or Electronic Disturbance Theater (EDT) must avoid the accusation that they are single or just a few people, because they need the mass of bodies to be able to claim to be a public protest that expresses a legitimate political claim precisely because it is, like a street protest, a mass. Somewhere embedded in the idea of mass street protest is the legitimacy conferred on this protest by the numbers of people involved, and this political claim needs to be translated into mass online protests. Such online protests therefore often utilize technologies that limit the powers of the internet and avoid the ability that Anonymous and others using dos attacks

have in multiplying protesting bodies rapidly and massively. The virtual protest body only corresponds to a street protest body by limiting the capabilities the internet offers.

This leads to the paradoxical situation in which the most technologically advanced mass protests must utilize impaired forms of technology to retain political legitimacy. The Ehippies protest offered two links to click on depending whether a protester had a fast or slow connection; the fast link reloaded six pages on the WTO site automatically while the slow loaded two. The Ehippies could have set these reloads to be much higher or could have launched automated dos attacks but they had to utilize technology that was less effective at taking down the WTO site so that they retained the political legitimacy conferred by being a *mass* protest.

The issue of political legitimacy and its different manifestations online and offline demonstrates how misleading the equation of street and online mass protests is despite that equation having been a basis for the creation of this political tactic. There are also other differences that can be quickly found. For example, online protests have been criticized for their ease and lack of danger, the comparison between clicking a mouse and running from riot police suggests a very different level of commitment between the two protest types. A further difference is that one of the key issues with a mass street protest is the logistics required to get a large number of people together in the right place at the right time; again this differs radically with online protests where such logistics generally involve turning on a computer, perhaps after having received notification through an automated email list (Jordan and Taylor, 2004, p. 80). The more the nature of a mass online protest is probed, the more such protests seem different to offline mass protests. The use of classic civil disobedience to present online protest as a metaphor, such as when the Critical Arts Ensemble calls for 'electronic civil disobedience,' turns out to be initially attractive but substantively misleading.

Despite the seeming immediacy and accuracy of many metaphors of offline for online phenomena, they turn out to be misleading in case after case. We can enter 'chat' rooms and 'talk' to people when in fact we are typing, and everyone can talk all at once and retain full communication. We 'go' to 'places' without moving an inch from our chairs, with just the pixels rearranging themselves

on our computer screens. And it is not that we fail to move on the internet, just that using the space we know that is not involved with internet technologies as a metaphor or guide to the spaces that internet technologies are part of producing, will initially beguile us but also mislead us. This failure is a clue to the larger issue; to what extent are social and cultural norms, ethics and practices different or similar when they are or are not dependent on internet technologies?

Moreover, such metaphors contribute to the way debates over the effects of the internet have often become polarized. The misleading understanding analogies and metaphors offer us, allow the comforting claim that something that seems new is actually familiar. When they fail, as they habitually do, they also then open the door to the opposite claim that something entirely new that supersedes the old has appeared. Analysis can then be caught in an opposition between claiming nothing 'really' new has appeared or its opposite that something radically new has appeared, rather than comparing and delineating what is new and what is the same. The present argument pursues the change that the failure of metaphors like street protest for online protest suggest exist, but does so to be clear that there are likely to be both similarities and differences between communication before and after the advent of internet technologies. To explore this, there will be a need to grapple with both the mess and complexity of variable interactions between technologies, groups, individuals, signs, actions and more through which communication is lived and routine and habitual practices that in their repetition also make up communicative practices. The first stage in this analysis is to take this clue that failed metaphors offers and turn it into a hypothesis based on existing studies of communication and the internet.

A hypothesis of communicative practice after the internet

The failure of metaphors drawn between non-virtual and virtual spaces suggests differences between the two. To develop this difference and focus it on communication I will propose the following hypothesis. The difference between online and offline can be taken as a sign of the existence of two

concurrent and interacting communicative practices: one communicative practice was developed in Western societies prior to the emergence of internet technologies and is familiar to the point of being nearly entirely taken for granted; and, there is a second communicative practice that has arisen with the emergence of internet technologies and has been rapidly developed and assimilated by many.

A hypothesis here can be thought of as the first suggestion that explains some of the behaviour indicated by the failure of metaphors between online and offline and that is also being studied in the quickly grown field of internet studies. Further, 'hypothesis' can be understood in its older meaning from Ancient Greece when a hypothesis was a summary of the plot of an ancient drama. Such hypotheses acted as something like a preface giving the story, its setting, main characters and the context for a play's initial production (Vlastos, 1994; Kovacs, 2005, pp. 384–5). If the modern drama at stake in this book is 'Has communication and culture changed with the arrival of the internet?', then another way of understanding what I mean by hypothesis is that it summarizes the story's plot by outlining its main meanings and conceptual protagonists. A hypothesis of this type is well served by telling the story once in a small way and then retelling it with conceptual and empirical complexity.

The hypothesis, or storytelling, has implicitly begun in the identification of the possible difference between phenomena that are offline and online. The phenomena that were used to suggest this possibility were each based centrally on communicative contexts, whether that of illicit communication to computers or of destroying communication to targeted protest sites. Putting communication and practice together suggests exploring sets of social and cultural relations played out through material practices that establish ways in which people may communicate. Material practices here refer to repeated actions emphasizing that they involve empirical and tangible resources. Communicative practices set out how we, normally unthinkingly, stabilize the elements of communication and how in daily practice we easily answer questions such as: What is the identity of the sender? How does the receiver know this message is from the sender? What is the identity of the receiver? How is the self-identity of the message maintained? How can the message be read? Communicative practices focus not on the moment of transmission,

when meaning passes from a sender to a receiver, but instead on the means by which such transmissions are created and are able to be repeated across masses of people. The hypothesis being developed can address communication before and after the internet by setting out the nature of communicative practice prior to internet technologies and then comparing them to communicative practice dependent on internet technologies. I will briefly sketch in these stories.

Communicative practices prior to the internet began from those derived from face-to-face communication. These are based on a collapse between a physical body and an identity that then legitimizes authors, recipients and messages. All these elements can be swiftly negotiated when face-to-face because all parties to the communication are present. The development with face-to-face communication is one in which there are masses of authors and recipients who are at a distance to each other. This creates the problem of authorizing a communication when the author and recipient's identities and physical bodies cannot be automatically known to be the same. The era of communicative practices prior to the internet derives from this development from face-to-face forms of authorization of communication because of the separation of communicative identities from communicating bodies that is required by at-a-distance communication.

Communicative practices for at-a-distance communication create transmission based on authorizing the coincidence of body and identity using material practices involving letters, stamps, signatures, voice and so on. Where being at a distance pulls the body and identity of face-to-face apart, these practices of communication now authorize a reconnection of communicative identity to body by creating a communicating body. One example of this is the signature, which is a practice in which the performance of inscribing certain shapes produces a coincidence of name and body, because the signature establishes that the body of whoever is named in the signature touched and produced a message, much as if it had been spoken aloud. Signatures can be traced back to royal practices of seals in which the person of the monarch, the body of the king, was legitimized as the author of a communication (whether the communication was personal, state, legal or other was often reflected in a different seal and signed name). The physical body of the monarch was attached to a communication through a device which could not be activated

unless that physical body was tangibly at the communication (hence, also the practice of seals, particularly personal seals, being made into a ring and so being intimately attached to a body that 'owned' that seal) (Clanchy, 1993, pp. 51–77). The development of written languages and the extension of literacy integrate into a range of different media this way of stabilizing the transmission of messages.

The central dynamic of pre-internet at-a-distance communicative practice is the use of written language on a variety of media that is legitimated as coming from one identity through practices and technologies that authorize the message as having come from a physical body co-terminus with the sender's identity. The problem of separation of identity and body is solved through a range of practices that stabilize the two as one and legitimize certain performed marks as mediators which state that a certain body is attached to a certain identity that produced the message. For example, characteristic styles of handwriting, or particular styles of language use, or certain types of salutations and ways of signing off can all be interpreted, when they are known and repeatedly used, as stabilizing a body and identity as the author of a message, just as seals and signatures can. Through these practices the physical body and identity of communicants is not reflected but is produced through fragments that stand in for and are taken to authorize the communicant.

Such a complex set of attachments stabilizes and underpins communication through the pre-internet era. This form of communicative practice is flexible enough to continue through a range of new developments. For example, the telephone created little disturbance to the basic structure of communication because it provided another means of authorizing a physical body through fragments found in the timbre, intonation and characteristics of someone's voice. Other forms of communication, such as the telegram, posed more challenging problems with its restricted vocabulary undermining strategies of identifying through performances within messages and carrying only the barest of signatures. While telegrams are part of pre-internet communicative practice, this may only be because of the exceptional nature of telegraphic messages within the vast weight of other such forms of communication.

In contrast, internet-dependent communicative practices no longer stabilize communication through material performances that merge identity and body. Instead, the body as a means of stabilizing identities fades away as a locus of authority because the internet characteristically offers faulty and suspicious markers of identity leaving the body overshadowed by practices in which styles of messaging stabilize a communication. This is caused by a communicative context in which markers of identity – such as email address, forum name, Facebook name – are unstable and themselves need to be authorized. The extent of the instability of this communicative practice may be a marker of its novelty, perhaps first initiated in telegrams but only coming into widespread use towards the end of the twentieth century (Standage, 2007). In this communicative practice, styles of message become evermore important and so the symbolic content of messages becomes more closely integrated into the means of stabilizing communication. The invention and use of new forms of text communication, such as emoticons or ‘text speak,’ alongside choices about what new styles one does and does not use become evermore important to authorizing who has created and who is receiving a message and whether that message can be understood.

For example, in many online fora if a post is made under one name and is followed immediately by another post using a different name whose content either strongly agrees or disagrees with the first post, many will immediately suspect that the two posts come from the same person. The suspicion is that ‘trolling’ is going on in a deliberate attempt to spark an argument for the sake of the argument. In such a case, the identity-markers claim two different communicants are at work but the style of the interaction is read contrary to the identity-markers to instead assume that there is only one person sending messages. Other markers may buttress this kind of reading. For example, if a forum offers a post-count of the number of times a particular name has posted a message then if the first post has a high post-count and the second with a different name has a very low post-count (or vice versa), this will emphasize suspicion that the two are from the same identity (one from the user’s normal and highly used account and another from a rarely used one) (Donath, 1998). A second example is the experience of someone who sends mass advertising

emails, or spam, illicitly taking over an email address and routing the advertising mails through that address to the person's contact list. In this case, what may well be a very familiar email address associated automatically with a particular body offers up a style of message radically at odds with the expected style of the communicant. If someone you know and whose email is familiar suddenly sends advertisements for viagra, for enhancements to body parts or suggests new dating sites, then most will immediately assess the email from the style it offers rather than from the email address. Styles of communication, particular themes, forms of writing, characteristic examples and other such markers of a particular way of communicating, have become the means of stabilizing communication from a sender to recipient.

Two communicative practices, each made up of many and varied material practices, have been hypothesized and their differences revolve around the ways in which messages are legitimized as coming from one identity and are received by another identity and ways in which the nature of the message can be constructed and maintained. The key shift is from the body to style. But these practices should not be thought of as mutually exclusive or sequential in the sense of one inevitably taking over from the other. If we take the viewpoint of a particular individual then it is not that any one person will experience these two communicative practices separately but s/he is likely to experience the mess of everyday life flitting in-between and within two sets of communicative practices that themselves pull in different directions, have different standards and are potentially dissonant to one another.

This hypothesis is a first approximation to understanding what the clue found from the failure of metaphors between offline and online means, all it does is to open a way forward towards understanding what has happened to communication. The hypothesis tells the first story. The question now becomes how best to study this hypothesis? If this first telling of the story leads to the suggestion of two different cultures that sustain different ways of transmitting and receiving messages, then the task becomes finding a way both to understand and test the story. It becomes a project of retelling the story in a more complex and empirically grounded way to see whether the story remains coherent and sensible or whether it comes apart and disintegrates. This however sets a number of interesting methodological problems.

Methods: theory, comparison, difference, intensity

A theoretically complex and empirically informed retelling of the hypothesis is necessary. What methods can do in this context is to give a specific form to the retelling that offers the greatest chance of finding out whether the story remains coherent once it becomes complex. A number of components to such a method are needed. Theoretical complexity has to produce an understanding of communication that stretches from pre-internet to internet-dependent historical periods. While the latter is not so long, the former stretches far back into communication history. Analysing both periods for their communicative form then provides a basis on which comparison may be conducted. However, confusion is possible because internet-dependent communication does not replace and is not mutually exclusive from pre-internet communication, but rather continues to exist alongside and to interpenetrate with internet-dependent practices. One way to minimize this potential is to take a case study of pre-internet and one of internet-dependent communication that are as clearly representative of each as possible. To ensure comparison can be done meaningfully, it is important for the case studies to acutely express the specific nature of their communicative contexts. It will be useful to clarify these two aspects of the method being employed; comparison and difference.

To create the possibility of comparing pre-internet and internet-dependent practices, a theory of communicative practices that applies to both will need to be articulated. The hypothesis already implies significant conceptual work because of the extensive use in it of terms that have themselves been subject to considerable conceptual controversy over, at least, the last 30 years. What is meant by message? What is meant by identity? What is meant by body? What is meant by transmission? Is a theory of performativity (and which one) needed or is a theory of practice or both? These kinds of concepts need to be taken into account to fully understand what the hypothesis might be claiming, and this theory also needs to outline a view of communication that can confidently be used across the eras of pre-internet and internet-dependent communication.

This theoretical task will be undertaken by drawing on two related but not always connected areas of analysis. Communication studies will be a key resource, particularly in the debates around the meaning of transmission of

messages and cultures of transmission that have developed around the term 'communicative practice'. The work of Carey, Peters and others will be taken up here. Not always connected to this work have been developments in cultural studies around language and the body which also deal with issues of how communication is created and maintained. Connecting this cultural studies work, particularly as derived from Derrida and Butler, to communication studies will create a complex view of communication that takes many issues back to an abstract foundation in the ways in which the transmission of messages is created and maintained (see Chapter 2). While the meaning of communicative practice will be defined abstractly, the theorization also requires that each communicative form will be located in particular times and spaces. Such a theory outlines how it is possible that the particular communicative practices that operate in pre-internet and internet-dependent times and spaces can be defined and compared. Abstractly both pre-internet and internet-dependent communication are communicative practices, but in practice they exist in specific times and spaces and have particular forms.

To counter the potential confusion produced by these factors, the empirical evidence will be collected from case studies of intense forms of communication. Intense, or 'extreme,' here does not mean unusual but rather communication that is heightened by the particular time and space it exists in. Comparing two case studies of intense forms of communication should provide the clearest possible examples of communicative practices and allow conclusions about their differences and similarities to be drawn. For similar reasons, a historical view that starts prior to the internet and traces the emergence of internet-dependent communication is potentially subject to confusion given the more gradual change over time provided by a historical narrative rather than the abrupt comparison of communication from two different eras. This does not mean a historical view of communication is either inaccurate or untenable, only that the more direct route to understanding the differences of communication at stake here is to focus on two clear comparable case studies. The final element of the methods underpinning this book is then to define the case studies and why they are 'intense' forms that offer clear evidence of communication in their era.

For pre-internet communication, it seems advisable to move prior to the telegraph to remove the possibility that the telegraph first brought internet-like

communication (Standage, 2007). One way of identifying an intensive form of pre-internet and pre-telegraph communication, that is also amenable to research, is to look at communication in letters that is radically at a distance. If the letter writers and receivers are themselves so distant that effectively all communication between them is carried by letters, then examining those letters will put the researcher in as close contact as is possible to pre-internet communication by offering the researcher nearly all that constituted the communication when it first happened. One case study that fits this specification is letters to colonial Australia in the early nineteenth century, and archives of such letters were examined (see Chapter 3). In this case, not only were several series of letters between individuals found but also case studies of business letters and of state letters. These were supported by work in other archives to form a case study of pre-internet communication. The first case study is then an archival study of letters to and from colonial-era Australia.

The second case study needed is of 'intense' internet-dependent communication. While it might seem obvious to compare letters to email, and clearly this can be a productive research method (Milne 2010), there is also the difficulty of further confusion caused by similarities in form between emails and letters. In addition, more immersive environments are possible based on internet technologies, environments which cannot be imagined without such technologies, whereas email lies at least partly within the imagination of letters. A communicative environment unimaginable before and without internet technologies would be an intensive form of internet-dependent communication, and these can be found in virtual worlds. Such worlds offer physically dispersed individuals access to an online space that presents itself as a new world, some of the best known of which are World of Warcraft (WoW) and Second Life. The second case study takes up this sense of intensity by conducting ethnographies in virtual worlds, primarily in the massive multiplayer online games WoW and Dark Age of Camelot (DAOC). These ethnographies aim to produce empirical evidence for the ways communicative practices that are dependent on internet technologies enable and maintain the transmission of messages.

One of the costs of this approach is that the two case studies are generated using different methods, suggesting it might be difficult to compare the results.

Two points can be made about this. First, any case-study-based comparison of communication before and after the rise to mass use of internet technologies will face this problem because moving prior to computer-mediated communication, and the telegraph, means studying phenomena from different eras. Such a comparison is nearly certain to need different techniques to grasp the full communicative contexts because such contexts are about more than the content of messages. What needs to be studied is how the content of messages is created and moved and how receivers and senders are authorized, identified and maintained. This means paying attention to the materiality of communication in order to grasp how transmission is created and maintained, rather than focusing on the meaning of what was transmitted. This kind of study necessarily means mixing case studies researched through different methods because of a need to study phenomena from different times and spaces. Second, the comparison is of communicative practices and as long as the methods employed produce a good analysis of the nature of communication in each particular time and space, then it should be possible to compare them as such practices. That is, if the case studies produce an understanding of how communicative practices are created and maintained then it should be possible to compare these understandings, even if different methods have had to be employed to generate results.

A way forward to testing the hypothesis by retelling it in ever greater theoretical and empirical complexity is now clear. First, a more detailed theorization is required to make sense of the concepts used in the hypothesis of communicative practice. Identity, body, message, authority, legitimacy and so on all require conceptualization (see Chapter 2). This theorization will hinge on connecting the fields of communication studies and cultural studies which, while not complete strangers to each other, are also often not as closely connected as they could be. Second, such conceptualization must be done in relation to material practices, while this does not mean theory and practices must be written about simultaneously, it does mean theory cannot remain abstract while neither can material practices be understood atheoretically. Two case studies informed by the theorized hypothesis of communicative practices and engaged with the materiality of communication will take up this task. One case study focuses on pre-internet communication through a study of

letters to colonial Australia in the early nineteenth century (see Chapter 3), while the second case study focuses on immersion in internet-dependent communication through an ethnography of multiplayer online games in the early twenty-first century (see Chapter 4). In both case studies, the aim is to generate as clear as possible a view of communication in their times. Finally, the results of these analyses can be reflected on to produce insights consequential to understanding communication, culture and society in the twenty-first century, particularly in the embedding of a form of communicative anxiety deeply within cultural practice (see Chapter 5).

As this study unfolds, it will become ever clearer that the state of being 'after the internet' is not being without the internet or, in a circular sense, returning to something prior to the internet, but of constantly negotiating and dealing with two broad communicative practices; one that existed prior to and that continues to exist after the rise of the internet and the other that is dependent on and could not exist without the internet. The points of intersection, whether of contradiction, unimportance or reinforcement of each other, will need to be teased out by telling the story of two communicative practices whose coexistence constitutes being after the internet.

Note

- 1 Hacking is a term that refers to a number of things; for this example, it is being taken as referring to cracking. For a full examination of its various meanings and their interrelations, see Jordan, 2008.