
Cyberpsychology as Everyday Digital Experience across the Lifespan
Dave Harley, Julie Morgan and Hannah Frith

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ISBN 978-1-137-59199-9 ISBN 978-1-137-59200-2 (eBook)
https://doi.org/10.1057/978-1-137-59200-2

Library of Congress Control Number: 2018940731

Cover credit: Jonathan Knowles/gettyimages

Printed on acid-free paper

This Palgrave Macmillan imprint is published by the registered company Macmillan Publishers Ltd.
part of Springer Nature
The registered company address is: The Campus, 4 Crinan Street, London, N1 9XW, United Kingdom

To Robin, Gonzo, Mum and Dad D.H.
To Graham, Rowan and Rudi J.M.
To Rich, Tom, Ruby and Ninja H.F.

Preface

Digital technologies and media play an increasingly central role in our everyday lives—from online shopping and banking, managing our bills and services, maintaining relationships with family and friends to creating new friendships and communities, and exploring who we are and how to show ourselves to others. Many of our mundane daily activities and interactions take place online, in virtual worlds, or mediated through digital technologies. The developing discipline of Cyberpsychology often struggles to keep apace with digital innovation and the ways in which these technologies are taken up, moulded, adapted and made sense of through everyday practice. This book emerged out of our experience of teaching Cyberpsychology (the study of how new communication technologies influence, and are influenced by, human behaviours and subjectivities) to undergraduate students at the University of Brighton over the last five years. In this time, the field of Cyberpsychology has grown tremendously, and yet, it remains dominated by research which examines the 'impact' of the internet on our behaviour, attitudes and well-being—often assuming a negative impact and focussing on those who are likely to be most vulnerable to the influence of these technologies (e.g. children). Our aim in writing

this book was to shift the focus of Cyberpsychology away from quantitative, experimental approaches exploring the 'effects' of human–computer interaction and towards a focus on the subjective experiences and sense-making of users in everyday contexts. In other words, we wanted to focus our lens on the way in which individuals engage with internet-based technologies and make sense of their own online behaviour. Being aware of the diversity of online and mobile spaces, platforms and communities, the varied design features of hardware and software, and the different motivations, interests and life stages of users, we wanted to explore how the interactions between these elements create complex contexts in which the meaning of mediated interaction is produced. We also wanted to reflect the way in which our investment in, and use of, digitally mediated communication is likely to change and evolve over time as we meet the psychosocial challenges of different life stages and reflect on whether virtual spaces are coded as 'for us'.

Therefore, we chose to organise the book roughly chronologically from childhood to older age taking in some key aspects of everyday life along the way—from having a social life, to being sexy, to dying and grieving. Chapter 1 gives a more in-depth overview of our particular focus on the subjective experience of online spaces and contexts. Chapter 2 looks at the experience of 'Growing Up Online' for children and adolescents. Chapters 3–7 explore aspects of online experience which reflect different motivations or 'life orientations' which transcend age. Chapter 3 examines the construction and negotiation of identity and selfhood online, and Chapter 4 explores how social relationships are formed and maintained through digital technologies. Both are developmental tasks typically associated with adolescence, but which continue across the lifespan. Chapter 5, Chapter 6 and Chapter 7 speak to different ways of being in online spaces and virtual worlds. In Chapter 8, we come back more explicitly to focus on life stage, to consider the experiences of older people who are not 'digital natives' and make sense of technologies in sometimes very different ways to young people. In Chapter 9, we examine how experiences of death and grieving are mediated by digital technologies. Although often associated with old age, social networking sites (for example) are often mobilised for memorialising those, such as the young, whose deaths fall outside

these expectations. By organising the book in this way, we hope to illuminate the ways in which time, age, maturity and life stages are brought into complex relationships with the everyday use of digital technologies. In the final Chapter 10, we draw together the themes within the book around some key questions: 'How much should we invest in our digital selves?' and 'What counts as real life?'.

We hope we have written a book which is accessible to both undergraduate students and lay readers, and has something to offer scholars in Cyberpsychology as well as related disciplines such as human–computer interaction and media studies. Writing the book has given us (as academics who teach and research in the field of Cyberpsychology and as lay people who use technologies) much cause for reflection, and we have had many delightful conversations over coffee and cake about how we make sense of ourselves and others in relation to digital technologies. We hope that this book encourages you to be curious about your own experience of technologies, and that it sparks your further interest in Cyberpsychology.

Brighton, UK

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Understanding Digital Technology as Everyday Experience

As we sit down to write this book, we will have lived through 26 years of the World Wide Web—that accessible information space which has made the human potential of the internet come alive for so many of us in the developed world. In that 26-year period, we have seen profound changes in the way that we experience everyday life thanks to an ever-increasing reliance on digital technologies to fulfil our daily wants and needs.

As the Web has developed, we have seen a convergence of three principal technologies (computers, the internet and mobile telephony) and a move from limited desk and text-based interactions to more sophisticated and mobile forms of perpetual contact which allow us to exchange all kinds of media from synchronous text to photographs, synchronous video and audio clips. internet use has become a ubiquitous, pervasive and sometimes invisible part of our everyday lives being accessed through all kinds of digital devices from satnavs[1] and games consoles to tablet computers, mobile phones and smart watches. At the same time,

[1]Satnavs have historically just used GPS satellites to provide their routing information. Those that provide moment to moment information on traffic conditions now pool data from different vehicles on the roads via the internet.

D. Harley et al., *Cyberpsychology as Everyday Digital Experience across the Lifespan*,
https://doi.org/10.1057/978-1-137-59200-2_1

our internet-enabled devices have come to play an increasing part in shaping our experience of the world around us, how we express ourselves in daily life and how we relate to one another.

As well as providing us with access to a seemingly endless source of information and entertainment media, the persistent digital connections of the internet and World Wide Web have allowed us to inhabit new digital spaces that exist alongside the physical realities of our everyday lives. We can now continue relationships across the planet via applications like Skype, social networking sites like Facebook and apps like Whatsapp, whatever time of day or night. We can connect with people we have never met before through global websites like LinkedIn, Twitter and YouTube or meet nearby strangers through apps like Tinder or Meetup. As well as the obvious technical achievements that have made this possible, we have developed new ways of behaving and representing ourselves through these technologies in order to harness the interactional potential of these online and mobile spaces. Central to this process has been a willingness to open our lives up to the public gaze of the internet and to invest in digital surrogates of ourselves in order to capitalise on these new social opportunities.

It would be wrong to suggest that everything about this digital revolution has been driven by pure and transparent intentions however. These same technologies now provide unparalleled access to our personal data for promoting the commercial interests of business and as conduits for wholesale government surveillance while at the same time providing new opportunities for Cybercrime through the misuse of that same data. Increasingly our digital surrogates are involuntary and invisible aspects of our everyday lives with our personal data being captured constantly during Web searches, digital conversations and as a result of travel and purchase decisions made with credit and store cards. This data forms the basis of new invisible digital selves which now help to define and control our view of the outside world by limiting our access to knowledge and determining potential avenues for action in the online and offline worlds. In this book, we explore just how our evolving relationship with internet-enabled digital devices has changed and is changing the experience of being ourselves and our relationships with others in the midst of everyday life.

As digital technologies become ever-present witnesses and accomplices to the intimate aspects of our lives, they influence how we develop as individuals and how our lives play out, inviting new life opportunities, risks and dilemmas. In this book, we also consider the role of digital technologies throughout our lives and ask what part they play in relation to different life stages, from childhood, through midlife to old age and death?

Our new digital selves are not automatic, effortless reflections of our inner selves. They take a lot of upkeep, competing for our attention alongside the immediate demands of everyday life. Negotiating the simultaneous social expectations of our online and offline worlds has become a new life skill, and in order to achieve a reasonable balance, we have had to redefine some of the cultural norms of self-presentation and invent new social practices. Perhaps one of the most visible of these new practices at present is the act of taking a 'selfie', that is taking a photograph of yourself with a mobile phone or tablet in order to share it via social media. Selfies have evolved from being a mostly teenage activity to the new lingua franca of social media. Taking selfies is almost ubiquitous among younger people (aged from 18 to 24) with active selfie-takers sharing between 3 and 20 selfies per day (Katz and Crocker 2015). Although the reasons for taking selfies change with age, it has become a common activity for all ages in possession of a smartphone (Dhir et al. 2016).

Here, the challenges of maintaining a digital self are sometimes brought into stark relief. In a search for more authentic and appealing selfies, some teenagers are going to extreme lengths, deliberately taking photographs of themselves in dangerous and unusual situations. In June 2017, a young Indian girl called Priti Pise drowned while taking an extreme selfie from Mumbai's breakwater when a massive wave engulfed her and carried her out to sea (Haines 2017).

At the same time, selfies are being used to convey feelings of allegiance and communal commitment through social media. In March 2014, Cancer Research UK decided to run a fund-raising campaign in which they encouraged Twitter users to show their support for the cause by posting their own selfies using the hashtag #nomakeupselfie. In the space of a week, they had raised £8 million and were able to fund ten clinical trials which would not have happened otherwise (Miranda and Steiner 2014).

A year later in March 2015, the National Gallery in London, the home of the self-portrait, decided to ban the use of selfie sticks[2] because they were disrupting other people's enjoyment of the paintings (Weaver 2015). Twenty-six years ago, this kind of behaviour was unheard of even though personal photography was well established as a pastime, so what has changed and how do we make sense of these changes? Technology and social media companies obviously promote such opportunities as boons to society while news media typically express some degree of moral panic over such activities, highlighting the addictive nature of social media practices and the narcissistic tendencies of those who engage in them (Murphy 2015). Such reports will often use psychological research to back up their views (e.g. Fox and Rooney 2015). In this book, we attempt to move beyond these good/bad judgements of new technology and towards an understanding 'from the inside' that acknowledges the motivations and experiences of those using these technologies and the social meanings that arise within these new mobile and online contexts.

Our Evolving Relationship with Digital Technology

The first personal computers started to arrive in people's homes in the mid-1970s. At that time, they were mostly office machines and required some programming knowledge and direct text entry of commands in order to operate them. When graphical user interfaces were first developed in the 1980s, our opportunities for interacting with computers developed further through mouse-based 'point and click' options and game-based interactions. It was only when computers started to be connected to the internet in the 1990s that their potential as socially connected sources of media and information began to be realised.

[2]A metal stick specifically designed to hold a smartphone or camera beyond the normal range of the arm so that selfies can be taken which are in focus and which capture the surrounding scene.

In the developed world, the ubiquitous nature of mobile and internet-based digital technologies is hard to deny. There are now more mobile phones on the planet than there are people (GSMA 2017; Worldometers 2017). In developed nations, mobile phone ownership has reached near saturation point with 93% of the UK population owning at least one phone (Ofcom 2015) and similar adoption levels of 92% in America (Anderson 2015) and 84% in Europe (GSMA 2016). Internet access is commonplace in the developed world with 85% of the UK population being online (OfCom 2015), 84% of Americans (Perrin and Duggan 2015) and 81% with internet access across Europe (EU 2015). Many now choose to go online via smartphones with 66% of Britons and 64% of Americans owning one (Anderson 2015).

There are still concerns about those that are excluded from the digital economy, living the wrong side of a digital divide because of age-related limitations, poverty or lack of mental capacity, but for the most part digital technology is presumed to be a positive addition to modern life.

Looking back into history, we can see that there have always been concerns about the effects of new technologies on the human psyche and behaviour. As far back as the fifth century BC, the Greek philosopher Socrates expressed concerns about the new technology of writing (Bloom 1991) and its potentially negative effects on the transfer of human knowledge which had previously (in the Greek oral tradition) relied on a strong connection with personal experience as a basis for 'knowing'. Subsequent innovations have continued to spark concerns about how technology might influence human thought and behaviour.

At the beginning of the twentieth century, when the telephone was still a fairly recent innovation, it was considered a potential threat to morality and social cohesion with fears it would 'allow the destruction of community' and 'encourage far-flung operations and far-flung relationships' (Fischer 1994). During that same period, the technologies of cinema and television were becoming a cause for concern and initiated the earliest attempts to assess the psychological effects of technology. This later became known as the 'media effects' tradition in psychological research. Cinema studies in the 1920s showed that children were apt to copy what they saw on screen influencing their subsequent behaviour, attitudes and emotions (Jowett et al. 1996). Later research in the 1950s

and 1960s showed that watching violence on television could undermine normal childhood development by making young viewers more aggressive (Bandura 1963) and desensitising them to real acts of violence later on in life (Lazarus et al. 1962). Since then research into media effects has broadened to show TV as responsible for a whole range of emerging attitudes including those relating to sex (Huston et al. 1998), romantic relationships (Eggermont 2004), ideal body image (Tiggeman 2006) and political allegiance as well as influencing attitudes leading to greater risk-taking (Potts et al. 1994) and criminal behaviour (Huesmann et al. 2003).

The Emerging Field of Cyberpsychology

The underlying premise of media effects research has been that technology (and media) is responsible for changing our attitudes and behaviour in discernible ways and that we are particularly susceptible to these influences while growing up. Within Cyberpsychology, investigations into the transformative nature of digital technologies have pursued a similar trajectory, attempting to show the ways that digital technologies can cause changes in attitudes and behaviour, particularly maladaptive behaviours.

The significant milestones of Cyberpsychology research so far suggest that digital technologies are responsible for a number of effects on our psyche and behaviour.

1. Regular and excessive use of digital devices has been shown to have an addictive quality, undermining normal behaviour and disturbing mood and sleep patterns. These same effects have been found for the internet (Young 1998, 2004), video games (Griffiths and Meredith 2009) and mobile phones (Bragazzi and del Puente 2014).
2. Internet use has been implicated in changes to social behaviour and mood. In the early days of the internet, it was suggested that using it would inevitably lead to increasing social isolation and corresponding feelings of loneliness and depression for everyone (Kraut et al. 1998). This view has since been tempered (Kraut et al. 2002;

Amichai-Hamburger and Ben-Artzi 2003; Caplan 2006) to acknowledge the different personalities of internet users and the particular vulnerabilities of shy and lonely people to these ill effects. Nonetheless, the view that excessive internet use causes loneliness and depression continues to be a firmly held view, informing much of the research in this area (e.g. Yao and Zhong 2014).

3. Anonymous internet use, in particular, has been singled out as having a significant effect on users with research showing that we become less inhibited when interacting online in a way that is similar to being drunk (Hirsh et al. 2011). This results in us either becoming overly trusting, disclosing 'too much' personal information and helping complete strangers or becoming more antisocial, expressing overly critical or aggressive comments with those that we encounter online (Joinson 2001; Suler 2004).
4. Excessive playing of video games has been shown to change the way that players relate to others, attenuating their ability to empathise in 'real' life. Research focusing on violent video games has shown that (as with violent television) regular players find it harder to empathise, and they become desensitised to instances of real-world violence and become generally more aggressive (Anderson and Gentile 2014). Conversely, playing games with a prosocial and cooperative slant can encourage greater empathy (Anderson et al. 2010).
5. Social networking sites and the practices of self-disclosure that accompany their use have been shown to be intrinsically rewarding (Tamir and Mitchell 2012), potentially leading to overdependence and addiction (Kuss and Griffiths 2011; Turel 2015). While there is evidence that SNSs like Facebook serve an important social function bridging social worlds online and offline (Ellison et al. 2007), their inherent 'selfie-culture' has been shown to encourage social comparisons which can cause depression in regular users (Steers et al. 2014).

This research highlights the profound impact that digital technologies can have on our mental state and behaviour but it also betrays a certain bias towards these new technologies that is not unlike that of Socrates, blaming them for negative trends in human behaviour.

A central concern for any study of Cyberpsychology has to be the notion of causality. Is it the technology that causes these changes to human thought and behaviour or is it something else? Positivist approaches to Cyberpsychology in line with the 'media effects' tradition have tended to pursue a 'technologically determinist' agenda here, maintaining a view that it is the technology itself that is the prime mover of psychological and social change (along with associated problems). In some ways, this chimes with a dominant view in broader society (particularly in the developed world) where technological innovation is seen as the solution to many of humanity's problems. Technology's preeminence commonly informs government policy (e.g. Cabinet Office 2014) and business investment aimed at alleviating such problems. Within the frame of technological determinism, current approaches to Cyberpsychology offer a critical voice challenging this Utopian view of technology and highlighting its equal potential as a maladaptive influence. However, the underlying stance of technological determinism remains a partial one with particular drawbacks.

The technologically determinist form of Cyberpsychology assumes that the psychological effects of digital devices operate in one direction with the user being a passive recipient of these effects. The causal factors of a particular technology (e.g. the anonymous, global and text-based interactions of Twitter) are assumed to be immutable and monolithic aspects of each technology, predetermined by design and experienced in the same way by all users.

So what are the causal factors of digital technology that are seen as responsible for these ill effects? Much of Cyberpsychology's criticism of digital technology comes from a central concern about 'overstimulation' caused by increasing access to all forms of media that digital technologies afford. Internet and mobile networks increase access in terms of speed and choice to all forms of media including news, gaming, entertainment, gambling, advertising, pornography and social media. The argument that proceeds from this is that we are vulnerable to the demands of this media, soaking up their messages and allowing them to transform our minds, our behaviour and the norms of society accordingly as we unconsciously indulge in their consumption (Carr 2011).

In technologically determinist Cyberpsychology, the closest we get to an acknowledgement of the user is through individual differences in terms of personality traits, gender, age and culture. The subjective experience and agency of individual users are often ignored even though these may be central to explaining how and why digital technology is so prominent in everyday life and how it is interpreted, understood, made meaningful through use (and even enjoyed!). Given the interactive nature of the Web and its blurring of distinctions between media and technology, we could argue that individual experience and agency are even more significant than with previous forms of technology and media.

This objective stance within Cyberpsychology also struggles to accommodate the truly social nature of digital technology use, i.e. the social contexts established through digital connections that frame interactions, giving them meaning and purpose, sustaining emotional involvement and guiding our interpretations of media content and online activities.

The inability of digital technologies to convey the same degree of social information as face-to-face interactions is usually cited as problematic here (e.g. Sproull and Kiesler 1986). Interestingly, the issue for technologically determinist researchers in this instance is one of incompleteness and 'understimulation'. The lack of socially relevant cues that would normally be gleaned from body language, tone of voice and aspects of a shared physical setting means that mediated communication is often incomplete and ambiguous. This is likely to hinder communication, leading to greater misunderstanding (Bazzanella and Baracco 2003), disagreement (Kushin and Kitchener 2009; Lampe et al. 2014) and disinhibition (Suler 2004). This perspective, often described as the 'cues-filtered-out' approach (Culnan and Markus 1987) to Computer-Mediated Communication (CMC), views the social contexts of digital environments as inevitably impoverished and therefore encouraging of social transgression because the media that they operate through cannot convey 'social presence' in a faithful manner (Short et al. 1976). Here, social context is defined as a simple accumulation of available social information (or cues) where social meanings are predefined and independent of the medium itself or human agency. While social 'bandwidth' may be extended (e.g. by choosing to use Skype to

communicate difficult emotions rather than text messaging), some social cues will always be missing from CMC and it is their absence that is viewed as problematic because these cues are essential for the social regulation of emotion and the resolution of shared understandings.

More recent theories of CMC such as Walther's (2008) Social Information Processing (SIP) model have started to question this limited view of CMC, showing how social bottlenecks are commonly overcome by users revising the significance of different social cues principally by taking greater notice of time as a significant social variable and reinstating some of the missing elements from face-to-face interaction. Examples of such workarounds are commonplace, e.g. if a friend posts a status on Facebook that we don't immediately understand, we will likely take some time to ask them what they mean. In response, they may attempt to iron out ambiguities by explaining things differently or by adding emoticons. In short, we have human techniques for making ourselves understood that are not negated by the technology.

Here, we see the beginnings of a more user-centred approach to Cyberpsychology which can both accommodate human agency and consider digital environments as bona fide social contexts. In this book, we continue to pursue such a line of inquiry.

The Approach to Cyberpsychology Pursued Within This Book

Beyond technologically determinist forms of Cyberpsychology, there are other valid ways for us to frame the dynamic between people and their digital devices and these should be part of a more complete approach to Cyberpsychology. In this book, we start to acknowledge these alternative approaches by moving beyond technological deterministic arguments and towards more subjective and socially situated understandings of the human-technology dynamic. This means incorporating studies that acknowledge phenomenology and context—that is studies of a more qualitative and ethnographic character drawn from Cyberpsychology as well as other disciplines such as technology design, human computer interaction, sociology, anthropology, linguistics and media studies.

Subjective Understandings of Technology

The way that we decide upon the meaning and purpose of a particular digital technology is only partly defined by its design. Psychology's earliest attempts at explaining our relationships with digital technology (within the field of Human Computer Interaction or HCI) assumed that purpose was something that was fixed. They focused on the overt 'designed-for' intentions of technology designers and explored the mismatch between these and users' expectations of a technology's function (Norman 1988). Through analysis of this 'cognitive mismatch', HCI was able to improve the 'usability' of a technology by redesign. Emerging in the 1990s, Cyberpsychology borrowed much from HCI in terms of its positivist cognitive outlook and the fixed sense of purpose it assumed from digital technologies. While HCI focused on improving the design of technologies, Cyberpsychology assessed the psychological impacts of their use. Debates at this point in time were concerned with whether or not a technology was usable (e.g. Nielsen 1999) or harmful (e.g. Kraut et al. 1998). The quality of technological interactions and users' personal interpretations of use were largely ignored. As we have moved into an era of networked multifunction devices that inhabit not only our working hours but also much of our mundane and intimate activities as well, the quality and meaning of these technological interactions to our lives have taken on much greater significance.

Psychologists working within HCI have more recently turned to the notion of 'user experience' to explore issues of phenomenology, acknowledging the qualitative aspects of use that frame everyday interactions with and through digital technology (e.g. Green and Jordan 2003; McCarthy and Wright 2004). User experience acknowledges the temporal, emotional and aesthetic dimensions of technology use, showing how engagement may be shaped by underlying motivations of fun or pleasure versus work-based motives of productivity (e.g. Hassenzahl and Tractinsky 2006). User experience research provides an important resource for this book in terms of offering an alternative view on the person-technology dynamic that moves beyond simple notions of causality.

Cyberpsychology has been slow to incorporate this shift to a more qualitative perspective on the person-technology dynamic, but it is evident in certain lines of research (e.g. Bakardjieva 2005; Livingstone 2014; Turkle 2011; Whitty 2008). For these researchers, the emphasis has been on capturing individual lived experiences with technology as a route to understanding the meanings and motivations that inform daily use rather than making judgements about technology use that can be generalised across populations. Such approaches are characterised by a different set of methods aimed at capturing personal perspectives, motivations and feelings. These include online and offline interviews, participant observations and discourse analysis of online and mobile interactions. In this book, we incorporate such approaches and work towards an understanding that is relevant and accessible to technology users rather than those solely concerned with overseeing their use such as parents, teachers or policy makers. We also draw upon research from outside of Cyberpsychology where such qualitative approaches to technology use are perhaps more common.

The Context of Technology Use

The meanings ascribed to digital devices are rarely established in isolation nor are they fixed, universal or even obvious at times: they are implied by design but individually interpreted, shared and negotiated with others as part of an ongoing fluid involvement in particular social contexts. Let's take the smartphone for instance, can we say what one is for? If we consider a middle-aged person whose car has broken down at the side of the road and is using it to contact the nearest roadside assistance, their interpretation of its purpose will be quite different to the teenager who is using it to post messages to their school friends in the middle of the night. Ultimately, the smartphone's use is defined not just by its 'designed for' technical function but also by the 'context of use'—a set of social expectations about possibilities for action and norms of behaviour which are enacted and affirmed through use by other users.

Some of this variation is clearly down to design and functionality, the limits of which can be learnt from interacting with the device. However, the same overt functionality can be enlisted for quite different social purposes. Consider for a moment how differently one approaches the Facebook status update box versus posting to Twitter. Similar functionality but quite different contexts of use, with differing social norms and practices defining distinct forms of self expression on each platform. Different interpretations of use can even arise within the same technological framework (Salovaara 2008); in fact, it is common to see platforms like Facebook being used for all kinds of competing reasons from advertising to playing games to socialising with family and friends.

This has profound implications for how we make sense of Cyberpsychology research. Can we say for instance that 'the internet' means the same things to all users? If we are positing that there is indeed a problem with internet addiction, what version of 'the internet' are we talking about? If we are to assert that playing violent video games can desensitise children to real-world violence, does it matter who they play with and how they interpret violent game play in the first place. In short, context makes a difference and a complete version of Cyberpsychology must acknowledge this.

Early approaches to HCI tended to ignore context when evaluating people's interactions with technology, assuming that this was something predetermined by a technology's intended function (i.e. a technologically determinist stance). In the 1980s, studies such as Suchman's (1987) showed how people's interactions with technology (in this case photocopiers) were socially situated and far from being defined solely by the design of the technology and driven by prior rational planning, emerged contingent upon the actions of others, becoming intimately linked to the creation of the said 'context'.

Cyberpsychology has struggled to incorporate context as part of its assessment of digital technologies continuing with a largely technologically determinist stance. Studies of internet addiction (Kuss et al. 2013) and video game violence (DeLisi et al. 2013), for instance, have tended to problematise the digital medium itself rather than considering the social contexts that might surround or emerge inside such media which may validate their use. Some authors are already questioning the simple

causality put forward here, arguing that we need a much better understanding of users' underlying motivations before we can assert something as problematic as 'addiction' (Kardefelt-Winther 2014). Factors present within a social context such as exposure to family violence and peer influences have been shown to be more significant than playing violent video games in determining violent behaviour (Ferguson 2011) which again highlights the importance of a contextual understanding before passing judgement on digital media and technology. In this book, we take such contextual critiques further, exploring what motivates people to engage with online and mobile contexts as well as examining how online activities are rendered meaningful within the virtual contexts themselves.

When it comes to studies of online social interaction, Cyberpsychology does acknowledge certain aspects of context, but this is often in a limited sense. Social context is usually represented as static and quantifiable in terms of the social cues available within a digital medium and the amount of information that can be transmitted through each. This inherently cognitive approach equates communication with an efficient exchange of information but struggles to capture the inherently pliable nature of human communication where meaning emerges out of the interaction itself. Even Walther's (2008) SIP model, which does extend the notion of context to include the progression of time and the reinvention of social cues for enhanced communication, is not able to fully accommodate the effects of human resourcefulness when the need to communicate arises. Attempts to acknowledge context in a more qualitative manner have done so at quite a gross level, either contrasting online with offline behaviour (Pierce 2009) or differentiating task-based versus socioemotional framings for online interaction (e.g. Peña and Hancock 2006). While these definitions of context are clearly significant, they tend to oversimplify the role of context in determining human behaviour and struggle to provide meaningful insights into our everyday uses of digital technology as they exist now. Notions of distinct purpose are rarely clear when we log onto our Facebook page but emerge as we start to use it. Context is dependent on a number of factors such as the possibilities for action and norms of behaviour in a particular online setting, but also what motivates us to be there in the first place (how our age and