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INTRODUCTION — A SECOND MEDIA AGE?

In the last few years ... widespread talk of 'cyberspace' has brought new attention to the idea that media research should focus less on the messages and more on communication technologies as types of social environments. (Meyrowitz, 1999: 51)

In an essay, 'Learning the Electronic Life', written just before the 'widespread talk of cyberspace' that accompanied the so-called 'Internet Revolution' of the 1990s, James Schwoch and Mimi White (1992) set about to describe a typical day's activity for their American family – from waking up, to putting in hours as teachers in the education sector, to trying to relax in the evening.

At first light they relate how they are woken by the baby monitor which links their room to their son's. Next thing they are heating up the rice cereal in a microwave. While their boy is in the play pen, James and Mimi commence some exercise in front of the TV with remote control handy.

Out of the house and, if not a walk-to-work day, into the car, lowering the garage door with the automatic opener as we drive away on errands. Stop at the bank – or rather, the nearest automatic teller machine to get some cash for groceries and shopping (done with cash, checks, and credit cards, with access to the first electronically verified by a local computer network, the latter two verified at point of purchase by a national computer network) – and upon returning home, check the phone machine before going off to the office or upstairs to the study to work on the computer. A typical work day can include not only personally interacting with students and colleagues, but also interfacing with long distance telephone calls, photocopies, print-outs, hard drives, programs, modems, electronic mail, floppies, audio and video tape, and once in a while a fax. If we do not work into the evening, a typical night may well include (along with returning phone calls) radio listening, recorded music (albums, tapes or compact discs), broadcast television, cable television, or videocassettes. The most probable result, of course, is some combination of the above choices, with too many TV nights degenerating into an uninspired channel-hopping via remote from the comfort of the couch. In the background the baby monitor provides the sound of sleeping baby, a sound that accompanies us into bed each evening. The cycle, with a slight degree of variation, begins anew the next day. (Schwoch and White, 1992: 101–2)

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Schwoch and White describe these interactions as 'an unremarkable series of events' about which 'few stop to marvel at how quickly and unthinkingly certain aspects of technology – telecommunications based on the electromagnetic spectrum and various wire-based telecommunications networks such as the telephone – become part of our everyday experiences' (102). Their very prosaicness, they argue, is what makes them so important and powerful, because it is in our interface with these technologies, the human-technical interface, that an entire pedagogy of technical competence is fostered, a pedagogy which becomes almost buried in the thousands of discreet habits and routines that both help us, connect us and imprison us in the information society.¹

People who live in information societies not only encounter and 'use' information and communication technologies, rather, increasingly, their modes of action are enframed by these technologies. They are not so much tools as environments. Since Schwoch and White published their essay, over a silicon century (seven years) has passed, in which time a range of interactive communication technologies have come become meaningful in our daily life. We could add to their scenario the emergence of digital, optic-fibre and packet-switching technologies which have made the Internet possible, and the normalization of satellite-based communications and information devices like satellite phones and global positioning systems (see Dizzard, 2000). More often than not, we are not even aware of the extent to which these technical systems precondition the simplest of activities – an ignorance which was aptly epitomized by the trillion-dollar anxiety over the millennium bug, the dreaded Y2K.²

But this lack of awareness does not signal that we have become 'overloaded' with information, images or technology, as subscribers to the 'saturation' thesis suggest.³ Media saturation tends to encourage a view of some order of unmediated experience, which is menaced by impersonal scales of intrusive media. In this book, we will see that, in fact, attachment to media can be very personal and as meaningful as embodied relationships, and that appreciating the strength of these attachments requires a broadening of the concept of 'cyberspace'.

The exponential explosion in webs of CITs (communication and information technologies) has, at a phenomenological level, shifted the orientation many of us have to 'objects' to an extent that can change our sense of otherness.⁴ As face-to-face relations are replaced by 'interface' with technological 'terminals' of communication, electronic devices acquire a life of their own. Outside our own bodies the world fills with objects that are also animated, an animation which might compete with the human – as suggested by Sherry Turkle's notion of the computer screen as a 'second self' (Turkle, 1984). Whilst the non-human might be competing with the human, individuals themselves increasingly find that they are part of contexts in which they are 'objectualized'.⁵ Studies that have been conducted on these phenomena show high degrees of attachment to media and communication technologies, whether this be people's need to have a television on in the

background even if they aren't actually watching it, the near desperation that many Internet users have in downloading their email, or individuals who find security in having a mobile phone even if they use it only seldomly (see, e.g., Silverstone and Hirsch, 1992).

But of course, behind our surface contact with this system of objects are definite social relationships, relationships which new communication and information technologies enable to be *extended* in time and space (see Sharp, 1993). At the same time, however, the particular way in which they are extended can also be considered a relationship itself, which is capable of acquiring an independence from the function of extending 'pre-technological' or pre-virtual relationships, even if they somehow might take different kinds of reference from these relationships.

What this book proposes is that these electronically extended relationships are constitutive of their own dynamics, dynamics which can be studied beyond the bewildering array of object technologies which, in their very visibility, render the social relation largely invisible.

In particular, the social dynamics that will be analysed on the basis that they *can* be analysed as part of this technologically extended sphere of social integration are broadcast integration and network integration. By the end of this volume, I aim to show that these kinds of integration are ontologically distinct – that is, distinct in external reality, not just theoretically distinct – whilst at the same time mutually constitutive.

Communication in cybercultures

The technologically constituted urban setting which Schwach and White describe is increasingly typical of contexts of everyday life which preside in the processes of modern communication. Communication does not happen in a vacuum, nor does it happen in homogeneous contexts or simply by dint of the features of a natural language, but in architectural, urban, technically and socially shaped ways.

This book explores the interrelation between these contexts and the character of a range of communication events. It is about the contexts of communication in so-called 'information' societies as well as the kinds of connection that these contexts and the communications themselves make possible. The urban and micro-urban realities that can be described in the everyday experiences of James and Mimi are integral to the understanding of contemporary communication processes. Is there a relationship between the increase in the use of CITs and the increase in the number of people living alone in America, Australia and Britain? Is there a logic which links the privatization of public space like shopping malls and the dependence on broadcast and network mediums?

In the last ten years, the convergence between technologies of urban life and new communications technologies has been remarkable. It has

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even led some commentators to argue that the privatizing concentration of so many context-worlds, be they electronic, architectural or automobile-derived, is what really amounts to 'cyberspace'. This convergence is perhaps nowhere more powerfully represented as it is by the Internet, which is itself a network as well as a model for 'cyberspace' relations.⁶

It was in the final decade of the twentieth century that the emergence of global interactive technologies, exemplified by the Internet, in the everyday sphere of advanced capitalist nations dramatically transformed the nature and scope of communication mediums. These transformations heralded the declaration of a 'second media age', which is seen as a departure from the dominance of broadcast forms of media such as newspapers, radio and television. Significantly, the heralding of a second media age is almost exclusively based on the rise of interactive media, most especially the Internet, rather than the decline of broadcast television. Empirically, some have pointed out how certain *technological forms* of mass broadcast have waned or fragmented in favour of 'market-specific communication' (see Marc, 2000), although this is seldom linked to the rise of extended interactive communication. Rather, what is significant for the second media age exponents is the rapid take-up of interactive forms of communication. Whether this take-up warrants the appellation of a second media age, which can so neatly signal a demise of a 'first media age', is contested in this book. Certainly, the second media age thesis points to and contains insights about definite changes in the media landscapes of nations and regions with high media density. But the conjunctive as much as the disjunctive relationships between old and new media are very important.

Nevertheless, the arrival of *what is described* as the 'second media age' has two important consequences: one practical and the other theoretical. The extent and complexity of these practical consequences, which this book outlines, concern the implications which 'the second media age' has for contemporary social integration. The theoretical consequence of the second media age is that it has necessitated a radical revision of the sociological significance of broadcast media as addressed by traditions of media studies.

The overstatement of linguistic perspectives on media

Under the influence of cultural studies, European traditions in Media studies have, since the 1970s, typically focused on questions of content and representation rather than 'form' or 'medium'. This is perhaps itself a reaction to the preoccupation which 'process' models developed in the United States had with 'media effects' and behavioural epistemologies.⁷

Analysing media content – the employment of perspectives on language, beginning with Marxist conceptualizations of ideology, followed

by the influence of 'semiotics', 'deconstruction' and 'New Criticism' – was conceived as a matter of studying the meaning of texts and discourse and the way in which the 'mass' media influence cultural values and individual consciousness. Throughout the 1970s and 1980s, differences between these approaches to studying texts were debated around the problem of social reproduction and how dominant discourses of a 'dominant ideology' were related to broader social form.⁸ Under the umbrella of the linguistic paradigm, media studies has also concerned itself with 'media' over 'medium' – with the textuality of writing, still and moving images, music and speech, more than the institutionalized adoption of these media in broadcast and network settings.⁹ Together with the related discipline of cultural studies, media studies has been a discipline which has invariably confined questions of identity (individuality and 'the subject') as well as questions of power, ideology and community to the great model of language and the frameworks of understanding that have derived from the influence of the 'Copernican revolution' in the humanities inaugurated by the work of the Swiss linguist Ferdinand de Saussure at the turn of the twentieth century (see Chapter 2).

With the exception of a few theorists writing throughout the period of the dominance of media studies such as Marshall McLuhan, Guy Debord and, to a certain extent, Jean Baudrillard, there was very little attention given to questions of form and medium.¹⁰ It was as though the fascination with the content of 'the image' and the discourses surrounding it had somehow concealed the very modes of connection which gave them circulation. Some areas of communication studies, in particular positivist and behaviourist perspectives,¹¹ have examined the interactive processes which are deemed to exist between two speakers – and dyadic models of communication analysing the relation of sender, receiver and message abound (see Chapter 2). However, the social implications of the actual structures of communication mediums (network and broadcast) have received relatively little attention (save exceptions such as the above).

From the early 1990s onwards, a few years after the Internet began its now infamous exponential growth, the theoretical necessity of analysing the social implications of communication 'mediums' had become paramount, if not unavoidable. It was as though, by the turn of a key, there had been a transformation in the opportunity to understand the integrative dimensions of media that aren't subordinate simply to linguistic derivatives. It was as if media studies had been waiting for an historical object – the Internet – in order to acquire the appropriate lens for understanding communication as medium.¹²

The consequences of this theoretical period of change were that, firstly, some of the early 'medium' theorists like McLuhan and Innis began to be, and are still being, reclaimed (see Chapter 3). Secondly, new distinctions are being made to reflect the renewed importance of distinguishing

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between 'form and content' such as 'ritual' versus transmission accounts of communication. The understanding of communication as 'ritual' is a radical paradigm shift from the hegemonic status of 'transmission' views of communication, which all but saturated communication theory for the most part of the twentieth century. Put simply, ritual views of communication contend that individuals exchange understandings not out of self-interest nor for the accumulation of information but from a need for communion, commonality and fraternity (see Carey, 1989). Following this approach, transmission models of communication, on the other hand, view communication as an instrumental act – the sending and receiving of messages in ways which individual actors are largely in rational control of.

The latter model of communication, which has in the main dominated communication theory, has been critiqued, either implicitly or explicitly, by philosophers of language who have attacked the identitarian, essentialist, 'logocentric' and 'phonocentric' underpinnings of such a model (see Wittgenstein, Lyotard, Kristeva, Lacan). The project of Jacques Derrida, for example, has been to criticize the idea that language affords a stable stock of meanings for which it is the job of any particular communication to convey. To characterize communication in this way, as '*a transmission charged with making pass, from one subject to another, the identity of a signified object*' (Derrida, 1981: 23), is to make all kinds of metaphysical investments in the derivation of meaning and the privileging of communication agents as rational, autonomous selves. These assumptions are radically criticized by Derrida and we will return to them in trying to understand the way in which he claims they are tied to variations in contexts of communication. At the same time it will be possible to see how Derrida's work is also celebratory of a second media age, because the latter's apparent open-endedness unmasks the 'metaphysics of presence' that is able to operate in the more restricted (but never totally) contextual setting of broadcast forms of communication.

However, for the most part, whilst philosophical 'deconstructions' of essentialism are instructive, they have also, it is argued, been overstated. Instead of only examining the way meaning works within texts, this book will focus on how technological infrastructures of communication also need to be examined for an understanding of forms of connection, social integration and community. These material changes, it is argued, also offer a challenge to this older metaphysics, and make them harder to sustain. Hence the need for communication theory which can not only challenge the 'media studies' paradigm, but also show how it is coming to be recast. At the same time, however, media studies, as a theoretical domain concerning itself with the first media age and as harbinger of 'content analysis', remains relevant to the fact that broadcast and the nature of spectacle in modern society are integral to social organization in advanced capitalist societies.

The first and second media age – the historical distinction

The commitment to the idea of a 'second media age' is one that had been gaining ground by the middle of the 1990s with an array of texts – some utopian, others pessimistic concerning the rise of Internet culture and the concomitant demise of broadcast or 'media' culture. Such literature, exemplified by the publication of Mark Poster's book *The Second Media Age* in 1995, has exhibited either a kind of enthralled fascination with the liberating social possibilities of new technology, or, conversely, has encouraged us to rethink what older technologies mean for social processes. But the idea of a second media age had been gaining ground during the 1980s in embryonic form within rubric notions of the information society which was somehow different from simply 'media society'. Indeed the discipline of 'media studies' has become far more ambiguous as its object of study has been made much more indeterminate by the transformations that are currently underway. The term 'media' itself, traditionally centred on the idea of 'mass media', is addressed in the United States by the discipline of 'mass communications'. But media studies (and mass communication studies) in its traditional form can no longer confine itself to broadcast dynamics, and in contemporary university courses it is being subsumed by the more generic scholarship of communication studies – where the accommodation of the distinction between first and second media age is able to be best made.

However, the formalization of the distinction between these two kinds of era has, I would argue, received its greatest momentum in the wake of the domestic take-up of the Internet from the early 1990s. Since that time we have seen a plethora of literature taking over bookshop shelves dealing with everything from technical guides to interactive computing to numerous interpretive texts about the influence the Internet will have on our lives. It is also implicit in a range of journalistic writings in the mid-nineties including Howard Rheingold's *The Virtual Community* (1994), George Gilder's *Life After Television* (1994), Nicholas Negroponte's *Being Digital* (1995), the corporate musing of Bill Gates in *The Road Ahead* (1996), but also in other, more critical texts like Poster's, Sherry Turkle's *Life on the Screen: Identity in the Age of the Internet* (1995), Pierre Lévy's *Cyberculture* (2001) and various collections like Steven Jones' *Cybersociety* (1995) or David Porter's *Internet Culture* (1997), culminating in the compilation of readers by the late 1990s (Bell and Kennedy, 2000; Gauntlett, 2000; Lievrouw and Livingstone, 2002; Wardrip-Fruin and Montfort, 2003). Not suprisingly, a 'new media age' had also come to feature in numerous texts regarding media policy, in claims that broadcast was rapidly dying and that regulation of digital media forms presented the only remaining policy challenge (see, e.g., Steemers, [1996] 2000). At the same time the heralding of a 'new Athenian age of democracy' by Al Gore, and Third Way political advisers in Britain, became very audible.¹³ By the

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end of the 1990s the second media age thesis has rapidly become an orthodoxy, and entered the mainstream of New Media thinking.

In Australia, for example, Trevor Barr's account of the Internet, 'Electronic Nomads: Internet as Paradigm' (Barr, 2000), exclaims: 'The Internet's extraordinary growth and global reach of the platform in recent years, the passion of its adherents and its maze of unresolved issues all qualify it as a paradigm shift' (117). Whilst wanting to specify whether or not the Internet will offer 'promise or predicament at the dawning of a new communications era' (144), Barr maintains:

An inherent strength of the Internet is its anarchy compared to the established modes of ownership and control of traditional media: there are no direct equivalents to the 'gatekeepers' of content and form which characterize the major media of the past few decades, the press and broadcasting. Everyone who has access to the Net can become their own author, expressing their own sense of identity to other Net users scattered throughout the world. (143-4)

Even non-specialist media thinkers like Manuel Castells (1996) have taken up a version of a second media age thesis as a critique of McLuhan, arguing that the onset of cable and digital television audiences has brought about more personalized and interactive media culture: 'While the audience received more and more diverse raw material from which to construct each person's image of the universe, the McLuhan Galaxy was a world of one-way communication, not of interaction' (341).

It is the 'interactive society' which has replaced such a world, according to Castells, in the wake of a symbolically transitional period of 'multimedia' which has given way to a 'new system of communication, based in the digitized, networked integration of multiple communication modes' (374). Castells claims that only within this integrated system do messages gain communicability and socialization: All other messages are reduced to individual imagination or to increasingly marginalized face-to-face subcultures. From society's perspective, *electronically-based communication (typographic, audiovisual, or computer-mediated) is communication*' (374).

Castells is saying that whilst non-electronically based communication may still exist, it is progressively losing its status. This makes access to the 'interactive society' a crucial question, as the world becomes divided into the 'interacting' and the 'interacted':

... the price to pay for inclusion in the system is to adapt to its logic, to its language, to its points of entry, to its encoding and decoding. This is why it is critical for different kinds of social effects that there should be the development of a multinodal, horizontal network of communication, of Internet type, instead of a centrally dispatched multimedia system, as in the video-on-demand configuration. (374)

These characterizations have not changed much from the arguments of the early to mid-nineties. Early second media age thinkers, Poster,

Gilder, Rheingold, Negroponte and Lévy, are quite coherent in expressing the way in which they claim that the Internet (and interactive technologies in general) enables quite a radical departure from prior forms of social bond. For them the Internet is redemptive in the way it is said to liberate individuals from centralized apparatuses of information, be they state- or corporate-controlled, exemplified by television. George Gilder (1994), who prides himself with having predicted the demise of television and the birth of the telecomputer as far back as 1989 (101), singles out television, 'the Cathode Ray Tube' and the wireless technology of radio as instrumental in the formation of a pervasive medium empire. The "'master-slave" architecture' of 'a few broadcast centers' that 'originate programs for millions of passive receivers or "dumb terminals"' (26). By contrast 'the much richer, interactive technologies of the computer age' will enhance individualism and creativity rather than mass culture and passivity (23, 32). For Negroponte (1995), decentralization is a major feature of what he calls the post-information age.¹⁴ In providing an alternative to the homogenizing structure of broadcast communication, the Internet is said to offer almost unlimited democratic freedoms to track down information, to correspond with thousands of other enfranchised individuals and spontaneously form virtual communities which would not otherwise be possible.

For Lévy (2001), the Internet is a 'Universal without Totality' (91–103), creating a knowledge space where, '[a]s cyberspace grows it becomes more "universal" and the world of information less totalizable' (91). But one of its most important aspects is that it provides an alternative to mass media, to 'communications systems that distribute organized, programmatic information from a central point to a large number of anonymous, passive and isolated receivers' (223).¹⁵

This model of decentred association is said to be seductive for thousands of consumers who have access to the Internet insofar as it spectacularly overcomes what is seen to be the tyranny of the first media age – broadcast media. Where broadcast media are characterized as a relation of the one to the many, as one-way centralized communication, they are said to be fragmentary of (geographic) communities in denying interactivity and homogenizing cultural form.

For Poster and Rheingold, who are examined more thoroughly in Chapter 3, an analysis of the architecture of cyberspace relations shows – they claim – that the newer, extended electronic public sphere defies the kinds of instrumental and monopolized centralized control that have traditionally been accompanied by practices of normalization and regulation wrought by broadcast (Rheingold) and the culture industry (Poster). This view persists in much of the second media age literature despite the fact that the Internet has itself become a frontier of monopoly capital.¹⁶

Compared to broadcast forms of media, the Internet is said to offer free-ranging possibilities of political expression and rights of electronic assembly which encounter far fewer constraints, whether technical, political or social. The celebrated democratizing character of the Internet is

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TABLE 1.1 The historical distinction between the first and second media age

First media age (Broadcast)	Second media age (interactivity)
Centred (few speak to many)	Decentred (many speak to many)
One-way communication	Two-way communication
Predisposed to state control	Evades state control
An instrument of regimes of stratification and inequality	Democratizing: facilitates universal citizenship
Participants are fragmented and constituted as a mass	Participants are seen to retain their individuality
Influences consciousness	Influences individual experience of space and time

rooted in its decentralized technical structure. Based on 'packet-switching', a technical network system developed by Rand Corporation in the 1960s, messages, images and sounds on the Internet are always sent in a fragmented fashion by way of multiple routes. This principle was Rand's solution to information held in a database being destroyed in military conflict. Information is always on the move, fluctuating between decipherability and indecipherability and indeterminate in its mobility. Because of this the Internet cannot be controlled either technically (by hackers or programmers) or politically (by states or corporations).¹⁷ In the twentieth century, which was characterized by the control of broadcast apparatuses by governments and corporations, the Internet was also popularly seen to represent an unlimited technical medium for the reconstitution of a 'public sphere'. As Table 1.1 suggests, the public sphere enabled by the second media age restores a two-way reciprocity that is otherwise seen to be denied by one-way communications of broadcast. In addition, the constituency addressed by broadcast is constructed as, and so regarded as, an undifferentiated and largely indeterminate mass, whilst on the Internet the individuality of communicants is redeemed.

In this historical typology, the periodization of an 'age' or era of interactivity – the digital age, the age of the Internet or the second media age – is almost always contrasted with a dark age of mass media.¹⁸ It is a particular expression of an historicist discourse on technology which fetishizes the new and accentuates any differences there might be from the old.¹⁹

The critique of broadcast is remarkably coherent, whether it be from liberals concerned with public choice and free speech (like Gilder, 1994; Negroponte, 1994; and Rheingold, 1994) or from those employing Marxist frameworks (post-Frankfurt School), or postmodern concerns for the rhizome (as in Deleuze) or the shadow of the silent majority overcoming the simulation machine (Baudrillard, 1982).²⁰

Celebrants of the Internet herald its claimed democratic and redemptive virtues either as being able to re-establish lost communities through interactivity or as making possible new kinds of community that transcend

modern forms of state control. To quote from Poster (1997), who is working from a broadly postmodernist point of view, the Internet connotes 'a democratization' of subject constitution because 'the acts of discourse are not limited to one-way address and not constrained by the gender and ethnic traces inscribed in face-to-face communications' (222). This is to be contrasted with the broadcast media as a medium of centralized unilinear communication: 'The magic of the Internet is that it is a technology that puts cultural acts, symbolizations in all forms, in the hands of all participants; it radically decentralizes the positions of speech, publishing, film-making, radio and television broadcasting, in short the apparatuses of cultural production' (222).²¹

Further, insofar as the electronically produced space of the Internet displaces institutional habitats, it breaks down hierarchies of race, gender and ethnicity (see Poster, 2000: 148–70). By allowing the construction of oppositional subjectivities hitherto excluded from the public sphere, the Internet's inherently decentralized form is heralded as its most significant feature – allowing the collision and superimposition of signifiers and semiotic worlds in which the some sense of an authoratative meaning – a *logos* or a grand narrative – can no longer be sustained. This, Poster argues, allows the Internet to subvert rationalized and logocentric forms of political authority, which has imbued the European model of institutional life since the Middle Ages. As cyberspace identities are experienced in much more mobile and fluid forms, the public sphere enlarges in the midst of state apparatuses but, at the same time, acts to undermine statist forms of control. This tension is partly played out in those state-originating anxieties concerned as much with the encryption of information against cyber-terrorism as with the use of communications technologies in surveillance.

Broadcast mediums and network mediums – problems with the historical typology

The conviction that we are coming to live in a post-broadcast society, envisaged in the claim that the Internet is going to eclipse broadcast media, is one that has been made by journalists and cyber-theorists alike. The idea that an entire communicational epoch can be tied to key technologies – print technologies, broadcast technologies or computerized interaction – is central to making the distinction between the first and second media age. The distinction is relative rather than absolute, as we shall see, owing to the fact that the significance of the interaction promised by the second media age is defined almost exclusively against the said rigidity and unilinearity of broadcast.

At an empirical level, the distinction between the two epochs is supported by statistics regarding the rapid take-up of interactive CITs, to

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the point of eclipsing immersion in broadcast environments. There are, however, two problems which come immediately to the fore in tying these epochs so closely to both the innovations in technological development and the take-up of these technologies by consumers of all kinds.

Firstly, all of the various celebrants of the second media age thesis overlook continuities between the first and second media age which, if recognized, would, I argue, shake up many of their social and political claims. However, we should not throw out the distinction between broadcast and interactivity altogether; as we shall see in Chapters 4 and 5, this is an indispensable distinction for a form analysis of modes of communicative integration.

Nevertheless, the second media age thesis does not acknowledge just how much interactive CITs share some of the dynamics of broadcast that they have supposedly transcended, and, what is more, the degree to which they are dependent on and parasitic of broadcast. These continuities, which are addressed in Chapters 4 and 6, involve the way in which CITs, whether we are speaking of interactive or broadcast, operate with similar logics as technologies of urbanization. Secondly, they both produce economic imperatives which are mutually reinforcing, rather than distinct. When looked at from an economic perspective, we shall be able to see how both the Internet and television, network media and broadcast media, 'need' each other.

A second difficulty with the historical distinction made by second media age theorists is the particular alignment of the two epochs with what are seen to be monumental technological developments. It is as though the various possibilities of communication are positively determined by the technology itself (a tendency toward technological determinism) rather than by the recursive relation between technical, political, social and economic environments. Then there is the necessity to distinguish between the structure of communication environments (decentred, centred, one-to-many, many-to-many) and the technical forms in which this structure is realized. Broadcast can be interactive as much as interactivity can be facilitated within broadcast.

Television, print, radio, the Internet and the telephone provide for elements of broadcast and interactivity; it is just that these are realized differently, and at different levels of embodiment in different 'techno-social' relations.

Broadcast can be any form of public spectacle or public address either technologically extended or not. i.e a lecture amplified by a microphone or not. Interactivity can be technologically extended (the Internet) or simply face-to-face. From the point of view of technologically extended forms themselves, we can also speak of a co-presence of different kinds of media formation. Thus, the significance of the Internet is not that it is a more powerful a medium than other channels, but that it provides a platform whose sub-media contains both broadcast and interactivity.²² Tanjev Schultz has observed that 'on the Web some sites ... become more popular

than others. Then they serve as “mass media” on the platform Internet that allows for all kinds of media and types of communication’ (2000: 208). Also, those Internet sites which are mirrors of professional established media, such as newspapers, simply add to the original reach which the publication or broadcast already has (see Schultz, 2000: 209).

It is not, therefore, the technologies themselves which bring about these properties in a direct correspondence to a medium. A capacity for broadcast is inherent in a range of technological forms, from the telephone to writing. At the same time the simulation of presence is just as possible in computer-mediated environments as it is with cinema and television.

The fact that so many of these examples have considerable histories to them makes the New Media discourse on ‘convergence’ theoretically flawed. Convergence is already immanent in old as well as new technologies, but mainly through their interrelation with technologically extended social relations in general.

However, the principal basis upon which convergence is presented as a New Media phenomenon is related to digitization. A review of the history of media and telecommunications technology shows that digitization is not a necessary condition of the convergence of broadcast and network architectures. Convergence may increase the inter-operability needed to access both architectures from one individual portal, but this has much more to do with the historically produced demand for personalization. Nor does digitization particularly privilege interactivity and network over broadcast, as the second media age theorists maintain. Rather, as we will see in Chapter 3, both these theses place technology before any understanding of the anthropology that is at work in contemporary communication environments.

To clear up these confusions caused by what might be called New Media historicism, I argue, in this book, for the need to characterize ‘the second media age’ not as an epochal shift but as a level of communicative integration which is in fact not new at all but is internal to a range of communicational mediums which have co-existed with broadcast long before the Internet. Brian Winston’s instructive history of means of communication from telegraph to Internet illustrates this fact well (Winston, 1998). That new technical mediums somehow have their own aesthetic and social qualities which are separated from ‘outdated’ mediums is, he reveals, a common misconception resulting from the fetishization of the ‘new’.

Winston shows, for example, how economic factors, rather than technology, imposed the primary limitations on the bandwidth of cable communication in the last century. But political and ideological factors which saw broadcasting as a ‘centralizing social force’ (Winston, 1998: 307) were also instrumental in eschewing cable. Throughout all of the time in which wireless broadcast prevailed, however, ‘the wires never really went away’, ‘the early radio and television networks were wired and the transoceanic telephone cables have kept pace with the development of the

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international telecommunications satellite system' (305). For Winston, the networks are as old as telecommunications itself, and the inflated claims about the potentials of simply linking computers together are *relatively* hyperbolic.

Nevertheless, for cultural and historical reasons, the arrival of the Internet has 'institutionalized' the idea of network as a normative 'medium', and in doing so it has allowed some theorists to rethink broadcast also as a medium. The term 'second media age' is useful to the degree that it implies a cultural shift in perception toward media environments – insofar as network structures of communication have become much more visibly prominent since the emergence of Internet communication. As we shall see in this book, the turn to reality TV genres away from narrative programming is a part of this shift. Insofar as even broadcast mediums, in a limited sense, also provide a kind of network between communicants – a network based on ritual – the rise of the Internet as a concrete and tangible network allows us to see this.

One of the major reasons why media analysts tie individual technologies so closely to communicational qualities is to do with the way in which CITs are largely empiricized. The significant relationship is seen to be that between the technological doorway to a medium and the consumer. This doorway is one to which we are said to have either an active or passive relationship – typified by the Internet and television, respectively. George Gilder (1993) proposes, 'TV ignores the reality that people are not inherently couch potatoes; given a chance they talk back and interact'. At the 'interface' level of interaction, this might be referenced to the consumer's control of the remote control, which is seen to be relatively passive, as opposed to control over the mouse, which is seen to be active.

In the case of the Internet consumer as opposed to the television consumer, there is an appearance of control over the interaction. This illusion of control is one in which a technology is reduced to that of 'reproduction' (Jones, 1995) – the reproduction of forms of life based on less technologically constituted modes of exchange like the face-to-face and writing. Here, when experienced as a 'use-technology', the Internet is seen to be very much instrumentally subordinated to the carrying on of a social contract by more technically powerful means. The individual who is idealized as participating in this contract is the embodied subject, whose embodiment is somehow overcome and extended. In being a TV consumer, on the other hand, the idea that there is an embodiment to extend is more ambiguous. Instead it is through our selectivity of channels of messages that we experience that we can participate in pre-constituted modes of life in a technologically extended way.

However, whilst this distinction between activity and passivity can be held up in the situation where CITs are thought of as technologies of reproduction (as tools, or instruments of extension), it weakens considerably when they are accorded the role of technologies of production

(as networks and electronic assemblies).²³ The idea of a CIT of production refers to the consideration of information mediums as *environments* (see Meyrowitz, 1999; Poster, 1997) constitutive of altogether new kinds of behaviour and forms of identity.²⁴ That is to say, they are not just reproducing existing kinds of social relations, but bringing about new ones.

Interaction versus integration

Media of communication ... are vast social metaphors that not only transmit information but determine what is knowledge; that not only orient us to the world but tell us what kind of world exists. (Carey, 1972: 285)

The distinction between activity and passivity as well as that between mediated and un-mediated communication falls well within the interactive paradigm, based as it is on the face-to-face or 'transmission' analogue for communication. This long-standing preference in communication theory for the transmission model can largely be attributed to the prevalence of 'interaction' as its basic communicative building block, from which are built the various accounts of communication.

The emerging alternative account is to distinguish between interaction and integration. In this distinction, interaction is still important, but needs also to be viewed in terms of the fact that all concrete interactions occur in the context of dominant frames of communicative integration – which is enacted through abstract 'rituals' of communication (see Chapter 5). The integration thesis rejects the idea that the study of communication is reducible to documenting empirically observable kinds of *interaction*, be these interpersonal or extended.²⁵ In tribal society, for example, face-to-face relations, and the significance of the body in communication rituals, envelop the social whole. This is observable from the point of view of the rituals and categories of seeing the world that are developed within such forms of social tie (i.e. the anthropomorphizing of animals and objects in the natural world). A person formed within this setting does not actually have to engage in constant face-to-face interactions in order to be enveloped by the set of relations that are bound up in its ontology. Even when such interactions are not occurring, the *ontology* of the face-to-face as a centre of cultural formation comes to frame all other forms of interaction. So distant forms of communion are made over 'in the image' of face-to-face. Similarly, if we take technologically extended forms of communication as characterizing a social tie of a different order again, we might say that in modern media-saturated societies, mediums like television or the Internet frame our lives even when we are not viewing or using them. This does not mean that we avoid face-to-face relations, or are 'addicted' to technologically mediated-interaction; rather it means that we conduct our face-to-face relations 'through' the dominant mediums or social interchange. Here are some examples:

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- When we watch a soap opera, we typically are viewing countless thousands of face-to-face interactions between talking heads, whilst, in the very act of such viewership, we forgo our own engagement in face-to-face interaction. Most of the needs we might have for the face-to-face may be achieved via the screen.
- Studies show that people in the city, who have much more access to high volumes of face-to-face contact, use the telephone far more than do people in rural areas.
- Studies of Internet relationships show that anonymous interactants are more likely to divulge intimate information, as if they had a long-term face-to-face relationship, than they would with strangers in embodied interactions.
- Commonplace in the etiquette of Internet communication is the use of 'emoticons' as a substitute for gestural communication that interactants feel is lost in the medium.

The prescience of the way in which technologically extended communication has become a dominant mode of integration can even mean that we may idealize some kind of unmediated face-to-face sense of community as a reaction to the pervasiveness of extended forms of 'communication at a distance'. Conversely, we might also fetishize communication technology itself as being capable of delivering us the interactive immediacy that is denied to abstract kinds of community (the dream of virtual reality). These two kinds of reactions to contemporary media integration can also be found in much of the more populist variety of second media age literature and cyberstudies texts which privilege the concept of interaction.

Such literature is framed by a social interaction model – i.e. that face-to-face interaction is being supplanted by extended forms of communication – and this is seen to be derived from technology somehow intervening and separating individuals from some 'natural state' of interaction which is the face-to-face. This powerful model inspires not only nostalgic communitarians, such as Rheingold, who claims that individuals in information societies are looking for ways to get back to that which they have lost – the face-to-face – but also postmodernists, like Félix Guattari, who, while sharing the view that face-to-face relations are no longer significant, sees in this no cause for lament. Instead, he argues, it is important to embrace post-individual networks of communication, and realize that the subject is a fiction and always was (see Guattari, 1986). But this kind of negative theology is, I would argue, merely parasitic of the misconception that the face-to-face *was* ever historically lost in the first place. That is to say, if the face-to-face is considered as a form of social integration rather than interaction, these kinds of political oppositions become, I would argue, untenable. It is because, anthropologically, the face-to face is an important mode of connection in information societies that the Internet becomes such a powerful mode of connectedness – but one that can never consummate the mode of integration it supposedly stands for.

Integration and ritual models, on the other hand, look to the kind of background communicative connections which provide the hierarchy of *agoras* of potential assembly, be these public, institutional or virtual, which are independent of individual communicative acts. The crucial point here is this independence. It is necessary to understand how, even when we are not watching television or listening to the radio, the broadcast communication environment still frames our individual lives. We can experience the telephone as though it is an extension of the face-to-face, or, conversely, we engage in the concrete act of face-to-face communication and yet we are somehow 'away' on the telephone or the Internet, only kind of half-present because, really, it is extended forms of communication that are mediating even how we experience the face-to-face. This latter thesis, that the dominant background connections or mediums by which a given group of individuals are socially integrated come to mediate other levels of interaction, is one persistently explored throughout this volume.

In working through this argument, the pertinence of distinguishing between a first and second media age is appraised, and alternative models of understanding how broadcast media and interactive network media are related to each other and to social reproduction will also be presented.

Notes

- 1 This is why Schwach and White are concerned with 'an analysis of the pedagogy of technological determinism in American culture' (101).
- 2 The process of learning the electronic life and the importance of the everyday is a matter to which I will return in the final chapter on telecommunity.
- 3 This claim is made for both traditional 'images' (see Gitlin, 2002) and New Media (see Postman, 1993; Virilio, 2000). The idea of a 'saturated self' is also central to this (see Gergen, 1991)
- 4 See the innovative article by Karin Knorr-Cetina 'The Society with Objects: Social Relations in Postsocial Knowledge Societies' (1997). Knorr-Cetina puts forward an 'end of the social' thesis in referring to the process of 'objectualization' in which increasingly 'objects displace human beings as relationship partners, and embedding environments, or that they increasingly mediate human relationships, making the latter dependent on the former. "Objectualization" is the term I propose to capture this situation' (1).
- 5 In information societies, the intensity of kinship relations and face-to-face relations has declined in a number of ways. Families are getting smaller and more people live alone. But even the nuclear family, as in the case of Schwach and White, is increasingly characterized by technological mediation, if not technological constitution.
- 6 Throughout this book, the term 'the Internet' refers to the 'network of networks' which has been globally standardized since 1991. Although many other CMC systems which facilitate Internet Relay Chat, email, newsgroups, bulletin board systems, MUDs and MOOs may not be, strictly speaking, part of the Internet, as Wellman and Gulia point out, they are rapidly becoming connected to it.
- 7 Some of the papers produced by the Centre for Contemporary Cultural Studies, such as Stuart Hall's influential essay 'Encoding/Decoding' (Hall, 1980), took as their departure point a critique of the process model. Hall, in a later interview, explains that he first gave the paper at Leicester University, where the communications programme was particularly dominated by process pedagogy (Hall et al., 1994: 253).

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- 8 This debate, between Marxist and postmodern forms of media studies, agreed about the importance of discourse, but conceived entirely different *ends* to their analysis, with Marxism interested in the role of ideology in the reproduction of a social totality, and postmodernism ontologizing the contingency of discourse itself as a denial of totality. Certainly the sociological merits of the Marxist approach would prove to be limited by remaining within the linguistic paradigm. By the 1990s Christopher Williams was asking, is it not 'the case that ideology has become a hopelessly unusable term?' (cited in Corner, 1997: 453). Indeed, in the face of New Media, it can only be wielded as a 'clumsy club', whereas it once has a central role in the unification of media studies.
- 9 For example John Hartley (1992a) adheres to a basic theoretical tenet 'that communication is textual, not behavioural' (14). The other tenet he gives is that communication is 'social not individual'. It is because Hartley conflates all communication with broadcast, or, at least, with understandings that an analysis of broadcast most often yields (the book in which he wrote this is about television), that he overemphasizes texts. My modification of this tenet is that the textual or behavioural qualities of communication are conditioned by the architecture of the medium in which it is realized. I agree with Hartley's second tenet, but the social nature of communication once again has to be related to the means and media of communication. The social is not some abstraction which can be posed over and against the individual, or the means of communication in which individuality is realized.
- 10 I would suggest that it is because of this imbalance, rather than the incommensurability of different approaches, that media studies has developed what John Corner (1997) has called a 'knowledge problem'.
- 11 Positivism and behaviourism each subscribe to instrumental views of technology, which is based on a stark separation between the human and the technical. For example, positivist methodologies tend to talk about the 'use' of technologies, 'the user perspective' or rational choice perspective, in which a technology is reduced to a most visible and tangible element, e.g. that on the Internet we use a mouse and make choices. Alternatively, behaviourist models come from the opposite direction in which the individual is rendered entirely passive – their aim being to examine the 'influence' that technology has on individual (only sometimes social) behaviour.
- 12 But this does not mean that 'media studies was nearly dead', as Gauntlett extravagantly claims in hailing 'long live new media studies' (Gauntlett, 2000: 3); rather, traditional media can be looked at in a new way.
- 13 For an assessment of Gore's proclamations on the Internet and the 'techno-communitarianism' of Demos, the New Labour think-tank in Britain, see Robins and Webster (1999: 229–31).
- 14 On decentralization see pp. 157–9. For Negroponte, the post-information age refers to a post-broadcast age of an 'audience the size of one' (164), where information is extremely personalized and not distributed in homogeneous volumes.
- 15 Moreover, 'Cyberspace ... is based not on such a hub-and-spoke model of distribution but on one of shared spaces where everyone can have his say' (223–4).
- 16 Studies indicate that the same gigantism that afflicts the old media now dominates the new. Despite the Internet's myth of indestructible diversity, cyberspace is also vulnerable to monopolistic tendencies. [In 1999], 60 percent of all time spent on the internet was on sites owned by 110 companies. By 2001, fourteen companies captured the largest share of the user's time and 50 percent of all time is spent with four companies' (Buzzard, 2003: 207).
- 17 See Chapter 3. A list of useful guides to the technical details of the Internet is given in Jones (1995: 8).
- 18 As Silverstone (1999) observes,

The new ideology of interactivity ... [is] ... one which stresses our capacity to extend reach and range to control, through our own choices, what to consume, both when and how, is seen to promise its reversal. It is hailed to undo a century of one-to-many broadcasting and the progressive infantilization of an increasingly passive audience. It is an expression of a new millennialism. These are the

utopian thoughts of the new age in which power is believed to have been given, at last, to the people: to the people, that is, who have access to, and can control, the mouse and the keyboard. (95)

- 19 However, some recent correctives to this orthodoxy, criticize 'information revolution' as hyperbole, and the modernist myth of the new. Bolter and Grusin (1999) show how processes of 'remediation' of older media by newer media (e.g. TV remediating film or photography remediating painting) are not exclusive to a digital or post-broadcast 'era'. For Winston (1998) the term 'revolution' is wrongly applied to 'New Media' as he proposes to show how the pace of change today is actually slower than in previous periods of technological diffusion and transformation in the means of communication. The 'Information Revolution' is 'largely an illusion, a rhetorical gambit and an expression of technological ignorance' (2).
- 20 The broad contours of this critique is already anticipated in Bertolt Brecht's short reflection on 'the radio as an apparatus of communication' ([1932] 2003).
- 21 (There is a great deal riding on these claims, stakes which broadcast corporations themselves are now interested in. Geoff Lealand (1999) argues that studies in the US are being conducted by media corporations, who have commissioned sociologists and communications analysts to study this decentring, and are part of strategies for more comprehensive forms of deregulation.)
- 22 However, this does not mean that the Internet should be seen as producing the same 'field of recognition' as television. For example, some have tried to depict the Internet as television with millions of channels, and millions of broadcasters. The problem is that each channel is weakened in its broadcast power the more channels there are, diluting the exposure of any message or persons who becomes its 'content'. As we shall see, it is impossible to be famous on the Internet.
- 23 An overemphasis on CITs as technologies of the production of 'new' social relationships can be seen to be a precursor to the advent of 'complexity theory' – the idea that volume and speed of emergence of causal interconnections between social (or physical) phenomena become so complex and chaotic as to produce new and sometimes chaotic behaviours and properties. (For a postmodern expression of this phenomena as it applies to communication processes, see Kroker and Weinstein, 1994.)
- 24 Nowhere is this more spectacular than in the widening generation gap that is emerging between net-literate youth and not-as-literate adults, especially in school classrooms. There is a burgeoning amount of literature in the education journals relating to this (see Downes and Fatouros, 1995; Green and Bigum, 1993; Holmes and Russell, 1999; Russell and Holmes, 1996).
- 25 Most typical, for example, of the humanist anthropology and behavioural traditions of communication research (see Finnegan, 2002).