The title of this book reflects a kind of generational rhetoric that often characterises discussions of the use and impact of so-called ‘new’ media. Young people are frequently described as a ‘digital generation’, a generation defined in and through its experience of digital computer technology. This rhetoric can be found in popular commentary in fields as diverse as commerce, government, education and youth activism. Thus, the electronics company Panasonic is currently advertising its new ‘e.wear’ MP3 players as providing ‘digital music for a digital generation’; the US Department of Commerce speaks about ‘preparing the digital generation for the age of innovation’ (Mehlman, 2003); educationalist Seymour Papert (1996) writes of the ‘digital generation gap’ between parents and children; while the journalist J.D. Lasica (2002) seeks to defend young people from what he sees as ‘Hollywood’s war against the digital generation’.

Elsewhere, we encounter ‘the Nintendo generation’ (Green and Bigum, 1993), ‘the Playstation generation’ (Blair, 2004) and the ‘net generation’ (Tapscott, 1998); as well as related constructions such as ‘cyberkids’ (Holloway and Valentine, 2003), ‘bionic children’ (Newsweek, 2003) and even ‘cyborg babies’ (Davis-Floyd and Dumit, 1998). Meanwhile in Japan, there has been considerable discussion of the ‘thumb generation’ – young people who have apparently developed a new dexterity in their thumbs as a result of their use of games consoles and mobile phones (Brooke, 2002).

Of course, the notion of a ‘generation gap’ has been around for decades, if not centuries. It typically emerges as a consequence of adults’ fears about the escalating pace of social change, and their anxieties about a loss of continuity with the past. The idea of a ‘digital generation’ merely connects these fears and anxieties to technology: it suggests that something has fundamentally and irrevocably changed, and that this change is somehow produced by technology. In this opening chapter, I want to suggest that we should approach these issues with a degree of scepticism. Rather than falling back on easy rhetoric, there are several fundamental questions we need to address. Is there indeed a digital generation - or even digital generations, in the plural? And if there is, how do we define it, does it matter, and in what ways?

**The social history of generations**

In their book *Generations, Culture and Society*, June Edmunds and Bryan Turner (2002) provide the basis for a sociological and historical theory of generations.
They define a generation as ‘an age cohort that comes to have social significance by virtue of constituting itself as a cultural identity’ (2002: 7). As this implies, generations are defined both historically and culturally. Most simply, a generation is a cohort of individuals born within a particular time-frame; although, as Edmonds and Turner suggest, a generation may also be defined by its relationship to a particular traumatic event, such as a world war or the great depression or the rise of fascism. (It may be that the attack on the US World Trade Centre in 2001, and the ensuing reconfiguration of world politics, will come to be seen as a similarly defining moment.) However, this process of definition is also a cultural issue; it is a matter of how the potential members of a generation constitute themselves as having a shared identity. It is possible, following this argument, that some generations may be more self-conscious or self-reflexive than others, and hence come to claim greater social significance: the ‘Sixties generation’ (at least in Western countries) might be seen in this way. More subjectively, this argument also implies that individuals' generational identifications are malleable and fluid; and so we may identify with a generation of which we are not strictly members in terms of biological age.

This theory of the construction of generations raises broader questions about structure and agency that are central to social theory. Karl Mannheim (1952/1979), for example, argues that the definition of generations is partly a matter of the particular life chances that are available to people by virtue of when they happened to be born; but it is also a question of how people respond to those life chances, how they interpret their given historical circumstances, and the shared meanings they attribute to their position. Mannheim argues that different ‘units’ within a given generation are likely to define their situation – and hence to behave as members of a generation (to ‘act their age’, perhaps) – in different ways. Interestingly, he also notes that, as the pace of social change accelerates, the boundaries between generations are likely to become blurred. Similarly, Pierre Bourdieu (1993) argues that generations are socially and culturally defined and produced. Different generations will have different tastes, orientations, beliefs and dispositions (or ‘habitus’); and while these are partly a result of the historical and economic circumstances in which people were born, they also emerge through struggles between generations over cultural and economic resources. As this implies, generations are naturally occurring phenomena, which emerge simply as a result of the passing of time; but generations also produce themselves, as their members (and, presumably, non-members too) define the meanings of generational membership.

These ideas find many echoes in recent work on the sociology of childhood and youth. Leena Alanen (2001) uses the notion of ‘generationing’ to describe the ways in which children and adults assert and jointly construct their differences on grounds of age. Defining who’s an adult and who’s a child (or a young person) occurs partly through a continual ‘othering’ – and indeed policing - of those who are older or younger. This kind of social constructionist view is often criticised for failing to pay enough attention to biological or developmental differences; but it
does reflect the ways in which the generational order is constantly being renegotiated. Likewise, in youth research, researchers are now inclined to conceive of socialisation, not merely as something that adults do to young people, but as a process in which young people are also active participants. The notion of ‘self-socialisation’, which has become prominent in youth studies in Germany (e.g. Fromme et al., 1999), implies that socialisation is something that young people work to achieve for themselves, among the peer group; while others have discussed the notion of ‘reverse socialisation’ (Hoikkala, 2004) – the possibility that young people may socialise their parents to adapt to social change, not least around technology. Both these ideas reflect a broader rejection of the notion that the social or generational order is something fixed that is simply imposed upon passive individuals. In both cases also, the media and consumer culture have been seen to play a central role in this defining and redefining of generational differences and identities (for example see Arnett, 1995 and Johanssons, 2004).

Nevertheless, just as in discussions of gender, the study of generational differences inevitably runs the risk of essentialising those differences. It is worth recalling here Mannheim’s notion of ‘generational units’, and his argument that a generation is not necessarily uniform, but that members attribute meaning to generational experiences in quite different ways. It is also difficult to know where the distinctions between generations are to be drawn. For example, if we explore the construction of a popular category such as ‘Generation X’, there is considerable disagreement about its historical parameters, let alone whether the term itself actually means anything to the people who are allegedly members of this generation (Ulrich and Harris, 2003). Which experiences, dispositions or characteristics do we take to be representative of a generation? Who are the spokespersons of their generation, and how is their authority established? And how do we actually identify the boundaries – or even the shared consciousness of a generation?

These kinds of questions are often at the heart of academic controversies about the nature of social change. For example, there has been considerable debate within sociology between Ronald Inglehard and others about the notion of a ‘post-materialist’ generation (Inglehard, 1990; Brechin and Kempton, 1994; Reimer, 1989). Essentially, Inglehard argues that there has been a generational shift from ‘materialist’ to ‘post-materialist’ values in the post-War period; yet his analysis raises difficult theoretical and methodological questions about how we measure and identify ‘values’, and about the relationship between the values that people might proclaim or sign up to in a questionnaire and their actual behaviour. Both within the academy and within popular debate, therefore, the concept of ‘generation’ is complex and contested; and how we define, characterise and study generations is highly problematic.
Accounting for media and technology

This issue becomes even more complicated when we take account of the potential role of media and technology in the construction and self-construction of generations. Within media and cultural studies, age has (somewhat belatedly) come to join class, ethnicity and gender as a key dimension of social identity; and in attempting to escape the limitations of normative psychological accounts, there has been a growing emphasis on how the media – and the ways in which the media are used - participate in defining the meanings of age differences (Buckingham, 2000; Jenkins, 1998). As I have noted, sociologists like Edmunds and Turner (2002) sometimes point to the role of traumatic defining events – such as wars – in defining generations; and it is possible, at least in principle, that radical shifts in technology or media might also play a role in this respect. The Australian cultural theorist Mackenzie Wark (1993), for example, argues that: 'Generations are not defined by war or depression any more. They are defined by media culture.'

What is the evidence for such a claim? On one level, we might draw attention to the role of ‘taste cultures’ among children and young people that serve precisely to exclude adults, and thereby to assert their own generational distinctiveness. This is most apparent in the case of specialised areas of popular music and fashion (Bennett, 1999), but it also occurs around more mainstream media such as television (Davies et al., 2000). We might also point to the phenomenon of ‘retro’ culture – the periodic revivals of particular musical or fashion styles, or enthusiasms for cult television shows of earlier decades, which often combine nostalgia and irony. As these examples imply, media can be used self-reflexively, as signifiers of generational affiliation.

Of course, the media industries themselves are also busily defining and reconfiguring generational categories for the purposes of maximising profit. Thus, it is possible to trace the historical emergence of age-based categories within marketing discourse and practice. The category of the ‘teenager’ is often seen as a phenomenon of the post-war consumer boom, which came to prominence in market research during the 1950s (Abrams, 1959); while Daniel Thomas Cook’s (2004) history of the children’s clothing industry in the US identifies the gradual emergence of age-based distinctions, and the construction of new age-defined categories such as the ‘toddlers’ during the 1930s. In more recent years, we have seen the construction of the ‘tween’ consumer (Willett, 2005), as well as a proliferation of new age-based marketing categories such as ‘kidults’, ‘middle youth’, ‘adultescents’ and so on. As in the case of ‘Generation X’, it is possible to show that, even if these categories were not invented by marketers, they are very quickly taken up by them as a means of describing and hoping to control what they perceive as a volatile and unpredictable market.

Beyond this, it could be argued that ‘youth’ has become a symbolic value that can be marketed to a wide range of audiences – to children aspiring to escape
from the constraints of childhood (as in the marketing of girls’ fashion products and make-up, for example), and to adults aspiring to recover ‘lost’ values of youthful energy and rebellion (as in the marketing of much contemporary rock music). In the increasingly competitive environment of contemporary media, such distinctions have a growing commercial significance. The term ‘youth’ in particular invokes a set of symbolic meanings that can refer to fantasy identities as much as to material possibilities. How old you are - or how old you imagine yourself to be - is increasingly defined by what you consume, by your relationship to specific brands and commodities; and youth culture, it would seem, is no longer just for young people.

Social theorists have suggested that in recent decades, chronological age has become decoupled from people’s actual life situations; and that the ‘normative biography’ – or the steady progress of the life-course – has become decentred (Ziehe, 2005). Even so, children and young people are not passive victims of this process: they are actively involved in sustaining the distinctions and boundaries between the generations, even as they may aspire to challenge them. In exploring the changing meanings of such age-based, generational categories, therefore, we need to understand how they are actually used by young people – and indeed, whether they recognise them at all - as well as how they work to regulate and define the meanings of age differences. And we need to recall that such categories are not merely discursive, ‘imaginary fictions’: they also have real material consequences.

Despite these qualifications (and others to be considered in due course), Wark’s assertion that generations are ‘defined by media culture’ does raise some interesting empirical questions. Do young people who are growing up with digital media in fact have a different orientation to the world, a different set of dispositions or characteristics - or in Bourdieu’s terms, a different habitus? It should be possible to ask this question without assuming a simple before-and-after sequence - not least because the dissemination of technology is bound to be gradual and incremental. It should be possible to address it without necessarily assuming a form of technological determinism – and to take account of the fact that technology may reinforce changes that would be happening in any case. And it should be possible to answer it without having to reduce everything to age – to acknowledge that there may indeed be differences (for example, to do with gender, culture and social class) within a given generation. At least in principle, therefore, it should be possible to posit the existence of a ‘digital generation’ without recourse to teleology, to determinism, or to essentialism.

**The generational hypothesis**

Don Tapscott’s book *Growing Up Digital: The Rise of the Net Generation* is one of the best-known and most ambitious arguments in favour of the idea of the digital generation. Tapscott’s account is based on two sets of binary oppositions,
between technologies (television versus the internet) and between generations (the ‘baby boomers’ versus the ‘net generation’). He draws clear lines between the generations, based primarily on birth-rate statistics: the ‘boomers’ were born between 1946 and 1964, followed by the ‘bust’ (1965-1976) and the ‘boom echo’ (1977-1997). According to Tapscott, the boomers are the ‘television generation’, who are defined by their relationship with that medium, just as the children of the boom echo are the ‘net generation’.

Tapscott’s oppositions between these technologies are stark and absolute. Television is a passive medium, while the net is active; television ‘dumbs down’ its users, while the net raises their intelligence; television broadcasts a singular view of the world, while the net is democratic and interactive; television isolates, while the net builds communities; and so on. Just as television is the antithesis of the net, so the ‘television generation’ is the antithesis of the ‘net generation’. Like the technology they now control, the values of the ‘television generation’ are increasingly conservative, ‘hierarchical, inflexible and centralised’. By contrast, the ‘N-Geners’ are ‘hungry for expression, discovery and their own self-development’: they are savvy, self-reliant, analytical, articulate, creative, inquisitive, accepting of diversity and socially conscious. These generational differences are seen to be produced by technology, rather than being a result of other social, historical or cultural forces. Unlike their parents, who are portrayed as incompetent ‘technophobes’, children are seen to possess an intuitive, spontaneous relationship with digital technology. ‘For many kids,’ Tapscott argues, ‘using the new technology is as natural as breathing’ (1998: 40). Technology is the means of their empowerment – and it will ultimately lead to a ‘generational explosion’.

Growing Up Digital takes the reader through a series of areas – cognition, play, learning, family, consumption and work. In each case, the argument is essentially the same: technology offers a new form of empowerment for young people; and this is producing a generation gap, as the habits and preferences of the older generation are coming to be superseded. From an academic vantage point, it is perhaps rather easy to mock these kinds of arguments: they lack scholarly caution and qualification, and the evidence on which they are based is unrepresentative and often anecdotal. Tapscott is a management consultant, entrepreneur and motivational speaker; and as such, academic virtues are likely only to dilute his appeal. Yet in fact many of his arguments come quite close to the kinds of ideas that circulate in the discourse of policy-makers – and, I would suggest, in the academy as well. For this reason, it is worth exploring his claims more closely.

Tapscott argues that technology produces a wide range of social, psychological and even political changes. Five key claims are particularly relevant to our concerns here.
1. First, technology is seen to create new styles of communication and interaction. Among the ten themes that Tapscott sees as characteristic of web-based communication, he includes independence and autonomy, emotional and intellectual openness, innovation, free expression, immediacy, and an investigative approach. The internet provides new means for constructing community: it is an active and participatory medium, which is about many-to-many, distributed communication. These new communities are inclusive, and require the creation of new kinds of trust. They are about breaking down walls, and they allow the creation of new kinds of relationships, both in the form of friendships and new family lifestyles: the internet, Tapscott argues, will give rise to ‘a new kind of open family’ characterised by equality, dialogue and mutual trust.

2. Secondly, the internet also produces new styles of playful learning. Unlike the television generation, the net generation is inquisitive and self-directed in learning. It is more sceptical and analytical, more inclined towards critical thinking, and more likely to challenge and question established authorities than previous generations. Net-based learning is interactive, rather than a matter of transmission. Where old-style education was teacher-dominated and authoritarian, digitally based education is non-linear and learner-centred, based on discovery rather than the delivery of information. The net transforms the teacher into a facilitator, whose input has to be customised to learners' needs. Above all, learning via the internet is ‘fun’: learning is play and play is learning, and so ‘the net is a place where kids can be kids’. However, this new style of learning is also particularly appropriate to the so-called ‘knowledge economy’, and to the new kinds of employment that are emerging there. In this new world, the old knowledge hierarchies no longer apply, and the working environment is one of personal networking, innovation and openness.

3. These new conditions of education, work and social life also require new competencies – or new forms of ‘literacy’. This is apparent to some degree in the innovative, informal styles of language that are emerging on the internet – emoticons and so on – and in the changing conventions of language use (or ‘netiquette’). More broadly, however, internet communication is seen to require and produce new intellectual powers, and even ‘more complex brain structures’: it results in a kind of accelerated development, and young people who do not have access to it will be ‘developmentally disadvantaged’. The net generation not only has different skills in terms of accessing and navigating through information, it also processes and evaluates information in a radically different way from the television generation. This new orientation towards information is natural and spontaneous, rather than learned: it somehow connects with the inherent condition of childhood.

4. At each of these levels, technology is implicitly seen to have direct psychological effects. Yet it also has consequences at a more psychic level: it provides new ways of forming identity, and hence new forms of personhood. For
all the reasons identified above, the net generation is high in self-esteem: the use of digital media imparts an enhanced sense of efficacy and self-worth, not only for young people with disabilities, but for all. In the digital world, the child is the actor. Via the medium of chat, the internet provides opportunities for experimentation and play with identity, and for the adoption or construction of multiple selves. By offering communication with different aspects of the self, it enables young people to relate to the world and to others in more powerful ways.

5. Finally, the internet is also seen to be leading to the emergence of a new kind of politics. The net itself is distributed and democratic: it is a collectively shared, non-hierarchical delivery system that serves as ‘a medium for social awakening’. Its effects on offline behaviour are also inherently democratising. According to Tapscott, the net generation is more tolerant, more globally-oriented, more inclined to exercise social and civic responsibility, and to respect the environment. Technology is radicalising them, just as television has ultimately led the baby boomers to accept the status quo.

Another story

In many ways, these are familiar arguments. To a greater or lesser extent, they are shared by many popular and academic commentators on the impact of digital media. They place a generational ‘spin’ on what has come to be called the ‘Californian ideology’ – the form of ‘cyber-libertarianism’ favoured not just by internet activists, but also (perhaps paradoxically) by many marketing gurus (Barbrook and Cameron, 1996). Despite the evident pleasures of wishful thinking, it is important to re-state some of the fundamental limitations of such arguments.

Tapscott’s approach is clearly based on a form of technological determinism. From this perspective, technology is seen to emerge from a neutral process of scientific research and development, rather than from the interplay of complex social, economic and political forces. And it is then seen to have effects - to bring about social, psychological and political changes - irrespective of the ways in which it is used, and of the social contexts and processes into which it enters. Technology is therefore regarded as an autonomous force that is somehow independent of human society, and acts upon it from outside. This view connects with a familiar rhetoric about the ‘information society’ (or the ‘knowledge economy’), which similarly appears to attribute a determining power to some disembodied force (‘information’). This perspective has been widely challenged. Raymond Williams (1974), for example, criticises the reductionism of this approach, and its tendency to reify technology, as though it existed independently of human activity - although he also challenges the opposite view, that technology is entirely shaped by pre-existing social, economic and political forces (see also Chandler, 1995; and Webster, 1995). Meanwhile, the notion of the ‘information society’ also seems to neglect the role of human agency, and the
complex, gradual processes through which technologies are integrated within existing social activities and arrangements (May, 2002).

These kinds of ideas carry a particular emotional charge when it comes to the discussion of childhood. The combination of ‘childhood’ and ‘technology’ serves as a powerful focus for much broader hopes and fears about social change: and for all those who believe, like Tapscott, that technology is liberating and empowering children, there are many others who see it as destroying or betraying the essence of childhood (e.g. Cordes and Miller, 2002; Postman, 1983). Yet the fundamental question here is how we understand the causal relationships that are at stake. As I have argued elsewhere (Buckingham, 2000, 2005), contemporary developments in technology do present new risks and opportunities for children. But these developments can only be adequately understood in the light of other changes – for example, in the political economy of children’s culture, the social and cultural policies and practices that regulate and define childhood, and the everyday social realities of children’s lives. These latter changes themselves can also be overstated, and frequently are; but in any case, it makes little sense to consider them in isolation from each other.

This technologically determinist stance means that there are many issues and phenomena that Tapscott and other such technology ‘boosters’ are bound to ignore. He neglects the fundamental continuities and inter-dependencies between new media and the ‘old’ media (such as television) that he so despises – continuities that exist at the level of form and content, as well as in terms of economics. A longer historical view clearly shows that old and new technologies often come to co-exist: particularly in the area of media, the advent of a new technology may change the functions or uses of old technologies, but it rarely completely displaces them. Tapscott’s approach is also bound to ignore what one can only call the banality of much new media use. Recent studies (e.g. Facer et al., 2003; Holloway and Valentine, 2003; Livingstone and Bober, 2005) suggest that most children’s everyday uses of the internet are characterised not by spectacular forms of innovation and creativity, but by relatively mundane forms of information retrieval. What most children are doing on the internet is visiting fan websites, downloading music and movies, e-mailing or chatting with friends, and shopping (or at least window-shopping). Technology offers them different ways of communicating with each other, or pursuing specialist hobbies and interests, as compared with ‘offline’ methods; but the differences can easily be overstated.

Given his relentless optimism, Tapscott inevitably has to ignore the downside of the internet – the undemocratic tendencies of many online ‘communities’; the limited nature of much so-called digital learning; and the grinding tedium of much technologically-driven work. One of the most troubling issues here is the continuing ‘digital divide’ – the gap between the technology rich and the technology poor, both within and between societies. In common with other technology enthusiasts, Tapscott believes that this is a temporary phenomenon, and that the technology poor will eventually catch up - although this is obviously
to assume that the early adopters will stay where they are. It is also to assume — as Tapscott very clearly does — that the market is a neutral mechanism, and that it functions simply by giving individuals what they need. The possibility that technology might be used to exploit young people economically (see Center for Media Education, 1997), or indeed that the market might not provide equally for all, does not enter the picture. The complacency of this argument is at least compounded by the view that children growing up without access to such technology — for example, in developing countries - are likely to be ‘developmentally disadvantaged’.

The technologically-empowered ‘cyberkids’ of the popular imagination may indeed exist; but even if they do, they are in a minority, and they are untypical of young people in general. One could even argue that for most young people, technology is a relatively marginal concern. Very few are interested in technology in its own right; and most are simply concerned about what they can use it for. But, like other forms of marketing rhetoric, the discourse of the ‘digital generation’ is precisely an attempt to construct the object of which it purports to speak. It represents not a description of what children or young people actually are, but a set of imperatives about what they should be or what they need to become.

**Conclusion**

So is there a digital generation? I would argue that, to a greater or lesser extent, technological change affects us all, adults included. Yet the consequences of technology depend crucially on how we use technology, and what we use it for; and these things are subject to a considerable degree of social variation within age groups as well as between them. There may indeed be broad systematic differences between what adults do with technology and what young people do with it; although it is important to note that the meanings and uses of technology are so variable, that we need some quite fine distinctions in order to capture what is happening here. For example, computer games are frequently identified as a children’s or young people’s medium; but in fact research suggests that the average age of game players is now thirty (Entertainment Software Association, 2005). Of course, young people may well be playing different types of games from adults, or even playing the same games in different ways; but in exploring this phenomenon in any detail, we will almost certainly need to jettison any essentialist assumptions about the differences between children and adults.

My aim in this introductory chapter has been to puncture some of the rhetoric and hype that typically surrounds discussions of young people’s relationships with digital technology. This is, frankly, a fairly easy task. What is more difficult is to conduct and analyse the research that will genuinely further our understanding of these issues — and that is something I leave to the diverse contributions that follow. Even so, I hope that this discussion has raised some important caveats and questions that will inform your reading of the book as a whole. As I have
suggested, the notion of a 'generation' is more complex than it might appear at first sight. To identify a generation, set boundaries around it, and characterise or define it, is far from being a straightforward matter – particularly if we wish to avoid undue generalisation, and to acknowledge the significance of other social differences. The notion of a 'digital' generation – a generation defined through its relationship with a particular technology or medium – clearly runs the risk of attributing an all-powerful role to technology. This is not to imply that, on the contrary, technology is merely an outcome or function of other social processes; but it is to suggest that it needs to be seen in the context of other social, economic and political developments. From this perspective, it also becomes easier to avoid the rhetoric of fundamental and irreversible change that often characterises the discussion of children and technology.

The chapters that follow take different stances on these issues, and address quite diverse concerns. Some of the cross-cutting themes are drawn out in our introductory remarks at the start of each section. However, all the contributors share a commitment to rigorous empirical investigation – and it is this commitment that needs to come to the fore in future debates about the role of digital technology in children’s lives.

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