



# cyberkids

children in the information age

Sarah L. Holloway & Gill Valentine

---

# Cyberkids

---

## Children in the Information Age

Sarah L. Holloway and  
Gill Valentine

First published 2003  
by RoutledgeFalmer  
11 New Fetter Lane, London EC4P 4EE

Simultaneously published in the USA and Canada  
by RoutledgeFalmer  
29 West 35th Street, New York, NY 10001

Reprinted 2003

*RoutledgeFalmer is an imprint of the Taylor & Francis Group*

© 2003 Sarah L. Holloway and Gill Valentine

Typeset in Sabon by

M Rules

Printed and bound in Great Britain by  
St Edmundsbury Press Ltd, Bury St Edmunds, Suffolk

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

*British Library Cataloguing in Publication Data*

A catalogue record for this book is available from the  
British Library

*Library of Congress Cataloging in Publication Data*

A catalog record for this book has been requested

ISBN 0-415-23058-6 (hbk)

ISBN 0-415-23059-4 (pbk)

---

# Acknowledgements

---

We are grateful to the ESRC for funding the research *Cyberkids: children's social networks, 'virtual communities' and on-line spaces* on which this book is based (award number L129 25 1055). Gill Valentine wishes to acknowledge the support of the Philip Leverhulme Prize in enabling her to work on this manuscript.

Thanks are also due to Nick Bingham who was employed as a research assistant on this project. Charlotte Kenten provided an invaluable service tracking down references, statistics and websites. We are indebted to the children, parents and teachers from our three case-study schools who allowed us into their homes and classrooms and gave up their time to talk to us about the role of information and communication technologies in their lives.

The 'Cyberkids' project that this book draws upon was part of the ESRC Children's 5–16 Programme. We wish to acknowledge our appreciation of the guidance we received from its director Professor Alan Prout, the intellectual and social exchanges we enjoyed with the other award holders at programme meetings, but most particularly all the encouragement and support we received from Professor Chris Philo of our steering committee.

Chris Durbin played a key role in helping us to get the research off the ground. Chapter 6 includes material produced as part of the involvement of one of our case-study schools, Westport, with the *Interlink* initiative. This was commissioned by the British Council in New Zealand as part of their 50th year celebrations. *Interlink* was developed and managed by Copeland Wilson and Associates (CWA) Ltd, New Zealand. CWA is a specialist producer of education learning materials across all media ([www.cwa.co.nz](http://www.cwa.co.nz)).

Deborah Sporton and Charles Pattie have provided Gill with occasional, much needed technical support not to mention numerous cups of coffee and a welcome social diversion from work. Sarah O'Hara has put up with endless discussions about the Cyberkids project, and provided both Gill and Sarah with food and liquid sustenance at key moments during the project.

This book was commissioned by Anna Clarkson. We are very grateful to her, and her editorial assistants, for the support they have shown for this proposal and for waiting so patiently for the final manuscript to be delivered.

The quality of the final product is largely due to the hard work of Susan Dunsmore, the copyeditor, Sonia Pati, the production editor, and M Rules for the project management.

We are grateful to Jacky Fleming for permission to reproduce Figure 3.1 (page 56) and to *The Sheffield Telegraph* for permission to reproduce Figures 4.1 (page 86) and 6.1 (page 149). Every attempt has been made to obtain permission to reproduce copyright material. If any proper acknowledgement has not been made, we would invite copyright holders to inform us of the oversight.

---

# Contents

---

<i>List of figures</i>	vii
<i>Acknowledgements</i>	ix
1 Cyberworlds: children in the Information Age	1
2 The digital divide? Children, ICT and social exclusion	20
3 Peer pressure: ICT in the classroom	42
4 On-line dangers: questions of competence and risk	72
5 Life around the screen: the place of ICT in the ‘family’ home	99
6 Cybergeographies: children’s on-line worlds	127
7 Bringing children and technology together	153
<i>Notes</i>	160
<i>References</i>	162
<i>Index</i>	177

---

# Figures

---

3.1	Surfing for pornography on-line reinforces boys' understandings of themselves as heterosexual young men	56
4.1	Parents need guidelines to help them raise children in the digital age	86
4.2	'Net nanny' filter systems provide one curb on children's on-line excesses	89
5.1	The computer is implicated in the development of children's bedroom culture	111
5.2	The location of the PC in a shared space can provide a gathering point for members of the family	111
5.3	How the PC 'fits' into children's everyday lives: a Westport after-school time-budget diary	120
6. 1	The Internet provides children with a window on the wider world	151

# Cyberworlds

## Children in the Information Age

---

Cyberspace is one of 'the zones that scripts the future' (Haraway 1997: 100). Just as industrial technology was seen to transform Western society in the nineteenth century, so many contemporary academic and popular commentators argue that Information and Communication Technologies (ICT) are about to inflict far-reaching economic, social, cultural, and political changes upon the twenty-first century (for an overview see Kitchin 1998a, 1998b). Most notably, ICT are popularly understood to be about, if they have not already led to, the transformation of work and the production of value, as manufacturing is substituted by information as the dominant form of employment (Marshall 1997). The opportunities that ICT offer users to access information and communicate with whom they want, freed from the material and social constraints of their bodies, identities, communities and geographies mean that these technologies are regarded as potentially liberating for those who are socially, materially or physically disadvantaged (Turkle 1995). Likewise, the speed and connectivity of the Internet offer scope to facilitate greater participation in the political process, to re-scale politics from the local or nation to the global, and to produce more informed democracy. However, these opportunities also bring new risks. Most notably that those who lack technological skills to participate in the Information Age will be excluded from these activities and, unable to exercise their rights and responsibilities, will consequently be denied full citizenship.

Children, as symbols of the future themselves, are at the heart of debates both about how the possibilities that ICT afford should be realised, and about the 'new' dangers that these technologies might also bring for the Net generation. The British Prime Minister's statement that 'Children cannot be effective in tomorrow's world if they are trained in yesterday's skills' echoes a similar point made in a Labour Party document *Communicating Britain's Future*.<sup>1</sup> This claims that:

We stand on the threshold of a revolution as profound as that brought by the invention of the printing press. New technologies, which enable rapid communication to take place in a myriad of different ways around



the globe, and permit information to be provided, sought and received on a scale so far unimaginable, will bring fundamental changes to our lives . . . In many ways it will be in education that the greatest potential use for the new networks will emerge.

(The Labour Party 1995: 3, 18)

While supporting such political aims to advance children's technological literacy, popular commentaries have also highlighted the fact that children may be at risk of corruption from material that they can find on the Internet, and abuse at the hands of strangers whom they might encounter in on-line spaces (Wilkinson 1995; McMurdo 1997; Evans and Butkus 1997). These fears are exacerbated by the fact that parents and teachers – particularly those who are less technologically literate than the young people in their care – have a limited ability to control or filter what children might see and learn on the World-Wide-Web (henceforth WWW). The Internet-connected PC, as the latest form of media (following on from television, stereos, console games, etc.) to play an important role in children's peer group relationships (Suss *et al.* 2001), is also imagined to threaten children's off-line activities. Popular concerns have been expressed that using a computer is a solitary and potentially addictive activity, provoking fears that some children might become so obsessed with the technology that they will socially withdraw from the off-line world of family and friends (Hapnes 1996). In doing so it is suggested that they will also miss out on the imaginative opportunities for outdoor play that public space is perceived to offer, putting not only their social, but also their physical well-being at risk (Gumpert and Drucker 1998; McCellan 1994). In such ways, ICT are regarded by some as a potential threat, not only to individual children, but also to childhood as an institution because of their potential to threaten childhood 'innocence' and blur the differentiation which is commonly made between the states of childhood and adulthood.

Despite these fears in the popular imagination, little is known about how children actually employ ICT within the context of their everyday lives. We suggest that two key factors contribute to this oversight. First, children and young people are a social group that has been relatively neglected by academic research. Sociology has been criticised as an adultist discipline (see the following section), prompting a new theoretical turn in the study of children and childhood (James *et al.* 1998). A similar accusation has also been levelled at Geography (see also the following section). While there is a small but significant literature about children's geographies that dates back to the 1970s (Bunge 1973; Hart 1979), it is only recently that research in this sub-field of the discipline has reached a critical mass (Holloway and Valentine 2000a). As such, it is widely acknowledged in the social sciences that as adults we still know relatively little about children's own social worlds.

Second, despite the growing importance of ICT in the contemporary

Western world, there are surprisingly few empirical studies of how people actually use these technologies in an everyday context. Much of the contemporary writing about cyberspace in the social sciences is theoretical rather than empirically informed. Where research has focused on actual practices, this has tended to concentrate on the growth of on-line cultures through Multi User Domain (MUD) environments (textual virtual environments created by a programmer or participants) (see, for example, Turkle 1995). In other words, it has primarily focused on extreme users and utopian visions of virtual life rather than looking at the complex ways that ICT is used, and made sense of, in everyday worlds (Kitchin 1998a, 1998b).

This book is important because in it we address the issues raised above through an empirical investigation of the ways that ICT are used in practice by British children aged 11 to 16. The material we present, from children's own accounts of their on-line and off-line worlds, not only advances our theoretical understanding of children as social actors, it also has the potential to inform public policy initiatives designed to promote children's technological literacy, and to contribute to the popular debates about the threats ICT may pose to children and childhood.

In this chapter we first introduce the understanding of children and childhood that underpins the way the research upon which this book is based was conducted. Then we introduce our understanding of technology by outlining some of the theoretical debates about ICT, drawn from the social studies of technology and geographies of cyberspace. Finally, we introduce the empirical research upon which this book is based and outline the structure of the six chapters that follow.

## **Introducing children**

'Child' appears at face value to be a biologically defined category determined by chronological age. Children are assumed by the nature of their youth to be not only biologically, but also socially less developed than adults. The notion of immaturity, for example, is used not only to refer to children's physical bodies but also to their presumed lack of social, intellectual, emotional and practical knowledge and competencies. This less-than-adult status means that childhood is understood as a period in which children have to be schooled in their future adult roles. The process of learning to become an adult takes place not only through the educational system, but also the everyday processes of socialisation that children undergo as part of family and wider civic life. The flipside of being treated as less-than-adults is that children in the West are assumed to have the right to a childhood of innocence and freedom from the responsibilities of the adult world (though in practice poverty, ill-health and so on rob many children of the right to enjoy such a childhood). As such, we, as adults, are charged with the duty to both provide for children in the widest sense (materially, emotionally, etc.), and to

protect them from dangerous information, situations and people that might pose a threat to their 'innocence' and 'freedoms' (Holloway and Valentine, 2000a).

This essentialist understanding of children as a homogeneous social group defined by their biology, that in turn positions them as 'other' in relation to adults, has been critiqued by academics from across the social sciences. Rather, like many other social identities, 'child' has been demonstrated to be a socially constructed identity. Cultural historians, for example, have shown that the contemporary understanding of children in the West as less developed, less able and less competent than adults (Waksler 1991) is historically specific (see, for example, Ariès 1962; Hendrick 1990; Steedman 1990; Stainton-Rogers and Stainton-Rogers 1992). The work of Ariès (1962), whose study of mainly French cultural artefacts has been generalised to the rest of the Western world (Jenks 1996), is commonly used as evidence of the socially constructed nature of childhood. He demonstrated that in the Middle Ages young people, rather than being imagined as a distinct social category, were actually regarded as miniature adults. It was only in the sixteenth century, when children began to emerge as playthings for adults from privileged backgrounds, that they started to be defined in opposition to adults. It is from the Enlightenment onwards that this understanding of the category 'child', as inherently different from 'adult', has gone on to dominate our social imagination (Jenks 1996).

Within this understanding of childhood, Jenks points to two different ways of thinking and talking about children. He labels these Dionysian and Apollonian. Dionysian understandings of childhood view children as 'little devils', who are inherently naughty, unruly, and must be disciplined and socialised into adult ways in order to become fully human. In contrast, Apollonian views of childhood which emerged later, conceptualise children as born inherently 'good', only for the 'natural' virtue and innocence of these 'little angels' to be corrupted by adults as they are socialised into adulthood. These ideas underpin the emergence in the nineteenth century of a concern for the education and welfare of children, which is evidenced in the contemporary provision and/or regulation of much childcare, education, and interventionist welfare services. Although notions of the Apollonian child emerged after that of the Dionysian child, the former did not supplant the latter. Rather, both apparently contradictory understandings of the child continue to be mobilised in contemporary Western societies (Stainton-Rogers and Stainton-Rogers 1992; Jenks 1996; Valentine 1996a).

Even though these conceptualisations of childhood draw on essentialist understandings of children as inherently good, or bad, by demonstrating the historical specificity of childhood in the Western world, they prove that far from being a biological category, childhood is a socially constructed identity. Yet, the boundaries that mark the divide between child and adult are not clearly defined. James (1986) cites a number of legal classifications, such as

the age at which young people can consume alcohol, earn money, join the armed forces, and consent to sexual intercourse, to show how the definitions of where childhood ends and adulthood begins in the UK are variable, context-specific and gendered. Such variations are equally evident between countries, and are also contested by different groups of children and adults, providing further proof of the social nature of childhood.

One 'academic' consequence of the social construction of child as less than adult, and childhood as a phase of socialisation, is that research on children has been less valued than that on other topics (Holloway and Valentine 2000b). In the mid- to late-1980s a variety of authors began to bemoan the lack of research on young people. Ambert (1986), for example, identified the invisibility of children in North American sociological research, claiming that this reflected the continuing influence of founding theorists whose preoccupations were shaped by the patriarchal values of the societies in which they lived. She also argued that the system of rewards within the discipline that favours research on the 'big issues' such as class, bureaucracies or the political system contributes to the devaluation and marginalisation of children as a legitimate research subject. Brannen and O'Brien (1995) point out that the position is little different in British sociology where children and childhood have tended to be ignored, with children only being studied indirectly in sub-disciplinary areas such as the family or education. Here, children tended to be regarded as human becomings rather than human beings, who through the process of socialisation are to be shaped into adults. This understanding of children as incompetent and incomplete 'adults in the making rather than children in the state of being' (*ibid.*: 70) means that it is the forces of socialisation – the family, the school – that have tended to receive attention rather than children themselves (James *et al.* 1998: 25).

This relative absence of children from the sociological research agenda is increasingly being challenged. A number of key texts (e.g. James and Prout 1990; Qvortrup *et al.* 1994; Mayall 1994; James *et al.* 1998) are beginning to define a new paradigm in the sociology of childhood. This recognises children as competent social actors in their own right (beings rather than becomings) and acknowledges children's understandings and experiences of their own childhoods. A growing body of work within the sociology of education is also beginning to draw attention to children's agency in relation to questions of identity and difference in the school setting (e.g. Skeggs 1991; Dixon 1997; Epstein 1997). In making the claim that such work marks an epistemological break with earlier studies, James *et al.* (1998) identify this approach to the study of children as 'the new social studies of childhood'. This name reflects a growing cross-fertilisation of ideas between researchers in a variety of social science disciplines, linkages that have contributed (among other things) to a renewal of interest within Geography in children as social actors (Holloway and Valentine 2000a).

Like Sociology, and for much the same reasons, children have not been a

traditional focus of concern in geography (see James 1990). Though as we suggested earlier, there is a small but significant literature about children's environments that dates back to the 1970s (Blaut and Stea 1971; Bunge 1973). This work was marked by two discernible differences in approach that persist today. One, informed by psychology, has focused on children's spatial cognition and mapping abilities (e.g. Blaut and Stea 1971; Matthews 1987; Blaut 1991). The other, inspired by Bunge's (1973) pioneering work on children's spatial oppression (through which he sought to give children, as a minority group, a voice in an adultist world) but more recently informed by new social studies of childhood, addresses children's access to, use and attachment to space (Hart 1979).

Geographical research contributes to social studies of childhood by providing evidence for the ways that childhood is constructed differently, not only in different times but also in different places (Holloway and Valentine 2000b). In this book, for example, we show in Chapter 2 how place matters by demonstrating the wide variations that exist in children's access to ICT at global, national and local scales. At the same time, however, we also seek to illustrate the connections between these global and local processes (see Chapter 6). In classifying work within the new social studies of childhood, James *et al.* (1998) identify an irreconcilable split between research which is global in its focus (e.g. by examining the importance of global processes in shaping children's position in different societies of the world) and that which has more local concerns (e.g. work showing how children are important in creating their own cultures and lifeworlds). By employing an alternative, and more thoroughly spatial understanding of global/local, geographical work transcends this dichotomy to reveal a more complex picture. For example, in a study of New York and a village in Sudan, Katz (1993) has demonstrated that local manifestations of global restructuring have had serious, and negative, consequences for children in both locations. At the same time her study illustrates how these 'global processes' are worked out in 'local' places through 'local' cultures. In doing so, Katz shows that the global and local are not irreconcilably split, but rather are mutually constituted. It is an approach that we also adopt in this book, most notably in Chapter 6 where we consider how children's use of the WWW is at one and the same time both global and local.

A second, and related, way that geographers have examined the spatiality of childhood is by focusing on the everyday spaces in, and through which, children's identities and lives are produced and reproduced (Holloway and Valentine 2000b). The street, and 'public' space in general, have been key sites of concern in geographical studies of children's access to, use of, and attachment to, space. Most recently work has centred on contemporary concerns in North America and Europe about children's presence in 'public' spaces. These are characterised by twin fears, on the one hand, that some (Apollonian) children are vulnerable to dangers in 'public' places, and on the

other hand that the unruly behaviour of other (Dionysian) children can threaten adult hegemony in 'public' space (Valentine 1996a, 1996b). As we explain in Chapter 4, these same fears are also apparent in debates about children in cyberspace. Indeed, Jackson and Scott (1999) argue that notions of risk and safety are increasingly central to the construction of childhood. They write:

Because children are . . . constituted as a protected species and childhood as a protected state, both become loci of risk and anxiety: safeguarding children entails keeping danger at bay; preserving childhood entails guarding against anything which threatens it. Conversely, risk anxiety helps construct childhood and maintain its boundaries – the specific risks from which children must be protected serve to define the characteristics of childhood and the 'nature' of children themselves.

(Jackson and Scott 1999: 86–87)

Schools are one particular institutional space through which adults attempt to control and discipline children. In doing so, Aitken (1994) argues that they serve wider stratified society, preparing young people to assume roles considered appropriate to their race, class and gender identities. A number of geographical studies have been concerned with these moral landscapes, including both the historical context of Victorian reformatory schools (Ploszajska 1994) and the contemporary context of primary schools (Fielding 2000). Contemporary geographical research also illustrates the importance of schools as sites through which gender and sexual identities are made and remade. Hyams (2000) has examined discourses of femininity among Latina girls in Los Angeles, showing how ideas about appropriate femininities both structure, and are contested through, the girls' everyday practices. In Chapter 3, we focus not only on the production of femininities, but also on masculinities, within the context of the heterosexual economy of the classroom. This chapter builds on our consideration of children's access to ICT within the institutional context of the school outlined in the previous chapter. Here, we consider how national discourses about children and the Information Age are (re)negotiated by schools through their specific policies on information technology according to the schools' assessments of the needs of the local communities that they serve.

The home is a space that has been of particular relevance to feminist geographers who have been concerned with gender relations within households headed by heterosexual couples (see, for example, England 1996). As such, other members of these families, mainly children but also elders, have often been constructed in terms of the time/care demands they place upon the household rather in terms of their role as social actors in their own right. Recent work on children and parenting, however, has identified the home as an important site for the negotiation of adult–child power relations (e.g.



Aitken 1994; Sibley 1995; Valentine 1999a, 1999b). Indeed, the home itself is a space that is constituted through familial rules that demarcate appropriate ways for children to behave (Wood and Beck 1990). Some of this research has drawn attention to the power of children's voices within the household. This is not only in terms of their ability to articulate their own identities and desires, but also in terms of their ability to shape the identity and practices of the household as a whole (Valentine 1999a).

In part, the willingness of parents to acknowledge children as social actors in their own right is a reflection of the value of their offspring to them. Within the context of individualisation Beck and Beck-Gernsheim (1995) suggest that parents feel increasingly responsible for their children and under pressure to invest in their childhoods in order to maximise the children's opportunities and chances of success in adulthood. In doing so parents are not only thinking of their offspring but also of themselves. This is not only because young people can be a conduit for parents to live out their own hopes and ambitions (Beck and Beck-Gernsheim 1995; Jackson and Scott 1999) but also because being a 'good' parent is a rewarding identity in its own right. Geographical research has had an important role to play in exploring the connections between childhood and adulthood as discursive constructions and in examining a variety of spatial discourses. A number of studies have identified local communities as important sites through which understandings of what it means to be a 'good' mother or father and specific parenting cultures are developed (Dyck 1990; Holloway 1998; Valentine 1997a). In a less predictable world these definitions are increasingly structured around the ability of parents to protect their children from social and physical risks.

In the case of children's use of ICT adult anxieties about children's use of the Internet are heightened by the discursive construction of children's safety on-line as the responsibility of their parents, yet young people's technical competencies often exceed those who are charged with protecting them. While some parents regard children's skills as a threat to their status as adults, others embrace the opportunities ICT offers to renegotiate their relationships with young people. Debates about children's safety and competence are also negotiated through spatial discourses about the spaces of the home and the Internet. We explore these issues in Chapter 4. The importance we identify here, of children and parents to each other's social identities, highlights the need to look at children's accounts of their lifeworlds within the context of their 'family' relationships. As such, in Chapter 5 we focus on the role that the home PC plays in the constitution of 'the family' and in the production of domestic time-spaces. Here we use the term 'family' not just to describe traditional nuclear families but to cover the diverse, fluid and complex living arrangements of modern households (Stacey 1990).

To summarise, therefore, in this book we understand children to be social actors within their own right. We recognise, however, that children's identities are constituted in and through particular places, spaces and spatial

discourses (Holloway and Valentine, 2000b). Here we focus on the sites of school, home and cyberspace. At the same time we acknowledge the ways that understandings of childhood can also shape the meaning of these spaces and places. Throughout the book we challenge the split between global and local approaches to childhood by showing how children's everyday use of ICT is situated within the context of shifts in the global economy, and national educational policies and by examining how children's on-line activities are constituted and interpreted within the context of local cultures. In doing so, this book contributes to interdisciplinary work on children and parenting in four significant ways. First, we advance the notion that children's identities and relationships are constituted not only through their relations with other people, but also through their relationships with 'things' that we share our world with, in this case, the Internet-connected PC. Second, we redress the paucity of studies that examine children's ICT usage in different socio-spatial environments. This relative lack of attention to the ways in which children use ICT in different off-line spaces is important because, as James and Prout (1995) suggest in a different context, certain styles of agency are foregrounded in some social environments, with other styles being more appropriate elsewhere. In so doing, our aim is also to learn more about the ways in which these off-line environments are geographically constituted through their links with other places and spaces, by the actions of individuals within those spaces, and through ideas about appropriate childhood spaces. Third, through our focus on questions of risk and competence in this book we explore the possibilities that exist for children to renegotiate the flexible boundaries of adulthood and childhood. Finally, we do not treat children as a homogeneous category but rather focus on questions of difference, not only between traditional social categories such as gender, but also within them.

## Introducing technology

In the initial flood of academic and popular commentaries on cyberspace a clear opposition has often been drawn between off-line and on-line worlds, or the 'real' and the 'virtual' (Laurel 1990; Heim 1991; Springer 1991). In such representations the two worlds are viewed as distinct or unconnected from each other and as possessing different, usually oppositional (see Doel and Clarke 1999), qualities. For some commentators (e.g. Heim 1991; Thu Nguyen and Alexander 1996), whom we have termed 'boosters' (Bingham *et al.* 1999), 'virtual' space is understood to be an advance on the 'real' world, an opportunity to overcome its limitations. For others (e.g. McLaughlin *et al.* 1995), whom we label 'debunkers', the 'virtual' is regarded as inauthentic, a poor imitation of the 'real'.

Notably, on-line worlds have been uncritically celebrated by boosters as disembodied spaces in contrast to the materiality of 'real-world'



environments. As such, this technology has been heralded for the possibilities it is perceived to offer its users to escape the constraints of their material surroundings and bodies by enabling them to create and play with on-line identities (Springer 1991, Plant 1996). In these terms the human body is regarded not only as invisible on-line but also as temporarily suspended such that it becomes a complete irrelevance (Thu Nguyen and Alexander 1996). In this way, cyberspace is claimed to offer its users an escape from social inequalities – such as racism or gender discrimination – that relate to their embodiment (Turkle 1995). In a similar vein boosters have also claimed that ICT create new forms of social relationships in which participants are no longer bound by the need to meet others face-to-face but rather can expand their social terrain by meeting others located around the globe on-line, mind-to-mind. This is a privileging of mind over body that characterises masculinist rationality. Some observers even claim that ‘virtual’ relationships are more intimate, richer and liberating than off-line friendships because they are based on genuine mutual interest rather than the coincidence of off-line proximity. In all these representations ‘virtual’ space is characterised as a space that is not just set apart from everyday life, but also one that offers the possibility to transcend everyday life. It is a zone of freedom, fluidity and experimentation that is insulated from the mundane realities of the material world (Springer 1991; Laurel 1990). In Doel and Clarke’s (1999) terms it provides a hyper-realisation of the real.

Like the boosters, debunkers also view the ‘real’ and the ‘virtual’ as both different and separate worlds. However, for these commentators on-line worlds are viewed as unambiguously bad. The ‘virtual’ is conceptualised as a poor substitute for the ‘real world’. Disembodied identities are viewed as superficial and inauthentic compared with embodied identities. Likewise, on-line forms of communication are regarded as fleeting, individualised and one-dimensional exchanges in contrast to the more permanent and complex nature of human engagements in the off-line world (McLaughlin *et al.* 1995). ICT users are often characterised as so immersed in on-line culture that they become detached from their off-line social and physical surroundings and consequently their responsibilities in the ‘real’ world (Willson 1997). For example, as we argue above, some commentaries paint a picture of children as so absorbed in their on-line worlds that they reject ‘the real’, becoming detached from off-line social and familial relationships and withdrawing from public outdoor space into on-line fantasy spaces (see Chapter 5). In these understandings the ‘real’ is represented as a fragile world under threat from the seductive lure of the ‘virtual’ (Doel and Clarke 1999).

While boosters and debunkers differ about whether the development of on-line worlds are positive or negative, what they share is a tendency to regard the ‘real’ and the ‘virtual’ as not only different, but also as discrete. Research on cybercultures has commonly focused on users’ on-line activities, ignoring the way that these activities remain embedded within the context of