Mothers in the making?: exploring liminality in cyber/space

Clare Madge* and Henrietta O'Connor**

*Department of Geography, University of Leicester, Leicester LE1 7RH.

Email: cm@le.ac.uk

** Centre for Labour Market Studies, University of Leicester, Leicester LE1 7RH.

Email: hso1@le.ac.uk

Abstract

This paper makes a case for cyberspace and geographical space coexisting simultaneously as an interconnected dyadic cyber/space combining the virtually real and the actually real. Based on empirical evidence from a study examining the role of the internet in the life of new mothers, we investigate the simultaneity of online/onsite experiences through an exploration of cyberspace as a performative liminal space, one where the women `tried out' different versions of motherhood. We suggest that liminality, as a concept that can denote both a space and time of `betweenness', is a useful tool in the virtual geographers `conceptual handbag' as it enables a more lively understanding of cyberspace. But although cyberspace can result in the production of new selves, these selves have residual attachments to embodied experiences and practices. This suggests that new theorising about cyber/space must combine a consideration of liminality with everyday corporeality.

Key words Cyber/space, internet, women, liminality, corporeality.

Introducing cyber/space

> *In this paper we use the term cyber/space rather than cyberspace and geographical space, to try to capture the intersecting and simultaneous nature of the virtually real and the actually real. In using cyber/space we suggest that both spaces can be concurrently entwined and experienced for a particular person in a particular instance. The use of the backslash in cyber/space is intended to be emblematic of the mutually constituted, dyadic nature of both spaces, where clear distinctions between the two spaces can become blurred. This enables cyber/space to be understood as a process as well as a site, which is brought into being through specific performances.*

In this paper we consider the role of the internet in the life of new mothers and consider the implications this case has for theorising about cyber/space. In particular, we take up the challenge that more work is needed to explore the claim that cyberspace and geographical space[i] coexist to produce `hybrid space' (Janelle and Hodge 2000, 5) combining the virtually real and the actually real[ii]. According to Batty and Miller (2000, 134): `This nexus of hybrid space…represents an appropriate focus for a new geography of the information age.' Exploring this nexus of mutually constituted, dyadic cyber/space - the focus of this paper - is an attempt to heed Kitchin's (1998a, 403) call to deconstruct and map further the complex spatialities of cyberspace. This topic still remains `…surprisingly uncharted by geographers' (Adams and Warf 1997, 144) despite the fact that cyberspace is at the `cutting-edge' of geographical research (Warf 2003). Below we explore the interconnections and discontinuities between cyberspace and geographical space using the case of cybermothers (new mothers who use parenting websites to elicit information/support about parenting matters). What clearly emerges from this case is that many of the arguments surrounding cyber/space have been somewhat static and time-laden. In this paper we wish to argue for the simultaneity of online/onsite

worlds in the cybermothers' lives and suggest that we could usefully employ notions of liminality in order to understand the intermeshing of cyber/space.

The term liminality derives from the Latin *limen*, or threshold, and was first used by Arnold Van Gennep (1909 but translated to English in 1960) in *Les rites de passage*[iii]. Victor Turner `popularised' the use of the term in his classic work (1967) *The forest of symbols*. Here liminality denotes rituals of transition, a `time out of time' where one is `betwixt and between' social status. This clearly holds resonance with the case of new mothers in cyberspace. In the liminal zone of cyberspace women `tried out' different versions of motherhood resulting in the production of new selves[iv]. The virtual space betwixt and between geographical space allowed for transformation in `becoming a mother'[v]. In this paper we suggest therefore that liminality might be a useful conceptual tool to enable the development of a more nuanced and animated understanding of cyber/space. And its usefulness precisely lies in that liminality, in its original sense, was a term denoting both a time and a space.

Notions of cyber/space and liminality will be explored through the experience of an online research project entitled Cyberparents[vi] (http://www.geog.le.ac.uk/baby/) which examined how, why and in what ways new parents used the internet as an information source about parenting and as a form of social support. As such, the research focused on the `banal everyday use' (Holloway and Valentine 2001a, 129) of one specific `place' in the digital world (http://www.babyworld.co.uk) at a precise point in time by a particular group of parents[vii]. To this end, the project followed Gurak and Ebeltoft-Kraske's (1999, 147) plea for internet research to move away from generalisations towards studies situated in specific contexts and technologies. Thus an empirically-informed case study of cyberspace is timely, for as Valentine and Holloway (2002, 303) note: `…despite the growing importance of the internet in the Western world, there are surprisingly few empirical studies of people's actual use of ICT. Much of the contemporary writing about cyberspace…is theoretical, rather than empirically

informed.' There is therefore a need to move beyond generalised discussions about the `impacts of cyberspace' on society to `…look in rich empirical detail at the complex ways in which ICT technologies are being used in real ways…in the real world' (Graham 2004, 11).

This paper is structured into five sections. First, a theoretical review situates the empirical research within the virtual geography literature. Next, a background account is given of the research project, its online methodology and the associated parenting website. This is followed by an examination of the two key themes that emerged from the research. In section three the online support and information gained from the online parenting community[viii] is assessed, particularly in relation to everyday onsite life, to investigate the mutually constituted, dyadic nature of cyber/space in the new mothers' worlds. The interrelated and concurrent entwining of cyber/space is explored in the fourth section of the paper. In order to capture the simultaneity of online/onsite experiences we explore how the internet enabled the women to `try out' different versions of motherhood resulting in the production of new selves. Finally, in section five we suggest that liminality is a useful conceptual tool to capture this simultaneity and intermeshing of cyber/space, though this must be located firmly within an awareness of everyday corporeality.

Communities, embodiments and identities in cyberspace

Cyberspace is the interdisciplinary research arena *par excellence*. Geographers have made significant contributions to this burgeoning research field (Crang *et al.* 1999; Dodge and Kitchin 2001; Graham 2004; Holloway and Valentine 2003; Kitchin 1998a; 1998b; Shields 2003). Social geographies of cyberspace have received less attention than economic geographies (Walmsley 2000) because `…in general, geographers have yet to examine the social, cultural and political implications of cyberspace and to examine the role of space and

place in a distributed social space that lacks physicality (Kitchin 1998a, 393). In particular, `…geographers have paid insufficient attention to the cultural…dimensions of computer networking' (Adams and Warf 1997, 140).

In contrast, research on the formation of online communities in cyberspace is widely documented (Adams and Ghose 2003; Hampton 2003; Peris *et al.* 2002; Scott 2002). At the risk of oversimplification, these communities were initially said to be based on common interests and networks of social relations rather than being tied to specific locations and places. Grand claims were thus made as to how these virtual societies would restructure global civil society based on a shared global consciousness (Rheingold 1994). Later claims were more circumspect and studies proliferated to demonstrate that the depth of meaning in online communities was more shallow and relationships less committed than those based on geographical place (Robins 1995). Even the most `ecstatic' online communities are now recognised as being rooted in place and space (Pratt 2002; Walmsley 2000). So although recent research has started to highlight how online communities are embedded in everyday life and how online and offline worlds are mutually constituted (Hine 2000; Miller and Slater 2000; Valentine and Holloway 2002; Wellman and Haythornthwaite 2002), more detailed studies are needed to deconstruct further the complex continuum of interrelationships between geographical space and cyberspace (Dodge and Kitchin 2001, 51). In particular, more work is needed to explore this `…interpenetration of these two kinds of space….as an intersection of two worlds' (Batty and Miller 2000, 134), a simultaneously interconnected dyadic cyber/space. This is the purpose of this paper.

Cyber/space can be explored through the lens of online identities and embodiment. Many claims have been made that cyberspace allows individuals to perform different and often multiple identities (Davies 2004; Pitts 2004). For example, in cyberspace identities can become increasingly fluid, manipulable and constructed because the disembodied nature of

communication and anonymity allows one to be accepted on the basis of one's words, not on bodily `markers' (such as age, ethnicity, clothes, accent). It is claimed that cyberspace allows people to construct their self-presentation more carefully, play with their online identities and adopt unfamiliar roles. But these ideas of the transcendental and liberating effects of cyberspace have recently been contested. Seymour (2001), for example, suggests that while the physical `lived body' is invisible during virtual interactions, mannered behaviours, pre-interpreted meanings and unstated assumptions are clearly `visible' during online conversations, influencing the nature of discourses and social interaction. This is precisely because we do not leave the body and all its material inequalities behind when we enter cyberspace: `Even in the age of the technosocial subject, life is lived through bodies' (Stone 1992, 113). It is clear then that virtual interactions may be shaped by, and grounded in, the social, bodily and cultural experiences of users (Hardey 2002).

However, despite the documentation of the multiple, dynamic and context-dependent nature of identities in cyberspace (see for example Talamo and Ligorio 2001), much of the work on cyberspace and embodiment fails to conceptualise meaningfully the simultaneity of identity formations as one moves through virtual cyberspace and material geographical space as part of everyday life. As Parr (2002, 75) suggests: `It is relatively easy to begin to argue that the physical body is sometimes forgotten in virtual space, and seek to recall it as an academic project. It is less easy to understand how virtual space both enables a sense of technological disembodiment and yet simultaneously reconstitutes and reinforces the physical body.' To attempt to capture this simultaneity we draw on debates about performance, performativity and performative spaces in geography (Gregson and Rose 2000; Nash 2000; Thrift and Dewsbury 2000).

Gregson and Rose (2000, 433, 434) suggest that performance - what people do, say, or `act out'- is connected to performativity - the citational practices which produce and subvert

discourses and knowledges and at the same time enable and discipline subjects and their performances- through the saturation of performers with power, with particular subject positions. Performance suggests an intentional conscious agent, that identities exist in order to act. Performativity suggests there is no body prior to cultural inscription, that identities act in order to exist (cf Gregson and Rose 2000, 437). Butler's theories of performativity therefore propose a constantly re-cited body which stresses both transgressivity but also normativity through the `forced reiteration of norms' (Butler 1993, 94, quoted Thrift and Dewsbury 2000, 412). Here we argue that cyberspace is a performative space, one where new subject positions are `tried out' in and through practices of everyday life and these acts, or fabrications, produce over time an identity `effect' (cf Thrift and Dewsbury 2000, 412). These subjectivities may then `spill over' in an iterative manner to undermine, support or blend with place-based identities. These performative aspects of mothering identity are complex and uncertain but it is through the specific performance of mothering identity that cyberspace is brought into being: cyberspace is actualised through performance.

It is possible that this performative cyberspace may be particularly significant for new mothers because women's embodied experiences are commonly denied expression in the dominant symbolic order (Davidson 2001). Moreover, focusing on the performative aspects of mothering identities is important, for as Baker (1989) suggests, the transition to motherhood provides a fertile ground for examining the renegotiation of social identities. Davidson (2001, 286), for example, argues that `…one cannot be the selfsame individual postpartum'. This transition to motherhood has been investigated with respect to mothers of different social groups (Bailey 1999; Keating-Lefler and Wilson 2004; Stern *et al.* 1998), the oppression of women (Oakley 1979; Rich 1977), bridging home and work (Bailey 2000), domestic divisions of labour (Moss *et al.* 1987), family photographs (Titus 1976) and with respect to constructions of motherhood in childcare manuals (Marshall 1991), but there has been limited work on

changes or continuities in the transition to motherhood with the development of ICTs. According to Miyata (2002, 545): `As the Internet becomes more commonplace in the lives of mothers, it is important to study the mechanisms of its impacts on their lives.' Indeed, the lack of work on new mothers using the internet is surprising since it is widely recognised that the use of the internet as a source of health information is increasing (Fogel 2004; Pandey *et al.* 2003; Parr 2002). Mothers form a high proportion of those who are using the internet to seek health care advice for themselves and their children, a trend reflected in the growth of the number of parenting websites (Williams 1999). This paper is based on an empirical study of one pioneering UK parenting website, Babyworld (http://www.babyworld.co.uk).

Virtual research processes

`Babyworld' was started by Radcliffe Medical Press, a medical publisher '…determined to bring accurate and reliable advice to new parents' (http://www.babyworld.co.uk/aboutus/meet-the-team.asp Accessed January 2003). It was the first UK-based parenting website, launched in 1995, and advertised as `the mother of parenting websites'. Usage figures show that Babyworld is the largest parenting site in the UK with 160,000 unique visits per month, generating 3 million page impressions (http://www.babyworld.co.uk/aboutus/press/press_office.asp Accessed March 2004). Babyworld's mission is to support a community where '…new and expectant parents can share experiences and support, women can learn about their bodies, their baby, and childbirth and parents can celebrate the joy of a new life' (http://www.babyworld.co.uk Accessed May 2001). The site's slogan is 'Babyworld: be part of it'. There is a lively community where parents make friends and share support, augmented by an online `ask the expert' facility. Members are encouraged to become involved in the community by becoming chat room moderators in areas

with which they may have personal experience (e.g. post-natal depression), or by joining the vibrant antenatal club. They can also share life experiences through pregnancy diaries and birth stories.

Although Babyworld is open to both men and women, most of its users are women and for this reason the research focused on new mothers rather than new fathers. Further to this, there is an underlying presumption that the audience of the website is middle class, heterosexual and white. For example, issues that may be of particular significance to lower income families, such as family tax credits or subsidised childcare places, are not covered in discussion forums. Additionally, the majority of the images of babies and children are white and the parenting discussion forums include new parents, fathers, older parents, teenage and young parents, single parents, step-families and working mums but no mention is made, for example, of lesbian or black families: other experiences of race and sexuality are `designed out' by omission (see Nakamura 2002). The design, content and production of Babyworld should not be taken as neutral, as they reflect (and reproduce) the specific locatedness of the cultures involved in the creation of the website.

Novel online research methods were used to elicit information in the Cyberparents project: a web-based questionnaire survey and semi-structured virtual group interviews (see Madge and O'Connor 2002 for details). These virtual methods have been little used by geographers although Mann and Stewart (2000, 4) observe that `…it is perhaps surprising that the suitability of the Internet for conducting research remains relatively unexplored.' The web-based survey was used to identify general patterns of use of the website (see http://www.geog.le.ac.uk/baby/). The questionnaires were completed predominately by women (84%), the majority of whom were under 35 (76%) and lived in the UK (80%)[ix]. Only 23% of the respondents were employed full-time, others defining themselves as part-time workers (31%), `houseperson' (28%), on maternity leave (6%) or `other' (student, unemployed etc,

12%). Most women were white (81%), married (63%), and had at least one child (89%), most commonly under 2 years of age (81%). Our sample thus replicates the uneven social and spatial distribution of the internet (Warf 2001) and the specificity of this small sample of women should be borne in mind when reading the paper. Any conclusions must be limited to this specific group of (predominately) technically proficient white women from the UK and care must be take not to project their concerns as universal: as Collins (1994) has highlighted, race and class continue to be key in differentiating women's mothering experiences. The results of the research are virtual place and time specific, and the study should be viewed in such social and historical context.

The second stage of the research process involved semi-structured synchronous virtual group interviews to explore the key themes emerging from the questionnaire data. These group interviews were conducted using a software conferencing technique - Hotline Connect. The illustrative sample of women were of a similar age (22-36) and there was an even mix of `full-time mums', part-time workers and full-time workers. All but one woman had one child only and most of these children were under one year. Each interview lasted between one and two hours and the interview transcripts were analysed inductively through description, classification and interconnection based on a quasi-grounded theory approach (Kitchin and Tate 2000). Analysis of the interview data forms the focus of this paper and extracts from the virtual interviews are made verbatim, including spelling mistakes. All names have been changed to provide anonymity. These virtual interviews brought up many interesting issues, including the notion of an embedded and entwined cyber/space through the interactions between online and onsite worlds in the cybermothers' lives.

Online/onsite interactions in the cybermothers' worlds

The women felt that they had gained from being members of this virtual parenting community through increased knowledge, non-judgmental support and the development of online friendships available exactly when they needed them. As such, Babyworld provided companionship, informational and esteem support (Nettleton *et al.* 2002), all important for new mothers particularly because a woman's lifeworld can `shrink' once her baby is born (Davidson 2001, 288). Indeed, generally, the significance of online support for this group of parents cannot be denied, with 66% of questionnaire respondents stating that using Babyworld was like belonging to a virtual parent and toddler group and 36% agreeing that they had more in common with people visiting Babyworld than they did with people from their local community. This is not to argue, however, that such online support replaced onsite support and connections. Indeed only 12% of questionnaire respondents agreed that `real' friendships had been replaced by virtual friendships. Rather, in this case for most women online support supplemented more `traditional' networks on the `ground' (extract 1).

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Extract 1
Hen and Clare:  do any of you go to mother and toddler groups
in your areas?
Hen and Clare:  or has the internet made you feel like you
belong to a virtual mother and toddler group?
Imogen:  babies vary so much you are more likely to come across
someone with same experiences on the net but I also have some
friends from my postnatal & the parent & toddler group that
help
Beth:  I still go up the health clinic every other week, and
talk with my friends at work. the BW site is just like a lot of
extra friends I wouldn't have had, and as I don't know many
people where I live that's really nice.
Jane:  Internet is great for meeting others in the same
situation, but it can't replace the real thing
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Mandy:  The website hasn't replaced any other advice sources
just added to them
Marianne: I wouldn't say it's "replaced", more "supplemented".
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Thus while it is true to argue that cyberspace has become a new kind of social terrain, crowded with virtual communities, we dispute the notion that the growth of communications networks reduces the predominance of `geography' as a force shaping community. In our research online virtual support interacted with and supplemented onsite everyday lives. We would, therefore, neither wish to extol the virtues of the virtual community nor wish to dismiss the notion of cybercommunity (cf Driskell and Lyon 2002). Rather, we argue that online and onsite communities are used together to provide support and information networks for new mothers. In our study most women were multi-community individuals, being members of many different parenting communities, both materially and virtually based. Participation in a particular parenting community depended on the contingent immediate needs of an individual woman. So although the virtual world may be spatially separated from the material world, it is at times socially co-joined, making room for more and different types of parenting support networks.

In the intermeshing of online and onsite worlds, the women stressed the difference in the type of support gained in the two communities. Mandy said that: `With people you meet at a toddler group you talk about other local things and people' while most women agreed that: `On the net you talk more generally about parenting issues rather than general chit-chat at mother and toddler groups.' Overall it was considered advantageous to have access to both. Several women had made email friendships through the website, often with women at the same `stage' of pregnancy, age of children or parenting experience (extract 2).

```
Extract 2
Beth:  My husband found the site when we were first trying for
a baby, and I've been hooked ever since. I mostly like to read
other peoples stories. I found a pregnancy diary of a girl in
very similar circumstances to myself and sent her an email -
we've been corresponding ever since… My friend lives in
Australia so we correspond by email.
```

These friendships were often of a different nature to place-based friendships. They were often seen as more transitory and shallow `…only for the duration of the question' and `…more to the point than real friendships' (extract 3)[x]. Our findings thus contradict Willson's (1997) opinion that because social relationships formed in cyberspace are a product of choice rather than luck or spatial proximity, participants have a stronger sense of social cohesion and commitment than onsite communities. In our study generally the converse was true. However, as Miyata (2002) suggests, even weak social ties can promulgate psychological well-being and increase self-esteem for new mothers, so the significance of these `24/7' friendships should not be underplayed.

```
Extract 3
Hen and Clare:  so has joining BW made you feel like you are
part of a virtual mother and toddler group?  Have you made any
friendships through the website?
Marianne:  Yes - being at work full time, I don't get to meet
many other mums. I haven't made any friends I've stuck with
though, only for the duration of the question
Hen and Clare:  and in what way are the friendships different
from 'real life' ones?
Mandy:  On the net you talk more to the point about something
as there are no distractions
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Marianne:  All my friends on the net are people I knew before I
got online, so I can't compare. I've chatted with other people,
btu not got in deep, as it were...
Hen and Clare:  Mandy - do you mean child type distractions or
that it is easier to be straight when people can't see you face
to face?
Mandy:  both
```

Not only were online friendships considered to be qualitatively different to those onsite, but also the information obtained online was seen to be different. Language issues arose when relationships were made with women outside the UK, for example with the use of crib and diaper in the United States rather than cot and nappy. Of greater significance were how ideas about parenting varied with culture: these included sleeping practices and routines for babies, maternal roles and support after birth, weaning times and ideas about infants and crying. There was a diverse set of perceptions as to whether it mattered that the women were getting information and support from different parts of the world, opinions varying from believing that it was enriching their parenting skills, to discounting parenting ideas and practices divergent from their own world view, suggestive of an underlying ethnocentrism. As the quote in extract 4 illustrates, US hegemonic ideas did not pervade this website as they did in Holloway and Valentine's (2001b) research.

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Extract 4
Hen and Clare:  Ruth -does is matter to you that you are
getting support and advice from some where else in the world?
Beth:  no, I think it's great that I get to talk with people
from all sorts of places. other cultures sometimes have
different ideas and solutions that I wouldn't find out about
otherwise.
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Vanessa:  The chinese believe that you should stay inside with
your baby for 40 daysa after the birth
Hen and Clare:  did you do that?
Vanessa:  Absolutely not!
Marianne:  The Americans seem to have different ideas on
bringing up baby. A lot of it is what the latest craze is,
rather than good, solid practical stuff.
Vanessa:  Most are US sites and quite extreme in their advice,
they can be alarmist sometimes
```

Despite these different opinions, there was general agreement that: `It's interesting to know how other people think as well, so you don't get stuck in your own `peoples' ideas of upbringing' (Jane). The women concurred that generally the internet was not changing the way they acted as parents, so although it was broadening their outlook and giving them ideas that they might not have thought of otherwise, it was basically affirming their current parenting practices.

A paradox is evident here: while the internet allowed the women to `…extend their knowledge terrain and horizons beyond the boundaries of the place where they lived' (Valentine and Holloway 2002, 14), the women were also insistent that the internet had not considerably altered their meanings and practices of parenting. Thus regional and local parenting cultures remained fairly intact despite forays into the virtual world to access knowledge that transcended the local. The internet therefore enabled the women to `consume' greater knowledge but they apparently did not internalise that knowledge into practice-based outcomes. This suggests not only that specific cultural constructions of motherhood can limit what can be learnt but also that mothering involves learnt skills that can only be gained through embodied practice, through trial and error of what works for an individual child by a specific mother in a particular place and time. This observation is significant because it informs us about differences between place-based and virtual knowledge systems, hinting at the bounded

nature of virtual knowledges and the enduring legacies of placed-based knowledges which are internalised into everyday lives through `adaptive and continuous embodied performances' (Madge 1995).

Moreover, although the women could have been viewed as being `placeless' at the time of their online communications, they certainly brought both their place-based experiences and meanings about parenting to bear on the parenting information and advice they provided on the website. They also interpreted the information received within their place-based frameworks of understanding. This suggests the continued significance of geography in the (re)construction of parenting knowledge, with onsite and online information sources interacting to form a final version of parenting knowledge utilised at a particular point in time, often cemented through practical experience. It is clear then that a dialectical relationship existed between online and onsite spaces in forming parenting communities and in communicating parenting practices, supporting Valentine and Holloway's (2002) assertion that offline and online communities are mutually constituted.

It is clear from this study that cyberspace does not render geographical place meaningless and that geographically determined influences continue to matter in the study of online communities. For instance, this online community was particularly important to those women who were physically and socially isolated; parenting cultures varied spatially; the social cohesion and commitment to place-based communities remained stronger than this online one; place-based experiences and ideas were used to interpret advice and support (received and given) on the internet, and place-based knowledges appeared to be more enduring and more likely to be integrated into everyday practices than virtual knowledges. Thus although mutually interactive and supportive communities can exist without a territorial basis and mothers can create communities across scales (cf Aitken 2000) which include cyberspaces, nobody lives only in cyberspace (McGerty 2000).

Indeed, the significance of this virtual community compared to the onsite world must not be overstated. It is important to avoid `cyberbole' (Imken 1999) since any claims of the significance of this virtual community must be seen in light of the limitations of the research project in which self-selected computer-competent online users were interviewed, most of whom were in a `traditional family structure', which does not reflect the diversity of family composition in Britain today. So the role of the internet in the lives of these new mothers should not be exaggerated: established knowledges continued with few `revolutionary' alterations to parenting practices as online time complemented everyday life. On the whole, online interactions supplemented and added dimensions to the women's lives rather than copying or replacing the `real world' scenario, hinting at the inappropriateness of the real/virtual opposition. As Kitchin (1998a, 403) summarises: `…cyberspaces do not replace geographic spaces, nor do they destroy space and time. Rather cyberspaces coexist with geographic spaces providing a new layer of virtual sites' which, we argue, interact with geographic spaces to produce a `hybrid' cyber/space combining the virtually real and the actually real.

`Trying out' mothering in the digital arena

This notion of `hybrid' cyber/space can be extended through a consideration of mothering identities in the digital arena. According to Holloway (1999, 91): `Far from being a simply natural experience, motherhood is a complex social phenomenon: it varies over time and space, and is intimately bound up with normative ideas about femininity.' This is because parenting is a cultural ideology which is (re)constructed and (re)produced over time, in response to changing socio-historical and economic-technical changes (Valentine 1997). Competing discourses and practices are played out with respect to motherhood in different times and

spaces so what it means to be a mother varies in different historical periods and in different places. Motherhood is therefore not a natural social relation but a constructed one which is experimented through particular practices, discourses and experiences which sediment over time to produce an `identity effect'. The making of a mother is therefore an ongoing series of repetitive acts which become `sedimented' as the linear effects of identity (cf Thrift and Dewsbury 2000, 413). How, then, did the virtual experience alter the conditions for these repetitive acts and the citation of the self as a new mother? Was there something `special' about cyberspace, in some sense `detached' but coexistent with geographical place through embodied experience, that made it particularly appropriate as a site for the `inbetweenness' of new mothers?

In the same way that online '…disease-focused groups provide unusual opportunities for information exchange and mutual support among people who face special health interests and vulnerabilities' (Sharf 1997, 66), it appears that parenting sites provided a forum for expectant mothers and parents of young children. Indeed, one of the most important reasons for using parenting websites was for the feeling of shared experience in becoming a mother (extract 5).


```
Extract 5
Mandy:  When I first became a mum I found the enormity of it
all very overwhelming
Marianne:  I spent ages worrying that I didn't have the
"telepathy" all mums are supposed to have. I did in the end,
but I was too busy panicking to realise!
Mandy:  I hope all new mums panic cause I still do sometimes
Hen and Clare:   we still do too
Mandy:  I know that feeling
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Marianne:  God, yes!!! Every sniff is a major illness, if he's
sleeping noisily I'm worried that he's uncomfortable and if
he's sleeping quietly - it worries me even more!!!
Mandy:  I'm glad I'm not the only one
```

As Mandy expresses above, part of this need to share experiences comes from the desire to have your own thoughts and feelings confirmed as being 'normal'. The importance of sharing your feelings with others going through the same experience at the same time was also significant to the women in Oakley's (1979) classic study 'Becoming a Mother'. Amongst these women '…it was generally felt that husbands, mothers, friends, etc. did not provide a sufficiently sympathetic or interested audience for a detailed recounting of the experiences and difficulties of becoming a mother...' (Oakley 1981, 50-51). This was precisely the kind of support offered on Babyworld, a place where everyone had recently professed to have been through a similar experience and as such was deemed to have a special understanding or empathy with other online community members (see extract 6). The website was actively used by the women to legitimise their changing feelings as they became mothers and so mutual support was gained through a reciprocal communication process (Tichon and Shapiro 2003).

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Extract 6
Mandy:  It also helps knowing that other people are having
problems too
Marianne:  Sometimes it's enough to know that you're not the
only one!
Mandy:  Yes suggestions from different kinds of people
sometimes help you to think about something that you wouldn't
have done before
Marianne:  Very useful on the birth stories - although we
discussed pain relief in ante-natal classes, no one there had
ever tried any of it, so the information wasn't realy complete.
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```
Mandy:  Yes you can't describe giving birth until you have been
there no matter how much researce you do
Marianne:  TRUE
```

Often asking a question was just as important as the response, allowing the women to get the problem clear in their own heads through articulating it to another `faceless' woman: `Sometimes it helps to ask the question even if you don't get an answer to get things straight in your head' (Mandy). Clearly these mothers were not using Babyworld solely as a source of information but also as a `…valuable outlet for the verbalisation of feelings' (Oakley 1981, 50).  This hints at the significance of the website in enabling the women to `try out' different versions of themselves in the rapidly changing time/space of motherhood. This is important, for as Aitken (2000, 70) suggests `…there is little in the public life that prepares us for the very different rigours of parenting.' This `trying out' of motherhood was not a straightforward process however, but one beset with instabilities, for at other times the anonymity of the internet enabled some women `slippage' from the subject position of motherhood, allowing them to go back to more familiar versions of themselves. As one woman (Elin) stated: `I think sometimes you need space to talk about your children without them there - just being yourself.' So virtual space provided the possibility of competing, contradictory and sometimes transgressive performances of motherhood to occur - a classic example of the indeterminacy and ambiguities involved in the construction of the subject (cf Gregson and Rose 2000).

As Morahan-Martin (2000, 683) expresses: `On-line anonymity and lack of face-to-face interactions frees individuals of social and physical constraints, and has allowed women to express parts of themselves that they might not have otherwise in a safe environment, enabling them to explore new identities.' This anonymity, while significant for the women, may have had more negative consequences for their children in terms of the generalised advice received.

Unlike the parents in Grimshaw and McGuire's (1998) study who were unhappy with generalized advice not specific to their children, our respondents did not seem unduly concerned with this matter. Indeed, the majority of respondents (71%) agreed that it did not matter that the people they talked to on Babyworld had never met them or their family[xi]. In fact the interviews revealed that for some mothers this was considered a distinct advantage of the internet (extract 7).

```
Extract 7
Hen and Clare:  does it matter to you that the people you meet
'on-line' have not met your child in real life?
Imogen:  Not really - sometimes it helps
Elin:  not necessarily, that is why the baby pages are good.
Hen and Clare:  in what way?
Elin:  you can show off your beautiful child, and no one can
hear the tantrums!
Hen and Clare:  what do you mean by it helps that they don't
know your child (Imogen)
Imogen:  my daughter is very difficult "high needs" but likes
other people around so when I meet people they think she is
wonderful and think i'm making up the problems!
Elin:  I know that feeling!
Hen and Clare:  so in some ways then it can be easier for you
if people don't meet her
Hen and Clare:  and just see pictures of a lovely smiling girl!
Imogen: Yes
```

This quote reveals the ambiguities, complexities and contradictions involved in the women's constructions of themselves and their children. It also shows the different ways women negotiate motherhood resulting in a variety of complex subject positionings, even within the same individual (cf Longhurst 2000). This is probably to be expected as motherhood

is, after all, riddled with contradictions (Figes 1998). Anonymous interaction enabled some women to slip into alternative versions of motherhood which may in fact have borne only a limited resemblance to their daily lived experience. The internet can therefore allow individuals to `…carefully select, polish and embellish aspects of their selves' (Cheung 2000, 50). In our study this `trying out' allowed the women some emancipatory potential: they could gloss over the alleged problems of their children and perceived inadequacies of their mothering skills to present a more `rosy' idealised picture of motherhood and in doing so escape the restrictive moralities of mothering within the (apparent) safety of a female-dominated community. The `safe space' of the internet enabled the women to `reformulate life' (Keating-Lefler and Wilson 2004) as new mothers through playing with alternative versions of the self.

This `trying out' may be particularly significant in this case because becoming a mother is an ongoing process: `The birth of a mother does not take place in one dramatic, defining moment, but gradually emerges from the cumulative work of the many months that precede and follow the actual birth of the baby' (Stern *et al.* 1998, 3). The anonymous space of the internet was one way in which the women experimented with the acts involved in becoming a mother. These acts can become `sedimented' through repetition to produce an identity `effect' which may then `spill over' in an iterative manner to undermine, support or blend with place-based identities. But pregnancy and birth are also intense body experiences (Warren and Brewis 2004) so cyberspace also allowed `reintegration' of the women's bodily boundaries so disrupted during pregnancy and birth, aiding them in coming to terms with the `corporeal chaos' of their changed bodies (Coyle 2004). Babyworld provided a venue in which the women could negotiate their changed sense of body and identity and come to terms with their `…fleeting, multiple and contradictory selves' (Cheung 2000, 45). As Robins (1995, 142) suggests: `This is because the technological realm offers precisely a form of psychic protection against the defeating stimulus of reality. Techno-reality is where identity crises can be denied

or disavowed…; or it is where stressful and distressing consequences of fragmentation can be neutralised.' Perhaps this is particularly so because women may be more vulnerable to a `crisis' of identity when they become mothers than at any other life stage (Figes 1998, 38)[xii].

However identity formation is not fixed but continuous and often contradictory. It involves negotiating changes and affirming continuities. It is a process that draws on everyday place-based gender identities as much as on `fictitious' representations in the disembodied world. So although the internet has been interpreted as leading to the emergence of a distinction between the embodied self and the disembodied multiple cyber selves (Hardey 2002, 581), in this case cyberspace was usually used in ways that were grounded in pre-existent social and economic processes: for most women their online identity was in fact a confirmation of offline identity rather than a reconstruction of it. As Valentine (2001, 60) so correctly observes `…cyberspace is always entered into, and interacted with, from the site of the body', so this `processing' of the changes involved in becoming a mother was usually only temporary as the time-consuming reality and bounded nature of life as a new mother intruded into cyberspace. In the case of new mothers it is clear that overblown claims of the significance of disembodiment must be disbanded, as the demands put on the body by newborn babies and young children means that the cyberself can never be completely `wrenched away' from the physical body. It may be more accurate to argue that cyberspace provided some of the women with the potential to `try out' different versions of themselves simultaneously, with the possibility of fleetingly transcending motherhood (or being a different mother) in the virtual arena, which was simply not possible `on the ground' owing to the imperatives of the (breast feeding/sleep deprived etc) body. But it is how both this simultaneity and corporeality intrude into cyberspace to which we finally wish to turn our attention.

Liminal cyber/space and everyday corporeality?

This study of a distinctive virtual place at a particular time by a specific group of women exposes the contingency of internet use, the heterogeneity of people using it and some of the paradoxes involved in it. It suggests the need to recast imaginings of cyberspaces as undifferentiated and static virtual zones to ones which are as heterogeneous and constantly changing as materially grounded geographical spaces. And it shows both the importance of disaggregating cyberspaces and the emergence of differentiated virtual geographies interacting with everyday lived practices. One way in which this complexity can be understood is through the development of the notion of cyber/space. This term hints at the embedded nature of geographic and virtual space but it does not capture the simultaneity of the actually real and the actually virtual. To do so, we suggest that future studies of cyber/space draw on notions of liminality.

According to Shields (2003, 12-13), liminal zones allow transformation from one social status to another. In liminal spaces `initiates' are instructed in their new identities and responsibilities. This interstitial space is where one is both `betwixt and between' stages in the life process. In our research the virtual space betwixt and between geographical space allowed for transformation in `becoming a mother'. It appears that cyberspace as a liminal space and becoming a mother as a liminal life stage are particularly suited to one another. In this case new mothers negotiated creatively with online/onsite boundaries to create a conducive liminal space for `trying out' different versions of motherhood. This is significant because according to Figes (1998, 31, 45): `Childbirth is too significant a rite of passage to forget easily…but the absence of postpartum rituals in much of the Western world leaves the rights of passage to motherhood unfinished.' Cyberspace may offer one way of helping new mothers adjust to their new way of life and their changing versions of self, for as Young (1990, 168) highlights,

especially after the birth of her first child, a woman will experience a transition to a new self that she may both desire and fear.

Shield's (2003) work derives from that of Arnold Van Gennep (1909) and Victor Turner (1967). Van Gennep discusses the role of rites of passage that accompany movement from one `cosmic or social world to another'. These rites of passage involve three stages: separation (preliminal), transition (liminal) and reintegration (post liminal). During separation individuals become separated from their previous social environment and way of life. This clearly holds resonance for some women in the latter stages of pregnancy (Davidson 2001 but see Aitken 2000 for an alternative view). During the transition phase the individual experiences the liminal condition. We argue here that the use of the internet by the women in our study was one aspect of the liminal stage in the transition to motherhood, helping them through their psychological period of adjustment. Finally, during reintegration an individual enters a new group or way of life. Again, in our study we found parallels: once `integrated' as a mother, few women continued to use the internet as often or in the same intense manner, suggesting it was particularly significant during the liminal stage.

Turner (1967) focused on this liminal stage and argued that this period represented the possibility of an unstructured egalitarian social world termed *communitas*. *Communitas* derives from Latin and refers to a `modality of social relationships' rather than `an area of common living' which is a `timeless condition'. According to Turner (1967) *communitas* is characterised (in part) by equality of relations, comradeship that transcends age, rank, kinship etc and displays an intense community spirit. Thus people from all social groups may form strong bonds, free from structures that normally separate them. Again, there are clear resonances with the case of the cybermothers community: *communitas* can and does commonly occur online. As Turner so eloquently stated in a far-sighted observation: `The very flexibility and mobility of social relations in modern industrial societies, however, may provide better

conditions for the emergence of existential *communitas*, even if only in countless and transient encounters, than any previous forms of social order.'

We would suggest therefore that liminality, as a concept that can denote both a space and time of `betweenness', is a most useful tool in the virtual geographers `conceptual handbag': it enables a more lively understanding of cyberspace; it enables a way of thinking about cyberspace as a space where motherhood can be explored but also developed and it animates cyberspace as a productive space with creative possibilities. Liminality thus enables a way of thinking about cyberspace as a generative space which both operates as a metaphor but also represents lived practices, where alternatives to binaries may be thought out and lived through (cf Johnson *et al.* 2004).

But although cyberspace allowed new mothers to `try out' different versions of motherhood resulting in the production of new selves, these selves had a lot of residual attachments to embodied experiences and practices. The liminal zone of cyberspace is clearly not only virtual; it is also corporeal. A mother of a newborn baby can simultaneously breastfeed while `trying out' alternative versions of herself as a new mother on an online discussion forum. Dualisms of presence/absence offline/online mind/body become disrupted, as the new mother is both a part of and apart from cyberspace/geographical space simultaneously. Virtually real and actually real spaces blend in space and time producing both ordinary and extraordinary `hybrid' cyber/space. But they MUST do so in a corporeally grounded manner, for pregnancy and new motherhood are intense body episodes in which a woman can have little jurisdiction over her body. According to Warren and Brewis (2004, 221, 222) this is when `… the body apparently slips its moorings and refuses to `obey' in commonplace ways, ….a period during which matter literally takes over from mind.'

Moreover, the celebration of disembodiment in cyberspace is a Western quest to escape the physical, what Spellman (1988, quoted by Travers 2003, 226) calls somatophobia, or hatred

of the flesh: `Western social stratification reveals a link between physicality and low socioeconomic status. Freedom from physical labour is the reward for higher status. What assumptions are we perpetuating through this celebration of lack of embodiment in cyberspace?...Exulting the denial of the body reinforces the current gendered, race and classed division of labour…Tied to this hatred of the flesh is the marginalisation of women and other groups who are associated with the body…' (Travers 2003, 226, 229). So this paper makes a claim to redress the `obsessive attention' (Whitty 2003) to the absence of the body online and attends to Hillis' plea that the new virtuality must call `…the imagination back to embodied physical world' (Hillis 1999 quoted in Graham 2004, 281). We suggest that new theorising about cyber/space needs to combine a consideration of liminal cyberspaces with everyday corporeality: the mother with a newborn simply cannot `leave home' (cf Hillis 1999) without the body[xiii].

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Notes

i Here we retain the term geographical space for ease of understanding, as this is the expression used in the cybergeographies literature. It would, however, probably be more accurate to use the term material space to refer to the `actually real', as virtual space is also a version of geographical space.

ii The terms `virtually real' and `actually real' are adapted from Shields (2003, xv) and have been adopted here because for many people cyberspaces have become so integrated into their everyday lives they have become part of their daily realities - actually existing in the materialities of existence as well as in the imaginative and discursive realms.

iii There is some debate over the use of the term liminal. Turner (1982, 32) insisted that liminal could not be applied to `modern' societies but that liminoid - or not quite liminal - was more appropriate. Shields (2003, 19) has also argued that digital virtualities are liminoid in that they derive from the liminal but do not entail rights of passage. This is problematic in the sense that it artificially divides so-called `pre-modern' and `modern' societies. Also, in the case of cybermothers it is arguable that in some sense the women were going through a rite of passage in the use of Babyworld website in their transition to motherhood. We have therefore decided to use the term liminal rather than liminoid in this paper.

iv We use the term `trying out' to suggest that while there was at times a degree of intentionality in the women's interactions, this was certainly not always the case: many virtual exchanges were not coherent, complete or pre-thought. Subject positionings were moved into and slipped out of in different situations.

v This is not to suggest that in being a mother one has a fixed or stable `core'. Rather we would argue that there is no preconstituted `body' onto which motherhood is inscribed; what it means to be a mother is constantly produced and reproduced through varying and competing discourses and practices from a variety of people and places. The construction of mother as a category is not a pre-given, coherent and stable subject position.

vi The authors are grateful to the University of Leicester who funded this project. Also thanks to Babyworld.co.uk and all the women who participated.

vii We would argue that Babyworld does indeed represent a virtual place, not just an empty cyberspace. It was so much more than an internet point of presence because its virtual space was produced and given meaning through social practices and social communication, creating a virtual place. Through specific performances, this virtual space came into being.

[viii] We use the term `community' with some reservation. For some women Babyworld was a distinctive online place where they could meet other mothers, ask advice etc; for others Babyworld had become more embedded in their everyday lives and so it represented a stronger sense of a bounded community. What is clear is that cyberspace was not equally used and valued by these new mothers so any theorising about cyberspace must focus on specific online places.

[ix] The questionnaire survey was accessible to anyone who used the website over a 6-week period. In the first two weeks over 110 completed questionnaires were received but this response rate tailed off during the remaining 4 weeks to give a total of 155 responses, with a further 16 email responses from people expressing interest in a detailed further interview.

[x] This observation should be seen in the context of the timing of the research (1998), when use of the internet was a fairly new `tool' in the armoury of new parents. In 1998 it is estimated there were 30 million internet users compared to over 110 million in 2001 (Wyatt *et al.* 2002, 27). By 2004 more new parents are using the internet and it is likely the quality of friendships will be deepening as people's understanding of the Internet matures and it becomes more intricately entwined in their lives. Indeed a message recently posted on Babyworld's antenatal club's homepage read: `Our kids are two now, but our antenatal club is still going on' (http://www.babyworld.co.uk/community_intro/antenatal.asp Accessed January 2003). Such a speculation is borne out by Wyatt *et al.* (2002) who suggest that internet communication is increasingly replacing interpersonal and group interactions.

[xi] Although this may be because, as noted above, the advice and information received from Babyworld rarely resulted in any dramatic alterations in parenting practices.

[xii] We are a bit wary of the term `crisis' here as we would not want to pathologise the disorientation and dislocation that one can feel on becoming a first time mother. Rather, in our experience, this can be a `normal' state of affairs owing to the enormity of bodily, political, social and economic changes having a baby can engender for some women.

[xiii] But this is not to argue that this corporeal body of a new mother is not also in part constituted by linguistic practice and representation (cf Longhurst 2000, 457).