Parenting gone wired: empowerment of new mothers on

the internet?

Clare Madge* and Henrietta O'Connor**

*Department of Geography, University of Leicester, Leicester LE1 7RH. Email: CM12@le.ac.uk Tel: 0116-252-3643 Fax: 0116-252-3854

** Centre for Labour Market Studies, University of Leicester, Leicester LE1 7RH. Email: HSO1@le.ac.uk Tel: 0116-252-5950 Fax: 0116-252-5953

Abstract

The extension of information and communication technologies is purported to provide great opportunities for women, with the potential for empowerment and feminist activism. This paper contributes to the debate about women and cyberspace through a focus on the role of the internet in the lives of a group of technologically proficient, socially advantaged white heterosexual new mothers. The internet played a central role in providing virtual social support and alternative information sources which increased these women's real sense of empowerment in the transition to motherhood. Simultaneously, however, very traditional stereotypes of mothering and gender roles persisted. A paradox is evident whereby the internet was both liberating and constraining: it played an important social role for some women while at the same time it encouraged restrictive and unequal gender stereotypes in this particular community of practice. An examination of new virtual parenting spaces therefore has a contribution to make in understanding changing parenting practices in the new millennium.

Key words: Cyberspace, internet, mothers, empowerment.

Women, the internet and empowerment

Recent research suggests that the extension of ICT (information and communication technologies) into virtually every area of society provides great opportunities for women (Cherny and Weise 1996; Kennedy 2000). It is claimed that ICT have the potential for empowering women, enabling feminist activism and resistance to male power (Harcourt 1999; 2000; Sutton and Pollock 2000; Youngs 2001). Much has been made of the support, information exchange and political potential afforded to women through online community membership (Kramer and Kramarae 2000; Pudrovska and Ferree 2004; Vehvilainen 2001) and how ICT offer new opportunities for women to develop as entrepreneurs and innovators (Martin and Wright 2005). Others suggest cyberspatial technologies can enable a radical renegotiation of gender relations and challenge patriarchal hegemony (Haraway 1985; Jenson *et al.* 2003; Travers 2003).

However, over zealous claims of the power of ICT for transforming women's lives are not without critics (Gajjala 2003; Gajjala and Mamidipudi 1999; Mitra 2001; Woolgar 2002). Studies have shown how online discourses and practices continue to reflect and reinforce the unequal gender power relations present in onsite institutions and social conventions (Hocks 1999; Josok *et al.* 2003) and sexist practices abound (Cunneen and Stubbs 2000). Moreover, while the gender gap with regard to internet use is narrowing, the majority of women on the internet still continue to be white academic professionals (Travers 2003). The majority of participants on bulletin boards and listserves are also still men and men also dominate participation volumes and agenda setting even in feminist and mixed-gender cyberspaces (Gurak 2001). Recent studies suggest that effective use of the internet to increase women's empowerment may be overshadowed by its commercialization (Shade 2003) and its role in affirming norms of femininity and consumerism (Pitts 2004). These debates are couched within assessments of the significance of disembodiment for 'cyber-agency'. A number of scholars have suggested that the absence of the body online can result in greater freedom to perform different and often multiple identities (see Davies 2004 and Pitts 2004). The online venue is a place where the tangible existence of the researcher is removed, so bodily presence (age, gender, ethnicity, hairstyle, clothes, accent) become invisible. The internet then promises a radical potential in representing new genders, new sexualities and de-essentialising fixed unitary subjectivity. Plant (2000: 335), for example, suggests: 'There is a virtual reality, an emergent process for which identity is not the goal but the enemy, precisely what has kept at bay the matrix of potentialities from which women have always downloaded their roles.'

However, this 'net utopianism' of disembodiment has been challenged on several fronts. Seymour (2001), for example, suggests that while the '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. As Higgins *et al.* (1999: 111) suggest '...the electronic frontier has a history, geography and demography grounded firmly in non-virtual realities of gender, race, class and other cultural variables that impact on our experience of the technological.' Hardey (2002) also suggests that virtual interactions are inevitably shaped by, and grounded in, the social, bodily and cultural and experience of users. So often in practice there is a rigid adherence to gender norms in the virtual arena as it is increasingly recognised that online textual persona cannot be separated from the offline physical person who constructs them and they are commonly based on offline identities in any case (Valentine 2001: 56). This contested debate regarding disembodiment in cyberspace suggests that the extent to which the anonymity of virtual

interactions helps foster women's empowerment still remains an important research question.

Also despite this burgeoning literature, it is still generally acknowledged that there is a paucity of work on gender and ICT (Green and Adam 2001). Women's websites, for example, are for the most part absent from discussions about electronic communication. As Eble and Breault (2002: 316) note: '...dismissing and/or overlooking popular mainstream online venues for women seems to render these sites and the women who form these communities unknowledegable, unworthy, unimportant, unqualified, unnecessary...In short, failing to recognise or neglecting to acknowledge the potent and important exchange, creation, and dissemination of information and knowledge (albeit often domestic) taking place at these sites is a significant oversight.' So even though there is a growing scholarship addressing virtualⁱ spaces carved out by and for women, many important questions still exist about women and ICT, particularly in the context of their everyday lives. Existing scholarship pertaining to women and technology has consistently focused on how technology is used to marginalise and oppress women rather than on offering complex, complicated understandings of how women negotiate virtual communities (cf Eble and Breault 2002: 327).

This paper aims to present a complex understanding of one poorly documented virtual community: cybermothers (women with newborns/young children who use parenting websites to elicit information/support about parenting matters). The focus on cybermothers is timely as Ekinsmyth *et al.* (2004: 104) recently insist that '...a great deal of further work is needed to research the geographies of parenting, childrearing, family and the home' and Aitken (2000: 68) claims: 'Extraordinary events such as the birth of a child can ...pose important questions about responsibility, family, community and society.' More work is still needed about the ways in which mothers think about, and experience, their

6

lives as mothers (cf Phoenix *et al.* 1991: 6). In particular, the transition to motherhood can be fraught with difficulties with Figes (1998: 38) suggesting that women are probably more vulnerable to a crisis of identity when they become mothers than at any other life stage. Clearly then any research that can illuminate the possibilities of support and empowerment for new mothers is important.

Indeed, the paucity of work on new mothers using the internet is unexpected since it is widely acknowledged that the use of the internet as a source of health information is increasing (Fogel 2004; Hardwick and MacKenzie 2003; Nettleton *et al.* 2004; Pandey *et al.* 2003). This may be in part because the internet enables people to 'self-diagnose' and to 'discipline' their bodies (Parr 2002: 73). Indeed, parents form a high proportion of those who are using the internet to seek health care advice for self-diagnosis for themselves and their children, a trend reflected in the growth of the number of parenting websites (Sarkadi and Bremberg 2005). Moreover, the benefits of using the internet for disseminating parenting skills have been recognised by health professionals, aware that the resources available for teaching new parents about the day-to-day aspects of child care are limited (Alder and Zarchin 2002; Hudson *et al.* 2003; Lamp and Howard 1999). Parenting websites offer users the opportunity to join an online community based around a common interest, providing information, support and advice (Burrows *et al.* 2000).

Yet despite the acknowledgement of the potential significance of virtual parenting websites, little has been written about the actual experience of online life for women becoming new mothers. This partly reflects the fact that '…relatively little is known about how people actually employ information and communication technologies (ICT) within the context of their everyday lives' (Valentine and Holloway 2002: 302). It also reflects the fact that '…more thinking and research about how people actually use the internet for health 'empowerment' is required (Pitts 2004: 54). Questions include: what can be gained

from becoming a member of a virtual parenting community? Can it increase a woman's sense of empowerment? What is the significance of communicating anonymously? Does it challenge or uphold patriarchal power relations? Answers to these questions will be sought in this paper in an attempt to determine whether an examination of new virtual parenting places has a contribution to make in understanding changing parenting practices in the new millennium.

This is important, for as Valentine (1997) has documented, parenting is a cultural ideology which is (re)constructed and (re)produced over time, in response to changing socio-historical and economic-technical changes. These changes mean that mothers (predominately) are currently raising their children in contexts different to that of previous generations and as a result mothering practices are being renegotiated (Holloway 1999: 92). This paper focuses on these renegotiations in the light of changes brought about by the internet, for as Dodge and Kitchin (2001: 52) identify, the most profound impact of cyberspace is how it affects social relations; in this case the social relations of parenting. As Miyata stresses (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.'

This paper then focuses on role of the internet in the everyday lives of new mothers, for as Haythornthwaite and Wellman (2002: 35) note: 'It is time for further analyses on the Internet in everyday life. Further analyses need to examine in more detail the effects of the Internet, focus on the types of activities performed online, and explore how these fit into the complexity of everyday life.' In addressing these issues the paper is structured into five parts. First, details of the virtual research process is outlined, followed in the second section by details of the online venue under study. In the third section an assessment is made of the role of the internet in providing support and information for new mothers. The fourth section examines the significance of anonymous interaction for creating 'safe' virtual parenting places and challenging and/or upholding everyday place-based parenting cultures. Finally the conclusions assess the potential of the internet for increasing women's empowerment in the transition to motherhood and suggest important policy implications.

The virtual research process

This paper draws on the experience of an online research project entitled Cyberparents (http://www.geog.le.ac.uk/baby/). The project developed out of a personal interest in parenting matters, having recently become new mothers and having used internet parenting websites to gain advice and information about being a parent (see, for example, http://www.babyworld.co.uk http://www.practicalparent.org.uk/, http://parentsplace.com and http://raisingkids.co.uk). The research project also arose out of a political imperative, with parents being high on the policy agenda with the development of the British government's £540 million parenting support scheme 'Sure Start' (Buckby 1998). Yet no mention was made of how the internet might contribute to such parenting support schemes. We therefore initiated the Cyberparents project to examine how, why and in what ways new parents used the internet in banal and everyday ways (Holloway and Valentine 2001a: 129) as an information source about parenting and as a form of social support.

Following Gurak and Ebeltoft-Kraske's (1999: 147) plea for internet research to move away from generalisations towards studies situated in specific contexts and technologies, we decided to focus on one specific 'place' in the digital world. Babyworld (http://www.babyworld.co.uk) was selected as the case study site because it was the first UK-based parenting website, launched in 1996, and advertised as 'the mother of parenting websites'. At the time the research project was set up this website had a high profile amongst parents as it was advertised in the 'BountyGuide' parenting handbook distributed by hospitals to all new parents (Rodway 1997). Usage figures showed that babyworld was the largest parenting site in the UK with 160,000 unique visits per month, generating 3 million page impressions (<u>http://www.babyworld.co.uk/aboutus/press/press_office.asp</u> Accessed April 2005).

The research process was initiated through direct contact with the babyworld team and a face-to-face interview was conducted to get background information on the social production of the website, which was itself in its infancy. We found that the 'key players' in the website's production were all parents and so rapport developed based on our similar life experiences. While the babyworld team gave us no direct access to the website users, they did allow us to create a hotlink from the home page of the babyworld site to our cyberparents website (see Madge and O'Connor 2002 for details). It is significant to note that without the agreement and co-operation of the website providers to place this strategic hypertext link, it would have been much harder to recruit these specific online community members.

In this case the significance of having the babyworld team 'on our side' cannot be underestimated but it must be stressed that the research project was at all times independent, with no connections what so ever between us and babyworld, other than a social empathy as new parents. This commonality of identity as new mothers also facilitated our mother-to-mother virtual interviews and we did not find that we were viewed as 'an unwelcome arbitrary intrusion' (Paccagnella 1997: 3) as other academics researching into online communities have been perceived. Perhaps this was because we were socialised and acclimatised into this specific online community as previous users of the website, but also because we were very clear about disclosing our identity as researchers when the project began. We were also mindful of issues of informed consent, confidentiality and sharing the results of our research from the outset, and so were not viewed as 'research paparazzi in cyberspace' (cf Chen *et al.* 2004). Indeed, when the interviewees were questioned about the virtual interview process, many positive responses were received (see extract 1).

Extract 1 Hen and Clare: Can you comment on the interview - have you found it interesting? Have you preferred it to filling in the Q.? Jo: It's been fun. It's better than a Q, as sometimes someone else; s answer can make you think of somethign you wouldn't have thought of by yourself. It is nice to be more personal than the Q Julia: Hen and Clare: did the fact that we were both new mums influence your decision to take part? or were there other reasons? I like doing anything that involves parenting although Jo: it was nice to know that you would understand my experiences Julia: It did help - talking to people who haven't experienced it themselves is never satisfactory really. Also, I wanted to do my bit to help, as other people have helped me in this new experience.

According to Parr (2002: 87): 'There is presently a gap in the geography literature about qualitative methods in virtual space...and future 'Internet research' in social and cultural geography needs to take this into account.' In this Cyberparents project novel quantitative and qualitative online research methods were used to elicit information: a web-based questionnaire survey and semi-structured synchronous virtual group interviews (see Madge and O'Connor 2002 for details). The web-based survey was used to identify general patterns of use (see http://www.geog.le.ac.uk/baby/). The questionnaire was completed predominately by women (84%), the majority of whom were under 35 (76%) and lived in the UK (80%). 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 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 second stage of the research process involved semi-structured synchronous virtual group interviews to gain more detailed understanding of the key themes emerging from the questionnaire data. These virtual group interviews were conducted using a software conferencing technique - Hotline Connect. The interviewees 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 (although the age ranged from 10 weeks to 3 years). Each interview lasted between one and two hours and was based on a semi-structured format recommended for investigating the '...personal significance of what has transpired in the lives of the respondents' (Coyne and Gottlieb 1996, 985). Extracts from the virtual interviews are made verbatim, including spelling mistakes and the names of all interviewees and their families have been changed to provide anonymity.

Online landscape and virtual venue

Babyworld.com Limited, which is now a subsidiary of a UK Internet service provider, was started by Radcliffe Medical Press, a medical publisher, '...determined to bring accurate

and reliable advice to new parents'

Accessed April 2005). A face-to-face interview with the babyworld team revealed a fairly altruistic rationale for the initiation of the site in 1996. With very little financial backing, the site originally focused on providing high quality free information on health issues particularly for UK parents, and there were no shopping facilities or discussion forums. By 1998 the site had gained some sponsorship and the interactivity and commercial rationale had increased but babyworld's mission continued to be 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 today is 'Babyworld: be part of it'. There is a lively community where parents make friends, share experiences and support each other, augmented by an online 'ask the expert' facility. Membership of the 'community' is free but it is possible to 'lurk' and post messages without formally joining, although certain areas are restricted to members only. Members of babyworld are encouraged to become involved in the community, for example, by becoming chat room moderators in areas with which they may have personal experience (e.g. post natal depression, infertility, multiple births), or by joining the vibrant antenatal club. They can also share life experiences through pregnancy diaries, birth stories, baby diaries and the kids gallery. Although babyworld is open to both men and women, most of its users are women and for this reason the research focused predominately on new mothers rather than new fathers. Further to this, there is an underlying presumption that the users of the website are heterosexual, white and middle class. 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,

⁽http://www.babyworld.co.uk/aboutus/team/who%20is%20behind%20babyworld.asp

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).

Babyworld does, of course, also have a commercial rationale and it claims to be 'the UK's biggest online retail shopping site for expectant women and parents with young children.' (http://www.babyworld.co.uk/aboutus/press/feb00bwshop.asp Accessed April 2005). A range of products can be purchased including baby equipment, toys and gifts. Sponsorship is also gained from a variety of commercial companies, as evidenced from the variety of advertisements populating the website. It must be noted however, that shopping was not considered an important reason for visiting babyworld in our study. Our online questionnaire revealed that only 6% of respondents used the website solely for shopping, compared to 16% for the discussion forums only. Shopping was also rarely mentioned as a reason for visiting the website by the interviewees, even when probed by the researchers. Much more important was the online support and information that could be gained from the website.

Online support, information and empowerment in the cybermothers community

The web-based questionnaire revealed the significance of using the internet for parenting advice for this sample of parents. Most (71%) respondents indicated that the internet was an important source of parenting information compared to their mother (69%), other mothers (51%), childminder (38%) and neighbours (15%). The most important reasons for using the babyworld website were knowledge (78%), support (76%), convenience (73%) and range of audience (73%). Online knowledge and support were clearly significant and babyworld actively advertises itself for the information and support it provides for new mothers: 'The website provides mothers with a free forum where the experience and

knowledge of both experts and other mothers can be shared, *serving as a total support network and caring community*. With thousands of pages of advice updated on a daily basis, babyworld is a reference source, shopping facility, magazine and *extended family* rolled into one'

http://www.babyworld.co.uk/aboutus/press/dec98onebigmotherofawebsite.asp Accessed

April 2005, emphasis added). The interviews confirmed various supportive roles of the website. In particular, it was stressed that babyworld website was important in forming connections with other mothers, providing the women with a huge 'source' of other women who may be dealing with/suffering similar specific problems, such as postnatal depression or toddler tantrums. The women stated that they gained from the experience and expertise of other mothers on the website, who provided 'companion support' (Nettleton *et al.* 2002) (see extract 2).

Extract 2

Elin: I suffered from Pre-eclampsia and had an emergency caesarean. I found this difficult to deal with, what I learnt from the internet helped greatly Hen and Clare: that must have been hard Elin: It was a bit, being able to log on and just read other peoples stories to start with helped. I didn't join in until later Jane: Yes, it's friendly - easy to finds lots of info. Also, you can feel more involved than with a magazine. Marianne: it's reassuring to read about other mothers' problems and a good source of solutions Jane: It also helps knowing that other people are having problems too Indeed, the advice and information interviewees tended to mention was provided not by 'experts' but by other mothers. This feeling of 'shared experience' was one the most important reasons for these mothers using the internet for parenting information. Information from other mothers was seen as a good supplement to information gained from books and health professionals (extract 3).

Extract 3 Hen and Clare: are you happy with the info. you receive from babyworld? Hen and Clare: does it compare well with info. from elsewhere (gp, health visitor, mother etc.) Imogen: yes - its great - other mums offer better advice tha HV etc Imogen: my mum's 30 years out of date! Elin: so is my health visitor my health visitor doesn't have children, not always a Elin: bad thing but some things she just cannot appreciate Imogen: I also find the HV advice sometimes sounds like is coming from a text book as mt HV's children are grown up Elin: babies vary so much you are more likely to come across someone with the same experiences on the net

This is important for as Grimshaw and McGuire (1998: 55) argue, although parenting has moved into public discourse '...there has not been a comparable development of ways for parents to share their experiences in a non-judgmental setting.' The Community Mothers Programme (O'Connor 2001) recognised the need for new parents to discuss their concerns in a supportive and non-judgemental environment and succeeded in establishing such a facility, through home visits by mothers to mothers. The babyworld website would also appear to provide this kind of non-judgmental 'esteem support' (Nettleton *et al.* 2002) which women can access from their own homes.

'Informational support' (Nettleton *et al.* 2002) was also important. Advice and support was considered particularly useful for on the spot feedback especially at unsociable hours. One woman (Jo) stated: 'It is useful when it is late at night and there isn't anyone you wish to disturb for a trivial problem' while another commented that 'When I was pregnant, I found it useful, as I could get advice on what was what when I felt something was happening' (Jane). The fact that no appointment is necessary and that the website can be used 'at a time entirely suited to you and not someone else' (Jo) was considered significant. Another women stated that it was the fact you could not only access it when you wanted but also how often that was important to her: 'It could be three in the morning or the 10th time that day' (Elin). Healy (1997: 60) has underscored this observation: 'The networked citizen is never alone. Synchronously or asynchronously, the sun never sets on the virtual community.'

In our study this virtual support was of particular significance for those women living away from their extended family (especially mother) or if close family members worked or if their mother had died. The online parenting community therefore played an increasingly significant role for those women who were geographically or socially isolated, where mothering could not be a 'locally' shared activity (extract 4)ⁱⁱ.

Extract 4 Marianne: The info has been good so far. My mother passed away and my nieces are 10 and 13, so their mum's are a bit rusty. Sue: I had very little support from family or friends during my first pregnancy so the Internet Sue.: was a great help Elin: I don't know that many mums in my area so baby world is really helpful for me Mandy: Yes- being at work full-time. I don't get to meet many other mums Jane: The main reason why I use the internet and these babysites, is that I know noone where I live, and it gives me company, as well

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.

Online support was translated into feelings of empowerment by many of the women using babyworld. Several women noted this sense of empowerment through increased confidence and a greater sense of control. Elin stated: 'You can feel more in control and not feel you are pestering people.' Marianne said: 'I don't feel like an idiot asking questions I ought to know the answer to-... have had several daft questions answered on there so far!' The increased knowledge improved women's ability to make decisions and feel more in control of their lives as new parents. As one mother succinctly stated: 'I think the more information you can get the more informed decisions and choices you can make' (Elin). Although it must be noted that this empowerment in this self-selecting group is not surprising as those who felt alienated by babyworld would not have returned to the site or engaged in the online discussions, it cannot be denied that online self help communities encourage people to take an extremely responsible role in their own care through practical advice about coping, emotional support, technical medical information and online second opinions (Ferguson 1997). Our study is not alone in recognising the value of websites in improving women's knowledge. Pendergrass *et al.* (2001) have discussed the value of a website in improving disabled women's knowledge of reproductive health while Sharf (1997) has documented the support and empowerment received by women on the Breast Cancer List. As Pitts (2004: 47) succinctly states in her study of the personal web pages of women with breast cancer: 'In sharing stories, women offer each other mutual support, a forum for exploring issues of the body, psyche, relationships and community that are relevant to them, and a sense that their knowledge and experience are resources for others.'

Babyworld thus enabled the women to 'occupy positions of agency in the production of knowledge' (Blair and Takayoshi 1999: 1). Rather than by 'trickling-down' institutionally produced knowledge from the 'experts', the development of community discourse enabled the women to determine what constituted knowledge within in their own community. Owing to the interactive nature of discussion forums, women's 'informal' knowledge was exchanged and disseminated in online conversations. This knowledge could be archived from the chat and discussion forums, so unofficial online conversations became part of the sanctioned knowledge of the babyworld site. As Eble and Breault (2002: 325) argue: 'Through the archiving of local knowledge on chats and boards, women ...are granted greater authority and importance. They are empowered.' This is not to suggest that cyberspace is a neutral blank space upon which discourses and narratives are constructed free from onsite conventions, discriminations and power relations but rather that the babyworld website holds potential to disrupt the 'scientific' narratives of experts and validate the efficacy of women's 'technical knowledges'.

Overall then, we would assess that these women felt that they had gained, in an empowering sense, from being members of this virtual parenting community through increased knowledge, non-judgemental support and the development of online friendships available exactly when the women needed them. As such, babyworld provided

19

companionship, informational and esteem support (Nettleton *et al.* 2002). It was this far from an 'imagined community'; rather, it was a transient, contingent community catering for the immediate needs of this specific group of women at what can be a bewildering time as they adjusted to becoming a mother.

Safe virtual spaces challenging patriarchy?

In adjusting to motherhood babyworld itself represented a safe space for parents, usually mothers, to communicate. This is important for a new mother can easily feel isolated, incompetent and made to feel 'out of place' in the masculinist public realm (Davidson 2001: 295). In entering a community of (predominately) women who had all been through the experience of becoming a mother, most postings on babyworld were responded to positively and responses were invariably supportive and encouraging. This is a common feature of many women-centered sites (Correll 1995; Herring 1996; Savicki and Kelley 2000). In general the practice of 'flaming' (making rude and abusive remarks to others) is not found in women dominated discussion groups (Sharf 1997: 76) and indeed flaming was rare on babyworld. Additionally, with none of the women reporting that they played with their online identities as has been noted elsewhere (Roberts and Parks 2001; Valentine and Holloway 2001), there was a high degree of trust regarding online representations of gender, another common feature of women-only spaces (Wakeford 1999: 187).

Therefore although the internet is not always a 'safe' space, users of babyworld tended not to suffer the negative aspects experienced by some online self-help groups (Burrows *et al.* 2000; Cunneen and Stubbs 2000; Finn and Banach 2000). This feeling of being 'in place' was possibly an outcome of the gendered nature of the social production of the website. Four of the six key members of the babyworld team were all women (all mothers themselves), including the editor, the operations director, the community editor and the forums manager. All of the medical experts (doctor, midwives, antenatal teacher, breastfeeding expert, and health visitor) were women, although the fertility expert was male http://www.babyworld.co.uk/aboutus/meet_the_team.asp Accessed January 2003). Babyworld was a site produced by women for women with a commitment to helping new parents: 'Behind babyworld is a dedicated team, each of whom shares the belief that being a parent is one of the most important jobs that we will ever do and that information should be available to parents quickly and free of charge. In addition we believe that the online community is very important in offering vital support parents' to (http://www.babyworld.co.uk/about us/meet_the_team.asp Accessed January 2003). This caring/sharing ethic pervaded the website and influenced conventions of behaviour and communicationⁱⁱⁱ. The website was a classic example of the potential of new technology to create 'safe virtual spaces' (Wakeford 1999) for women, improving their self worth and leaving them feeling more empowered.

Moreover, it has been suggested that in these virtual spaces there is a tendency to be more open with others, often complete strangers, than in face-to-face communication (Wellman and Gulia 1999). As Kitchin (1998a: 394) explains, since the internet '...provides social spaces that are purportedly free of the constraints of the body, you are accepted on the basis of your written words, not what you look like or sound like or where you live'. This lack of visual clues allows people to '... better control the presentation of self' (Nguyen and Alexander 1996: 104) and as a result it is argued that individuals are more sociable, enabling candid online interchanges develop. This freedom of expression arises because the virtual setting allows users to say exactly what they think without fear of reprisals, again making the virtual venue a safe place in which to interact (cf Mann and Stewart 2000). In our research several interviewees stated that the anonymity provided by the internet enabled them to ask embarrassing or 'unimportant' questions without feeling too self-conscious (extract 5).

Extract 5 Hen and Clare: Does the anonymity help then? Elin: I think it does, you can really get things off your chest, and if you feel embarassed you know noone can see you blushing! Marianne: On the net you talk more to the point about something as there are no distractions Sue: It was to me while I was getting started, I think once you build up confidence you don't mind. Mandy: Yes, being anon means that you don't get embarassed asking about a little point or something personal

As Oakley (1979: 311) suggests, formal antenatal education provided by the National Health Service does not always meet the needs of new parents adequately and '...there is a level of information that can only be given and received in a more personal context.' The women in this study saw the internet as providing precisely that type of environment. Although it was perhaps ironic as the women could not see one another, as Paccagnella (1997: 2) states: 'Cyberspace constitutes a wonderful example of how people can build personal relationships and social norms that are absolutely real and meaningful even in the absence of physical, touchable matter.'

This level of anonymity was considered important to some of the women when using the website because it freed them from any judgemental expectations they felt health professionals might have of them because of their enquires. Cyberspace was therefore seen as advantageous in allowing the women some temporarily relief from the power dynamics played out between new mothers and medical experts in material space. As Parr (2002: 76,

22

92) notes, the increasing quantities of health information gained from the internet can facilitate new lay abilities to gain specialist medical knowledges which both enable bodily transformations in 'real space' but also may be used to resist traditional diagnostic authority and medical power. The anonymity of virtual space thus provided the women with an active route to by-pass dominant health discourses and power relations. In doing so the virtual realm was important as it enabled the women to temporarily transcend local moralities of mothering (Holloway 1998), in which the romanticised ideal of motherhood and the day-to-day reality of the conduct of motherhood were often divergent, leaving women feeling inadequate for not being the 'ideal mother' (Aitken 1999: 584) (extract 6).

Extract 6

Marianne: I feel better askign BW than my health visitor as they're not goign to see how bad I am at housekeeping!!! Mandy: I feel the same. Like the HV is judging even though she says she isn't 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: you can show off your beautiful child, and no one can hear the tantrums! Beth: I think sometimes you need space to talk about your children without them being there- just being yourself

The internet, then, was significant for the women in creating a safe space in which to try out their identity as new mothers (Madge and O'Connor 2005), to form judgements about appropriate parenting practices and to evade dominant medical power relations, all of which were facilitated through anonymous interactions.

23

But was this role confined to women or also true of new fathers? Uncovering gender differences is important for as Howard *et al.* (2002) and White (2001) have revealed, men and women approach and use the internet differently: for example, men are more likely to use the internet to get news, financial information and sport rather than to access health information. This was borne out in our study as few men used the babyworld website. Only 16% of questionnaire respondents were male and male discussion forums elicited a more limited number of respondents than the female forums. Indeed, interview questions about male partners using the internet for parenting advice! Music, humour etc etc etc but never baby related! (Jo)' 'My husband is definitely not interested in parenting...I mean using the internet for it' (Vanessa). Other male uses for the internet were noted including news, financial information, music, games and humour. Only in two cases did male partners use babyworld, one being: '...just a big a freak about it as I am. And he has actually been using BW more than me' (Jane) and the other '...had a little look at the Dad's bit, but he's not really that way inclined' (Marianne).

Several reasons were given for this disinterest in the website including: '...he prefers reading the books - I think he thinks they're more authoritative for some reason...' (Marianne) '...he does look up things like health issues but thinks babyworld is the equivalent of a mother and baby meeting' (Imogen) and '...we don't have access at home and he is always busy in work time' (Elin). But interestingly most of the women stated that their male partners did receive 'second hand' babyworld information from them: 'I tell him what I have found out both from net and magazines' (Marianne) and 'I've printed out several articles for my husband to read which he does eventually' (Beth).

This suggests an underlying 'insidious patriarchal culture' (cf Aitken 1999) in this particular virtual space in which parenting is discursively labelled as 'women's work' or

whereby fathers may be subtly distanced from taking direct responsibility for caring for their children. Indeed further questions as to where men gained their parenting advice from evoked responses such as 'Us!' (Elin) and 'I tell him what he needs to know or answer his questions' (Mandy). The lower level of fathers' involvement in parenting websites is not confirmed only to babyworld but it has also been noted in the use of parenting websites in Sweden (Sarkadi and Bremberg 2005). This is a potentially worrying phenomenon that requires further investigation. Do men feel excluded from such sites? Do they have more grounded networks of support to draw on when negotiating their changed identity and responsibilities as new fathers? How might differences between men be meaningfully accommodated on parenting websites? And how might online parenting communities endeavour to include men and create more progressive alternatives for parenting ideologies and practices that empower both men and women? These are important issues given that parental conflict increases when a child is born and parents need help in negotiating new relationships (Lorensen *et al.* 2004).

The observation that women predominately use and contribute to babyworld is indicative of the fact that the culture and conduct of parenting are gendered processes (Valentine 1997). In Britain today mothers are still generally held responsible for the care of their children (Bailey 1999: 337; Holloway 1999: 93) and despite movements towards more egalitarian parenting, in practice childrearing still remains predominately a female role (Family and Child Protection Group 1998: 18). In this example cyberspace was on the whole replicating these gender expectations, roles and stereotypes with the implicit view of childcare as a predominately female role, in a two person heterosexual relationship being the most common stereotype presented. A culture of mothering thus emerged which was generally speaking traditional and conservative. This was aptly summarised by the introductions made by the women at the start of the interviews (extract 7). Extract 7

Julia: Hi, I am 34 on Sunday (!!) with a daughter, Anabelle aged 10 months. I am a full time mother and am loving avery minute of it.

Jane: Hi, I'm Jane, I'm 29 years old, 30 in September. I'm a new mum, with a daughter , Joy who was born on March 15th, so coming up for 3 months now. I'm a stay at home mum, and about to go crazy at times, as she's had colic, and screams like mad.. I love being a mum!!

Jo: Hello everyone! I am 33 years old, married and have a 21 month old daughter who I'm sure is starting the terrible twos early! I work part time (reluctantly) but love being a mum. My husband, Bob works full time but is amazingly good with Jessie (our daughter) and will 'muck in' with just about everything

As these extracts show, however, there was some degree of differentiation in the views of motherhood presented, hinting at the plurality of constructions of motherhood during online interactions. In a minority of cases, for example, the women stressed a more egalitarian representation of parenting, with men and women having an equal role to play: '...sharing responsibility and making sure you both have the same agenda on things like discipline' (Beth)^{iv}. However, on the whole, in this virtual arena women were still the main 'players' in childcare, an active choice made by many women: 'John tries to share in absolutely anything, but when it comes down to the absolutes, I'm still Mum!' (Marianne). Generally on this website, online parenting roles and relationships reflected unreconstructed ideologies of parenting and reinforced traditional gender roles and a nuclear family structure. A more complex and fluid family composition, which is a reality for many families in Britain today (Duncan and Smith 2002), was little considered. As

Engel and Fisher (1997/8: 33) state: 'Women's experiences with the net do suggest opportunities to tell new stories, but these exist alongside some key familiar master narratives'. Indeed it may be that gender inequalities may not only be continued in cyberspace but may actually become exaggerated because, as Malina and Nutt (2000: 24) suggest, the 'markers' of gender are more limited and therefore more likely to become simplified.

This case study gives some insight into how cultures of mothering are being constructed in this particular community of practice. Babyworld was considered a safe 'female space' by women and men and the anonymity of online interactions did enable some of the women to feel more empowered through the ability to ask questions in a supportive non-judgemental arena. Simultaneously, however, babyworld generally upheld traditional stereotypes of gender relations and parenting roles. As Wakeford (1999: 180) observes: '...even where a multiplicity of roles is possible, traditional images and experiences of gender persist in most Internet fora'. Thus while the social construction of parenting now involves a virtual component for some parents, and representations of parenting clearly draw on virtual and everyday arenas for these parents, traditional ideas about gender roles, relationships and expectations persist in this community of practice. Hegemonic meanings and practices of mothering showed continuity with 'real' practices on the ground probably because the anonymity of the internet generally leads people to behave in more socially regulated normative ways (Watt et al. 2002: 76). Any significant challenge of patriarchal power relations has not been realised on this particular website (and clearly this was never anticipated as this website had no radical/feminist intention). This is, of course, not always the case. Other cyberspaces exist for different identity based http://www.pinkparents.org.uk/, communities (for example see http://uk.gay.com/channel/community/parenting/

http://www.disabledparentsnetwork.org.uk/) that generally do not reinforce such traditional versions of parenting and gender norms and offer alternative political positions for parents (see also Bos *et al.* 2004). The specificity of the predominately heterosexual, technically proficient white group of mothers visiting babyworld must again be reiterated.

However, it is fair to conclude that in this particular community of practice, our evidence supports Kitchin's (1998b: 395) claim of the situatedness of online worlds: '...the vast majority of social spaces on the internet bear a remarkable resemblance to real-world locales. As such, many online interactions are in fact situated in real-world protocols undermining the potential liberating effects of being online.' Patriarchal power relations persist and were upheld by both women and men on this particular website: a case of 'politics as usual in the cyberspace revolution' (Margolis and Resnick 2000).

Conclusions

The significant role that the internet played in the life of these particular new mothers has been underscored in this study. It played a central role in providing virtual social support increasing the women's ability to cope with their new experiences, which may be particularly important as the transition to motherhood can be fraught with many changes (Aitken 2000; Bailey 1999). The internet was also effective in providing these new mothers with access to alternative information sources which increased their real sense of empowerment and helped to ameliorate some of the potentially alienating aspects of life as a new mother. For many the internet was thus providing an additional support and information network to supplement those networks used in 'real space' while at the same time enabling a temporary relief from Holloway's (1998) 'moral spaces' of mothering (see Madge and O'Connor 2005). Clearly in this case the internet created a viable virtual community and an important virtual space for new mothers to interact, avoiding the 'shrinkage' of lifeworld's which has been documented in early motherhood for some women (Bailey 1999; Davidson 2001; but see Aitken 2000 for an alternative argument).

However, the significance of the virtual community compared to the offline world for these new mothers must not be overplayed. It is important to avoid 'cyberbole' (Imken 1999) since any claims of the importance of this virtual community must be seen in light of the limitations of the research project based on one particular parenting site in which selfselected computer competent online users were interviewed, most of who were in a traditional family structure, which clearly the majority of parents are not. The results are virtual place and time specific and the study should be viewed in such social and historical context. As Parr (2002: 78) notes: 'Virtual geographies are still relatively exclusive, with only some individuals having the ability to access these spaces.' While it is circumspect to be cautious about the ability to generalise from our conclusions, it is also worthy to note that a recent large-scale study (Sarkadi and Bremberg 2005) of the most popular Swedish parenting website, Parentsnetwork (http://www.alltforforaldrar.com) indicates that this website was particularly important for single mothers, those women on lower incomes and those with lower educational levels, tentatively suggesting that the results of our study may extrapolated beyond the boundaries of the group of socially advantaged British women that we interviewed. Moreover, it is also imperative to stress the importance of differentiating between the interviewees: variations amongst the women were observed in the value placed on social support and virtual advice; on the significance of anonymity and its emancipatory potential; and on perceived gender roles and constructions of motherhood. The internet was playing different roles for different women within this community of practice (cf Holloway and Valentine 2001b: 28).

So in this particular community of practice cyberspace was not providing an effective challenge to patriarchal relations: very traditional stereotypes of mothering and gender roles persisted. Cultures of mothering on this internet website bore a marked resemblance to mainstream/hegemonic cultures of mothering 'on the ground', partly because the internet reflects historically established gender patterns^v. A paradox is evident here whereby this internet website was both liberating and constraining to women: it played an important social role for some women while at the same time it encouraged restrictive and unequal gender stereotypes. Thus the online environment is neither an egalitarian utopia nor a space devoid of communicative power (cf Hawisher and Sullivan 1999).

It is clear then that parenting cyberspaces will play a role for some parents in the evolution of parenting practices and meanings in the new millennium, especially as the internet becomes more intricately enmeshed in everyday life. It is imperative to speculate on this future role. While this role will depend on the specific social and spatial location of the parents under consideration, some health care professionals have heralded the potential of the internet for providing information and support for new mothers (Lamp and Howard 1999; Sarkadi and Bremberg 2005), especially significant given that over 85 percent of women work during pregnancy (Lindsay 2004). The internet could, for example, be used to forge 'cyber-agency' through forums for new mothers and midwives/health visitors to communicate in more collaborative ways. The findings of this study support such a use, indicating that for some mothers the internet can play a significant given that following the birth of a new baby parental stress levels increase (Thorp *et al.* 2004) and '...certain aspects of modern life may make the transition to motherhood harder' (Figes 1998; 44).

Recent precedents exist: Baby carelink has been set up by a neonatal intensive care unit in Midwestern American hospital to act as a communication and consultation tool between the medical profession and parents of premature babies. Empirical evidence suggests that families from all social groups have used and benefited from the internet link (Safran 2003). Such an approach underscores the importance of providing internet support throughout society to improve the 'social options' (Carter and Grieco 2000) of individuals who by virtue of their circumstances (nationality, income, age, ethnicity, gender) may not have access to computer equipment, software and literacy or internet connections owing to the digital divide.

However, we must be cautious: the problem is not simply one of technical constraints but also owing to the linked issue of social exclusion (Liff *et al.* 2002; Valentine *et al.* 2002). The internet is not an inherently empowering technology and it is unlikely to solve serious social problems (Shields 2003). Virtual technologies can be infused with a discourse of empowerment that may not necessarily translate into power for individual women (Pitts 2004). We should not assume, for example, that the internet would be good for all women, for as this study shows, simplified gender markers may result in retrogressive gender stereotypes. Nor should we assume that women do not want access to it. We cannot assume technology will improve women's position and change patriarchal relations nor that women will want to use it, or continue to use it, and not have other grounded networks of support that are more effective to them and their baby/child. Parenting is learnt through experience and a different quality of support/advice may be gained if that experience is virtual rather than based on everyday grounded realities.

If we want to help women feel more empowered as they become mothers then women themselves must be central in deciding whether and how they use ICT and in defining the content and shape of cyberspace (Gajjala and Mamidipudi 1999). Moreover, internet support must be used in ways that relate to the social context and practical constraints of new mothers everyday lives (cf Valentine *et al.* 2002). Such select use of ICT

31

can enhance community building and human networking capabilities (Hanson 2000) but they must be promoted in conjunction with effective practical community initiatives on the ground (O'Connor 2001) to include those who choose not to, or are unable to, or no longer use ICT. Moreover, care must be taken to avoid a 'personal responsibility ideology' whereby provision of care/support/information for new mothers lies solely in the hands of individuals rather than through institutionalised social and economic support systems. Mothering involves meeting children's needs for protection, nurturance and training and to enable mothers to do this they must have the conditions that allow them to flourish as persons: including bodily integrity, moral autonomy, material security and political efficacy (cf Brush 1999: 43). ICT may be *one* way to help *some* women achieve these.

Acknowledgements

The authors are grateful to the University of Leicester who funded this project. Also thanks to the babyworld team and all the women who were interviewed. We are also grateful to the reviewers for their helpful and critically informative suggestions. We hope the final paper does some justice to their comments.

References

Aitken, S. (1999) Fathers and faltering: 'Sorry but you don't have the necessary accoutrements', *Environment and Planning A* 32: 581-598.

Aitken, S. (2000) Mothers, communities and the scale of difference, *Social and Cultural Geography* 1: 65-82.

Alder, C.L. and Zarchin, Y.R. (2002) The 'virtual focus group': using the Internet to reach pregnant women on home bed rest, *Journal of Obstetric, Gynecologic and Neonatal Nursing* 31: 418-427.

Bailey, L. (1999) Refracted selves?: a study of changes in self-identity in the transition to motherhood, *Sociology* 33: 335-352.

Blair, K. and Takayoshi, P. (1999) Mapping the terrain of feminist cyberspaces, in Blair, K. and Takayoshi, P. (eds.) *Feminist cyberspaces*. Ablex, Norwood NJ, pp.1-18.

Bos, H.M.W. van Balen, F. and van der Boom, D.C. (2004) Experiences of parenthood, couple relationship, social support and child-rearing goals in planned lesbian mother families, *Journal of Child Psychology and Psychiatry and Allied Disciplines* 45: 755-764.

Brush, L.D. (1999) Motherhood and feminist politics, Signs 21: 429-454.

Buckby, S. (1998) Government plays its hand in a game of happy families, *Financial Times* July 24th p.8.

Burrows, R. Nettleton, S. Please, N. Loader, B. and Muncer, S. (2000) Virtual community care? Social policy and the emergence of computer mediated social support, *Information, Communication and Society* 3: 1-16.

Carter, C. and Grieco, M. (2000) New deals, no wheels: social exclusion, tele-options and elective ontology, *Urban Studies* 37: 1735-1748.

Chen, S.S-L. Hall, G.J. and Johns, M.D. (2004) Research paparazzi in cyberspace: the voices of the researched, in Johns, M.D. Chen, S.S-L. and Hall, G.J. (eds) *Online social research: methods, issues, ethics*, Peter Lang, New York, pp.157-175.

Cherny, L. and Weise, E.R. (eds) (1996) *Wired women: gender and new realities in cyberspace*, Seal Press, Seattle.

Collins, P.H. (1994) Shifting the centre: race, class and feminist theorising about motherhood, in Glenn, E.N. Chang, G. and Forcey, L.R. (eds) *Mothering: ideology, experience and agency,* Routledge, London, pp.45-66.

Correll, S. (1995) The ethnography of an electronic bar: the lesbian café, *Journal of Contemporary Ethnography* 24: 270-298.

Coyne, J.C. and Gottlieb, B.H. (1996) The mismeasure of coping by checklist, *Journal of Personality* 64: 959-991.

Cunneen, C. and Stubbs, J. (2000) Male violence, male fantasy and the commodification of women through the Internet, *International Review of Victimology* 7: 5-28.

Davidson, J. (2001) Pregnant pauses: agoraphobic embodiment and the limits of (im)pregnability, *Gender, Place and Culture* 8: 283-297.

Davies, J. (2004) Negotiating femininities online, Gender and Education 16: 35-49.

Dodge, M. and Kitchin, R. (2001) Mapping cyberspace, Routledge, London.

Duncan, S. and Smith, D. (2002) Geographies of family fortunes: spatial differences and gender cultures in Britain, *Transactions for the Institute of British Geographers* 27: 471-493.

Eble, M. and Breault, R. (2002) The primetime agora: knowledge, power and 'mainstream' resource venues for women online, *Computers and Composition* 19: 315-329.

Ekinsmyth, C. Elmhirst, R. Holloway, S. and Jarvis, H. (2004) Love changes all: making some noise by 'coming out' as mothers, in Women and Geography Study Group (eds) *Geography and Gender Reconsidered,* Women and Geography Study Group, pp. 95-107.

Engel, M. and Fisher, C. (1997/8) Women and wires: feminist connections and the politics of cyberspace, *WE International* 42/43: 32-34.

Family and Child Protection Group (1998) *Family matters*, The Centre for Contemporary Ministry, Bedford.

Ferguson, T. (1997) Health care in cyberspace: patients lead a revolution, *The Futurist* 31: 29-33.

Figes, K. (1998) *Life after birth: what even your friends won't tell you about motherhood*, Penguin, London.

Finn, J. and Banach, M. (2000) Victimization online: the downside of seeking human services for women on the Internet, *Cyberpsychology and Behavior* 3: 785-796.

Fogel, J. (2004) Internet breast health information use and coping among women with breast cancer, *CyberPsychology and Behavior* 7: 59-64.

Gajjala, R. (2003) South Asian digital diasporas and cyberfeminist webs: negotiating globalization, nation, gender and information technology, *Contemporary South Asia* 12: 41-56.

Gajjala, R. and Mamidipudi, A. (1999) Cyberfeminism, technology and international 'development', *Gender and Development* 7: 8-16.

Green, E. and Adam, A. (eds) (2001) Virtual gender: technology, consumption and identity, Routledge, London.

Grimshaw, R. and McGuire, C. (1998) *Evaluating parenting programmes: A study of stakeholders' views*, National Children's Bureau and Joseph Rowntree Foundation.

Gurak, L. (2001) *Cyberliteracy: navigating the Internet with awareness*, Yale University Press, New Haven CT.

Gurak, L.J. and Ebeltoft-Kraske, L. 1999 The rhetorics of gender in computer mediated communication, *The Information Society* 15: 147-150.

Hanson, S. (2000) Reconceptualising accessibility?, in Janelle, D.G. and Hodge, D.C. (eds) *Information, place and cyberspace*, Springer, New York, pp.267-278.

Haraway, D. (1985) A manifesto for cyborgs: science, technology and social feminism in the 1980s, *Socialist Review* 80: 65-107.

Harcourt, W. (1999) (ed) Women@Internet, Zed, London.

Harcourt, W. (2000) The personal and political: women using the Internet, *Cyberpsychology and Behavior* 3: 699-706.

Hardey, M. (2002) Life beyond the screen: embodiment and identity through the Internet, *Sociological Review* 50: 570-585.

Hardwick, J.C.R. and MacKenzie, F.M. (2003) Information contained in miscarriagerelated websites and the predictive value of website scoring systems, *European Journal of Obstetrics, Gynecology and Reproductive Biology* 106: 60-63. Hawisher, G.E. and Sullivan, P.A. (1999) Fleeting images: women visually writing on the web, in Hawisher, G.E. and Selfe, C.L. (eds) *Passion, pedagogies and 21st century technologies*, Logan, Utah State, pp. 268-291.

Haythornthwaite, C and Wellman, B. (2002) The internet in everyday life: an introduction, in Wellman, B. and Haythornthwaite, C. (eds) *The internet in everyday life*, Blackwell, Oxford, pp. 3-41.

Higgins, R, Rushaija, E. and Medhurst, A. (1999) Technowhores, in Cutting edge: The women's research group (eds) Desire by design: body, territories and the new technologies, I.B. Tauris, London, pp. 111-122.

Healy, D. (1997) Cyberspace and place. The Internet as middle landscape on the electronic frontier, in Porter, D. (ed) *Internet culture*, Routledge, London, pp. 55-68.

Herring, S. (1996) Posting in a different voice: gender and ethics in computer-mediated communication, in Ess, C. (ed) *Philosophic perspectives in computer-mediated communication*, State University of York Press, Albany NY, pp.115-146.

Hocks, M.E. (1999) Feminist interventions in electronic environments, *Computers and Composition* 16: 107-119.

Holloway, S. (1998) Local childcare cultures: moral geographies of mothering and the social organisation of pre-school education, *Gender, Place and Culture* 5: 29-53.

Holloway, S. (1999) Reproducing motherhood, in Laurie, N. Dwyer, C. Holloway, S. and Smith, F. (eds) *Geographies of new femininities*, Pearson Education, London, pp.91-112.

Holloway, S. and Valentine, G. (2001a) Making an argument: writing up in human geography projects, *Journal of Geography in Higher Education* 25: 127-132.

Holloway, S. and Valentine, G. (2001b) 'It's only as stupid as you are': children's and adults' negotiation of ICT competence at home and at school, *Social and Cultural Geography* 2: 25-42.

Howard, P.E. Rainie, L. and Jones, S. (2002) Days and nights on the Internet, in Wellman, B. and Haythornthwaite, C. (eds) *The internet in everyday life*, Blackwell, Oxford, pp. 45-73.

Hudson, D.B. Campbell-Grossman, C. Ofefleck, M. Elek, S.M. and Shipman, A. (2003) Effect of new fathers network on first-time fathers' parenting self-efficacy and parenting satisfaction during the transition to parenthood, *Issues in Comprehensive Paediatric Nursing* 26: 217-229.

Imken, O. (1999) The convergence of virtual and actual in the Global matrix: artificial life, geo-economics and psychogeography, in Crang, M. Crang, P. and May, J. (eds) *Virtual geographies*, Routledge, London, pp. 92-106.

Jenson, J. de Castell, S. and Bryson, M. (2003) 'Girl talk': gender, equity and identity discourses in a school-based computer culture, *Women's Studies International Forum* 26: 561-573.

Josok, G.H., Lagesen, V. and Sorensen, K. (2003) Out of the boys room? A critical analysis of understanding of gender and ICT in Norway, *NORA: Nordic Journal of Women's Studies* 11: 130-139.

Kitchin, R.M. (1998a) Cyberspace: the world in the wires, Wiley, Chichester.

Kitchin, R.M. (1998b) Towards geographies of cyberspace, *Progress in Human Geography* 22: 385-406.

Kennedy, T.L.M. (2000) An exploratory study of feminist experiences in cyberspace, *Cyberpsychology and Behavior* 3: 707-719.

Kramer, J. and Kramarae, C. (2000) Women's political webs: global electronic networks, in Sreberny, A. and van Zoonen, L. (eds) *Gender, politics and communication,* Hampton Press, Cresskill New Jersey, pp. 205-222.

Lamp, J.M. and Howard, P.A. (1999) Guiding parent's use of the Internet for newborn education, *Maternal-Child Nursing Journal* 24: 33-36.

Liff, S. Steward, F. and Watts, P. (2002) New public places for Internet access: networks for practice-based learning and social inclusion, in Woolgar, S. (ed) *Virtual society? Technology, cyberbole, reality,* Oxford University Press, Oxford, pp. 78-98.

Lindsay, S. (2004) The influences of the 'spaces of everyday life' on pregnancy health, *Canadian Geographer* 48: 35-51.

Lorensen, M. Wilson, M. and White, M. (2004) Norwegian families: transition to parenthood, *Health Care for Women International* 25: 334-348.

Madge, C. and O'Connor, H. (2002) On-line with e-mums: exploring the Internet as a medium for research, *Area* 34: 92-102.

Madge, C. and O'Connor, H. (2005) Mothers in the making?: exploring liminality in cyber/space, *Transactions for the Institute of British Geographers* 30, 83-97.

Malina, D. and Nutt, D. (2000) Grey literature is a feminist issue: women's knowledge and the net, *The International Journal on Grey Literature* 1: 18-27.

Mann, C. and Stewart, F. (2000) Internet communication and qualitative research, Sage, London.

Margolis, M. and Resnick, D. (2000) *Politics as usual: the cyberspace 'revolution'*, Sage, California.

Martin, L.M. and Wright, L.T. (2005) No gender in cyberspace?: empowering entrepreneurship and innovation in female-run ICT small firms, *International Journal of Entrepreneurial Behaviour and Research* 11: 162-178.

Mitra, A. (2001) Marginal voices in cyberspace, New Media and Society 3: 29-48.

Miyata, K. (2002) Social support for Japanese mothers online and offline, in Wellman, B. and Haythornthwaite, C. (eds) *The internet in everyday life*, Blackwell, Oxford, pp. 520-548.

Nakamura, L. (2002) *Cybertypes: race, ethnicity and identity on the Internet,* Routledge, New York.

Nettleton, S. Pleace, N. Burrows, R. Muncer, S. Loader, B. (2002) The reality of virtual social support, in Woolgar, S. (ed) *Virtual society? Technology, cyberbole, reality,* Oxford University Press, Oxford, pp.176-188.

Nettleton, S. Burrows, R. Malley, L. and Watt, I. (2004) Health e-types?, *Information, Communication and Society* 7: 531-553.

Nguyen, D.T. and Alexander, J. (1996) The coming of cyberspacetime and the end of polity, in Shields, R. (ed) *Cultures of the internet: virtual spaces, real histories, living bodies,* Sage, London, pp. 91-124.

Oakley, A. (1979) Becoming a mother, Martin Robertson, Oxford.

O'Connor, P. (2001) Supporting mothers: issues in a community mothers programme, *Community, Work and Family* 4: 63-85.

Paccagnella, L. (1997) Getting the seat of your pants dirty: strategies for ethnographic research on virtual communities, *Journal of Computer Mediated Communication* 3: 1 http://www.ascusc.org/jcmc/vol3/issue1/paccagnella.html Accessed April 2005

Pandey, S.K. Hart, J.J. and Tiwary, S. (2003) Women's health and the Internet: understanding emerging trends and implications, *Social Science and Medicine* 56: 179-191.

Parr, H. (2002) New body-geographies: the embodied spaces of health and medical information on the Internet, *Environment and planning D: Society and Space* 20: 73-95.

Pendergrass, S. Nosek, M.A. and Holcomb, J.D. (2001) Design and evaluation of an Internet site to educate women with disabilities on reproductive health care, *Sexuality and Disability* 19: 71-83.

Phoenix, A. Woollett, A. and Lloyd, E. (eds) (1991) Motherhood: meanings, practices, ideologies, Sage, London.

Pitts, V. (2004) Illness and internet empowerment: writing and reading breast cancer in cyberspace, *Health* 8: 33-59.

Plant, S. (2000) On the matrix: cyberfeminist simulations, in Bell, D. and Kennedy, M.

(eds) The cybercultures reader, Routledge, London, pp. 325-436.

Pudrovska, T. and Ferree, M.M. (2004) Global activism in virtual space: The European Women's Lobby in the network of transnational women's NGOs on the web, *Social Politics* 11: 117-143.

Roberts, L.D. and Parks, M.R. (2001) The social geography of gender switching in virtual environments on the Internet, in Green, E. and Adam, A. (eds) *Virtual gender: technology, consumption and gender*, Routledge, London, pp.265-285.

Rodway, A. (ed) (1997) *Bounty infant health and feeding guide*, Bounty Publications Ltd, Diss Norfolk.

Safran, C, (2003) The collaborative edge: patient empowerment for vulnerable populations, *International Journal of Medical Informatics* 69: 185-190.

Sarkadi, A. and Bremberg, S. (2005) Socially unbiased parenting support on the internet: a cross-sectional study of users of a large Swedish parenting website *Child: Care, Health and Development* 31: 43-52.

Savicki, V. and Kelley, M. (2000) Computer mediated communication: gender and group composition, *Cyberpsychology and Behavior* 3: 817-826.

Seymour, W. (2001) In the flesh or online? Exploring qualitative research methodologies, *Qualitative Research* 1: 147-168.

Shade, L.R. (2003) Whose global knowledge? Women navigating the net, *Development* 46: 49-54.

Sharf, B. (1997) Communicating breast cancer online: support and empowerment on the Internet, *Women and Health* 26: 65-84.

Shields, R. (2003) The virtual, Routledge, London.

Sutton, J. and Pollock, S. (2000) Online activism for women's rights, *Cyberpsychology and Behavior* 3: 699-706.

Thorp, S.R. Krause, E.D. Cukrowicz, K.C. and Lynch, T.R. (2004) Postpartum partner support, demand-withdraw communication and maternal stress, *Psychology of Women Quarterly* 28: 362-369.

Travers, A. (2003) Parallel subaltern feminist counterpublics in cyberspace, *Sociological Perspectives* 46: 223-237.

Valentine, G. (1997) 'My son's a bit dizzy.' 'My wife's a bit soft': gender, children and cultures of parenting, *Gender, Place and Culture* 4: 37-62.

Valentine, G. (2001) Social geographies. Space and society, Prentice Hall, Harlow.

Valentine, G. and Holloway, S. (2001) A window on the wider world? Rural children's use of information and communication technologies, *Journal of Rural Studies* 17: 383-394.

Valentine, G. and Holloway, S (2002) Cyberkids? Exploring children's identities and social networks in on-line and off-line worlds, *Annals of the Association of American Geographers*, 92: 302-319.

Valentine, G. Holloway, S. and Bingham, H. (2002) The digital generation?: Children, ICT and the everyday nature of social exclusion, *Antipode* 34: 296-315.

Vehvilainen, M. (2001) Gender and citizenship in the information society: women's information technology groups in North Karelia, in Green, E. and Adam, A. (eds) *Virtual gender: technology, consumption and identity*, Routledge, London, pp. 225-240.

Wakeford, N. (1999) Gender and the landscapes of computing in an Internet café, in Crang,M. Crang, P. and May, J. (1999) *Virtual geographies*, Routledge, London, pp.178-202.

Warf, B. (2001) Segueways into cyberspace: multiple geographies of the digital divide, *Environment and Planning B, Planning and Design* 28, 3-19.

Watt, S.E. Lea, M. and Spears, R. (2002) How social is Internet communication? A reappraisal of bandwidth and anonymity effects, in Woolgar, S. (ed) *Virtual society? Technology, cyberbole, reality*, Oxford University Press, Oxford, pp. 61-77.

Wellman, B. and Gulia, M. (1999) Virtual communities as communities: net surfers don't ride alone, in Smith, M.A. and Kollock, P. (eds) *Communities in cyberspace*, Routledge, London, pp. 167-194.

White, M. (2001) Virtual pleasure in textual places: gazing in the multi-user objectorientated worlds, in Green, E. and Adam, A. (eds) *Virtual gender: technology, consumption and identity*, Routledge, London, pp. 124-149.

Woolgar, S. (2002) Five rules of virtuality, in Woolgar, S. (ed) (2002) *Virtual society? Technology, cyberbole, reality,* Oxford University Press, Oxford, pp. 1-22.

Youngs, G. (2001) Theoretical reflections on networking in practice: the case of the women on the net, in Green, E. and Adam, A. (eds) *Virtual gender: technology, consumption and identity,* Routledge, London, pp. 84-99.

Notes

ⁱ The term 'virtual' has been adopted here but it is not intended to be read in opposition to the 'real', for as this paper shows, the links between the two are greater than the differences between them. For many people cyberspaces have become so integrated into their everyday lives they have become 'real' spaces (Dodge and Kitchin 2001: 21).

ⁱⁱ This observation must be considered in the context of the research fieldwork (1998), when use of the internet among new parents was not widespread. In 1998 it was estimated there were 30 million internet compared to over 888 million in 2005 users (http://www.internetworldstats.com/stats.htm Accessed April 2005). As the use and understanding of the internet matures and it becomes more intricately embedded in people's lives, it is likely that the quality of friendships will deepen and supportive networks will emerge 'on the ground' where babyworld users are in geographical proximity. Indeed, a message recently posted on babyworld's antenatal club's homepage noted how 20 mothers who were members of babyworld's December 2000 antenatal club met up and visited London zoo together with their children (http://www.babyworld.co.uk/community_intro/antenatal.asp Accessed April 2005).

ⁱⁱⁱ More recently discussion forum netiquette pages (http://www.babyworld.co.uk/bbs/netiquette.asp Accessed April 2005) and terms of use pages (http://www.babyworld.co.uk/bbs/discussion_rules.asp Accessed April 2005) have been developed which lay down netiquette rules with respect to conditions of use, safety and legal issues. This has formalised the more informal 'caring/sharing' ethic.

^{iv} Interestingly it should be noted that more recent news archives include reports on fathers needing more time off work to help with newborns, the importance of fathers' role in parenting (http://www.babyworld.co.uk/news/june01/180601father'srole.asp Accessed April 2005) and lone fathers facing discrimination in work and lacking support services http://www.babyworld.co.uk/news/oct-01/091001 lone fathers.asp Accessed April 2005). The hot topic section of babyworld also has a section 'for dads' which includes discussions on 'what men worry about', 'how to support your partner' and 'dads in the delivery room' (http://www.babyworld.co.uk/hottopics/fordads/default.asp Accessed April 2005). This hints that some changes may be occurring in constructions of parenting on this internet website.

^v This is not always the case. Some examples exist of more liberatory and emancipatory gender roles played out on the internet. Davies (2004) for example, highlights how girls using the Babz software and website do not passively accept traditional maternal stereotypes.