From Exotic to Mundane: Longitudinal Reflections on Parenting and Technology in the Connected Family Home

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ABSTRACT

In this paper, we report on a longitudinal study of technology use in the home. We present three case studies of family life that examine shifting patterns of information and communications technologies (ICT) use in the home over a period of four years. The paper documents technological changes that have taken place, addresses new modes of practices in the homes, and explores changes in how parents and children view and manage technology use in the family home. We argue that changes to children's use of technology in the family home is not arbitrary, rather they reflect a process of ongoing negotiation, review and management involving both parents and children. We argue that these shifts are linked to a range of phenomena including the availability of new technologies for families, increasing autonomy of children as they become older, and changing understandings of ICT as they become less exotic, unfamiliar and strange and become domesticated features of the home environment that are familiar, mundane and unremarkable.

Keywords

Domestic technologies, parenting,

1. INTRODUCTION

Technologies are not merely located in the home. They participate in the constitution of a place as a home. Their particular constitution has serious implications for what goes on at home; for day-to-day lived experience. The home's role as a site for the production and consumption of information and communications content constitutes an important aspect of the contemporary domestic environment, within which domestic life is played out. Domestic Information and Communications Technologies (ICT) provide resources for the shaping and performance of domestic life, in all its facets. In this paper we are concerned with the particular facets associated with parenting and ICT in the home. Previously we have reported on the parent-child relationships that surround children's use of the Internet and all its many applications; television and its associated devices; electronic games and the like.[13] Our premise was that family members' use of, and access to, new ICT were a site of contested and ongoing negotiation for parents and children, and our conclusions were that they provide an occasion for the negotiation of the parent-

child relationship, and resource for performing the identity of parent, and the identity of child. That is, being a parent and being a child inheres in performances related to ICT, just as being a parent and being a child inheres in nappy changing, hand-holding, feeding and advising. Our aim was to identify and describe these negotiations and performances as they occur in three families.

In this paper we revisit those three families four years after our initial investigation and present preliminary findings of how things have changed in these three households, and some of the implications of these changes. Our purpose is to chart how domestic life for those three families changed, how negotiations around the use and deployment of ICT in the home have shifted, and how these shifts have provided new opportunities for the performance of the parent-child relationship.

2. BACKGROUND TO THE STUDY

The material for the three case studies presented in this paper was collected as part of the ongoing Connected Homes Project.[2] The working premise of this project is that home is a communication hub in a dense network of local, regional and international networks. The home's role as a site for the production and consumption of communications constitutes an important aspect of the contemporary domestic environment, within which family life is played out.

The project has investigated a range of issues associated with ICT in the domestic environment, including the interplay between parenting and ICT in the home.[3] In a series of previous papers we have discussed the parent-child relationship and how use and access to ICT was the subject of ongoing negotiation between children and their parents as well as providing an occasion for parenting.[13] We have also looked at the constitution of subject-object relations in the home as these pertain to communications technologies and how these relations are bound-up with various domestic identities.[4] Finally, we have examined how communication technologies are worked together with other spatial and material features of the domestic environment to produce particular material ecologies.[12]

These papers, like most of the work carried out in this arena, have provided detailed qualitative studies of everyday domestic life, which have been useful and important in generating insight into ICT in the domestic setting. However, these insights are often rendered as snapshots. They capture the experiences of participants at particular moments in time; at particular moments in their parenting careers and family development; as well as particular points in the ongoing activity of adopting and incorporating new technologies into the fabric of the home. In this paper we have sought to develop a longitudinal, or diachronic, understanding of appropriation and use of ICT in the home. We

achieve our longitudinal view by revisiting some of the homes reported in previous work[13] after a period of four years. We re-interviewed, all of the family members, including the children, and documented changes to technologies in their homes, and video-recorded their accounts of how, why and when individual family members use them. We compared these new accounts with those from four years ago, and reflected upon the changes, which had taken place, and the role of both parents and children in negotiating, managing and adapting to these changes.

2.1 Family background

The three families are the Sato-Bishops, the Lukic's and the Valerio's, Each family has two children, an older son and a younger daughter. These families can be described as 'middle-class' in terms of the location of their home, the educational and professional status of the parents, and their cultural capital. These families are considered 'high-end' users of ICT, that is, we recruited families who had existing broadband, networked computers, home theatres, laptop computers and other devices.

Family	Sato-Bishop	Lukic	Valerio
Father	Akashi	John	Robert
Mother	Ruth	Mary	Annie
Child	Mikio: 9-13	Peter: 20-24 yrs	Andy: 16-20 yrs
Child	Sana: 5-8 yrs	Angela: 9-13 yrs	Cathy: 9-13 yrs

Table 1: Families Members and ages of children at Phase One and Phase Two of the research. All names are pseudonyms.

While two of older boys might no longer be called 'children' in that they fall into the young adult group, (and have some autonomy in relation to this) they are remain dependent on their parents for food, housing and other goods as they are still attending educational institutions. This reflects a recent trend in Australian households where young adults are on average living at home longer (approximately 50% of males and females aged 18-24 have never left home).[5]

3. FAMILY CASE STUDIES

3.1 The Sato-Bishop Family

Akashi Sato and his wife, Ruth Bishop have been married for 14 years. Both have completed doctorate qualifications and Ruth now works at a university. She has an office there but continues to work at home a great deal. Akashi is unable to find work and currently spends much of his time online, writing a blog. Since we first met the Sato-Bishops there have been other changes to the household including a home renovation which included both an office at the rear of the property and another inside the house, and the disappearance of a dedicated media room which originally housed the TV, DVD, VCR, computer and other technology. Mikio (aged 13 years) now has a mobile phone and attends secondary school. His parents have upgraded from desktop PCs to laptops and have installed a wireless router.

During the first phase of the research the family had a large number of videotapes of Japanese programs, fairytales, and animation. Akashi was keen that his children learn Japanese from the videos, however the children prioritized free-to-air English-speaking TV, Internet use and video games over the tapes. This led to familial disputes about the children's ICT use. In addition, the family nominated Saturday night as 'video night' when Ruth made pizza, and Akashi rented a video, and they all watched it in the media room.

The Sato-Bishops, reported that there have been significant changes to the children's viewing habits because of the renovation and changes to the structural layout of the house. Akashi reported that, 'the kids tend to watch TV more. Not in the special (media) room. It is more exposed (in the communal area) so it gets turned on more.' Ruth reported that both the amount of TV the children watched, and the programs they watched have changed as they have become older, and with the purchase of cable TV. Ruth said 'Before we had a lot more control over what and when they watched… now they are older, they have a lot more autonomy.' She admitted this was influenced by their friendships with other children 'Their friends watch certain things and they are more aware of what's out there… it's more a part of their day.' Despite Ruth's concerns about the cultural value of American television she said that while the children used to watch free-to-air TV they now watch *Saturday Disney*, and Mikio watches *Southpark*.

The family still enjoys some traditions from four years ago including watching Japanese videos (although the focus here has shifted from learning the Japanese language to understanding cultural narratives) and watching a movie on Saturday night, although they now take it in turns to choose the movie. Ruth says one advantage of this is that she can observe what the children are watching. This sense of surveillance is not limited to videos. Both parents often work in the open plan spaces of the kitchen/lounge room so they are at the centre of things, can undertake multiple tasks at once (e.g. answer emails, answer the phone, cook dinner) while still observing the children. Mikio has a computer, with an Internet connection in his bedroom, and both parents are concerned with the amount of time he spends online. Ruth said, 'the one thing (the children) really need to learn – the hardest thing – is to know how long they have been watching and to monitor themselves… there are constant hooks to stay watching.' Akashi agreed; stating it this was a conscious decision to allow their children this autonomy to help them develop the skills to make the 'right' choices for themselves.

Both parents see positive aspects – '[The Internet] is like a portal into literally an infinite number of things' – and negative aspects – 'there is a sense that we are entertaining ourselves into something not necessarily good' – to new technology. Yet they argue that children should have some exposure to new ICT: 'if they aren't exposed at an early age, suddenly it becomes a mass of information.' However it is evident that much of this exposure is negotiated through a process of child-parent bargaining, 'we say yes you can watch a little bit, but only if you do these other things (homework, music lessons) as well.' Ruth admits that these discussions are the source of most arguments in the home.

3.2 The Lukic Family

When we first met the Lukics in 2004, it was apparent that with a home theatre-system, a hi-fi system with outputs throughout the house, and a small collection of electronic antiquities that this family enjoyed their technology. In 2008 it appears at first glance that little has changed, except that the study (the centre for ICT in their home) is now populated by two laptops, instead of two PC's; the house is wirelessly connected by router, and the family now has a flat screen TV and a digital set-top box.

However, while there may have been little change in the Lukics desire for new technologies, there have been some changes in the way the Lukics use ICT in their everyday lives. In 2004 Angela (then aged 9) had her television time strictly monitored and managed by her parents. She was allowed one hour of viewing a

day, and that time was allotted to specific programs (*The Simpsons*, and *Home and Away*). On specific occasions, for example, on Sunday nights, which was viewed as 'family viewing night', these rules were relaxed somewhat. Angela did not have her own email account, and John joked that she would not be allowed one until she was 21. By contrast, Peter, who was viewed as a young adult in 2004, had no restrictions placed on his television or Internet use.

In 2008, things are very different for Angela (now aged 13). She now has her own laptop (which she uses in different spaces in the house), an email account, a MySpace page and a mobile phone and often chats with her friends on MSN. In addition, her television and Internet usage are unmonitored by her parents. While John recognizes that there are online dangers associated with Internet use he said 'We don't monitor what she does, and Angela treats a lot of what she does as personal, which is fair enough. There is trust.' John said that when they first brought Windows Vista they put on parental controls, however he found it to be 'pretty ineffective' and quickly removed it.

The Lukics no longer impose time limits on Angela's Internet use. Nonetheless, Angela estimates that she spends less than an hour online each day. After finishing school she has homework to do, then its 'dinner time' or 'TV time', or 'calling friend's time'. She said that there is a collective time when she engages in online chat with friends 'it's about the time after school. At about 4.30 or something, everyone goes online'.

We asked Angela how she manages homework and socializing. She said that 'often I do homework while I have MSN running. Not MySpace. If it is something important I sign out, and I don't go on it. I have been getting quite sick of MSN, and I appear offline… I think it is too big a part in people's lives.' John added that Angela 'will be on the computer, and you don't know if it's homework or whatever. But the important thing is that homework gets done, which it does. Angela is really good at mixing it up.' Mary added that Angela and her friends often play imaginatively, and outside, so they don't rely on the Internet to have fun. However she said 'I regard the Internet as quite important, socially, for kids Angela's age group. I would hate for her to miss out on that potentially great dimension to relationships.'

Similar to the Sato-Bishop family, the Lukics have kept some of their family traditions. They still have family nights (Wednesday and Sunday) when they watch TV together on the new, large flat screen TV. It is still positioned in the family room, 'because the TV is here, it is where TV is watched. It's a good size unit for this room, and it has nice stereo sound, so we find that the kids come in a lot more.' Although Peter (age 24) has his own TV, in his room, he prefers the superior quality of the flat screen so he now joins the rest of the family to watch it more. John said that this is both 'good and bad'; good because he participates with the family more and bad because he can determine what is watched.

3.3 The Valerio Family

Robert and Annie Valerio have not changed their professions in the past four years, but have made some significant changes to the ICT in their home. Much of the technology has been upgraded. All four family members now have their own laptops (Cathy's is a hand-me-down, while Andy's is new) in addition to two desktop computers located in the study. The home has a wireless router and the family can use their computers throughout the house. Robert admits that the 'wireless network has made it completely

different how we operate.' This has caused some conflict in the home, as Annie prefers to work at the dining room table, not far from the new large flatscreen TV. Andy said 'we have had some great arguments about this one. Me sitting here wanting to watch TV, and Mum working at the table with the laptop saying, "No, don't turn the TV on, I am working, go to the study." Now there is a big TV here, and that thing [laptop] moves, the TV doesn't, it's just illogical...it drives me insane... *the laptop moves.*' Andy prefers to study in his bedroom, which is small but densely populated with TV, playstation and laptop computer. All members of the family reported that they spend more family-time watching television now that they have a flat-screen TV.

In 2004 Annie had grave concerns about the amount of time Andy (then aged 16 years) spent on MSN writing to friends, and other acquaintances he had not met face to face. Both Robert and Annie were concerned about the impact this online socializing had on his schoolwork, as well as the possibility that he might be exposed to harmful relationships. This was the focus of many arguments. Andy now says that since he turned 18 his parents don't tell him what to do, but he has stopped using MSN. He views it as 'crap' and a 'waste of time'. Andy said that he might use it if he is looking for someone, or he wants to talk to someone he can't reach on the phone, but that he prefers meeting face to face, and because he has a car he can drive to visit people now. In stark contrast, Annie who used to be opposed to MSN, preferring face-to-face interaction for both herself and her children, said that she has no rules or expectations about Cathy's (aged 13 years) use of MSN. In fact, in a reversal of her previous position, she said 'I try to encourage her to go on MSN, because I am a little bit concerned that there is so much socializing happening after school on MSN that she might be missing out... I wouldn't want her to start feeling as though she is left out. She doesn't, which is good. But that's a bit of a concern, if that is happening in her peer group, you wouldn't want your child to be ostracized.'

Cathy does not have a MySpace or Facebook account. She has an MSN account but doesn't use it much. 'My friends always tell me to go on MSN, but I don't like it. I have a hotmail account and I use email quite a lot.' She further added that sometimes she signs on, but puts her status as offline, to avoid people bothering her. She added that 'some of my friends have so many contacts online, that they don't really know half of them.'

Both children also have mobile phones. Cathy said that she enjoys her mobile because it makes socializing with her friends easier. Andy uses his mobile to text his parents when he is out late past midnight, he views this as a 'habit' while his mother said 'there is an expectation' that he will do so.

3.4 Discussion

3.4.1 *Technology is more pervasive and distributed*

It is apparent that over the last four years technology has become more pervasive in the home. The increasing affordability of laptop computers and mobile phones, along with the introduction of broadband wireless systems and structural changes to the placement of ICT in the home, has afforded families the opportunity to use ICT including the Internet, in locations throughout the house. Four years ago technology use was typically limited to particular places in the home; TV watching took place in the media room, computers were used in the study. Similar observations of the need to 'fit' communications technologies in the material, social and performative ordering of the home have been noted by others.[6,10,14,15] These families now

work in a range of spaces including the bedrooms, dining rooms and the 'hub' of the house, the kitchen. Parents often work in the kitchen space as it affords them the opportunity to multi-task (e.g. answer emails, make dinner, answer the phone) while still observing the children watching television and engaged in other activities. However it may also lead to some tension in families as they compete for resources in the same space, or their ICT use interferes with the activities of other. The increased distribution of technology use throughout the home does not necessarily lead to a decrease in familial interaction, but can support family activities. Indeed, the purchase of large flat screen TV's has supported the 'traditional' viewing practices of some of the families. It would seem, that as use of these technologies moves from dedicated and specialized locations such as home offices or media rooms out into the rest of the home they are made more ordinary, and more closely abut with other everyday domestic activities. These shifts in practices and locations of technology use change the spatial arrangements and temporal ordering of the home, and contribute to the reformation of the material ecology of the home. This reformation of material ecology involves an ongoing process of 'micro-regulation'[6] as the home is adapted and adopted to fit new devices and those devices are adapted and adopted to fit the existing material ecology.

3.4.2 Parental views of children's technology use
Revisiting the three case studies has illustrated some similarities and some differences in terms of parental views of their children's ICT use. Four years ago these parents had more rigid rules about what kinds of technologies their children should use, and for how long. These changes echo other research that has shown that the majority of Australian parents establish family rules governing the use of computers[8] and the Internet[11]. However, as time has passed these has been a tendency to relax these rules. This, in part, is certainly due to the children growing older, maturing and being trusted more. However it is also apparent that their views about the value of particular technologies has changed over time. For example, four years ago Annie Valerio was very concerned about her son's use of MSN and the forms of socializing it enabled. The forms of sociality supported by MSN were strange and somewhat foreign to her. Today she does not hold the same concerns for her daughter, Cathy, despite Cathy being three years younger than Andy was four years ago. Instead Annie argues that it is important that Cathy use new technologies (such as MSN) so that she can 'fit in' socially. This is a view which is echoed by other parents in the study. Annie's reversal in her position on the use of MSN can be linked to her increased exposure to MSN through her work. As MSN has been made ordinary for her, it has lost its exotic character, and with it her feelings of anxiety associated with its strangeness have reversed. This has coincided with a change in attitude on Andy's part; once a vital part of his existence, MSN is no longer exciting or indispensable. For Andy, MSN is no longer essential to his social being – essential in giving him access to his social world, essential as a mark or symbol of that membership, and essential as an assertion of the nascent identity of 'independent adult'. MSN, has retained some utilitarian value, but is no longer invested with the glamour and the connotations it once possessed for Andy.[7] It has become passé.

This theme resonates across all the families; as children become older, and as technologies become more familiar, parents were less concern about their use in the family home.

3.4.3 Parental strategies in the connected home
While parents recognized the importance of ICT in their children's lives, they also saw these technologies as something to be fitted around other routines and commitments such as homework, music practice, exercise, and so forth. This remained a topic of ongoing negotiation, discussion and rule making. What had changed was that the monitoring of these rules had shifted to the children themselves. For example, when we first visited the Lukic family, they had strict rules governing Angela's TV use. Four years later, while these rules had been relaxed, Angela still largely adhered to them. It was apparent that as children become older they were trusted to more fully govern their own use of ICT; particularly in the case of the second child. Indeed, according to our data, these children did largely respond to these unspoken rules, whether out of 'habit' or 'expectation' and engaged in the self-governance[9] of their ICT use. They were also adept at adopting, and managing ICT as mundane features of their everyday lives, and were quick to discard ICT that no longer fitted. They used ICT in sophisticated ways that often exceeded parental awareness and ability to monitor. The parental position of 'trusting' their child to make the right decisions about ICT recognized these competences. Notwithstanding parental concerns about the safety issues associated with their use of ICT, Mary's final comment sums up her view on the role of ICT in her children's lives 'as long as she is doing what she is supposed to do at school, getting a decent amount of exercise, and taking time out to spend time with us, then I see her as a pretty well rounded person.' This view signals a significant shift in how the parents in this study approached the regulation of technologies in the home. Four years ago, the parents in our study governed more by decree than trust, through, as Foucault might say, domination rather than subjection.[9] Now, it would seem, this emphasis has noticeably reversed. Parental approaches to governing communications technologies rely more on strategies that work to construct the child as knowledgeable, trustworthy, productive, sociable, well-rounded, *et cetera* and communications technologies as integral to their development as these kinds of subjects.

4. CONCLUSIONS
In this paper we have reported some preliminary results from a longitudinal study of technology use in three family homes. In these case studies we have explored some of the ongoing negotiations between parents and children that occur in and around ICT use in the home. We have illustrated how practices in the homes have shifted over time, and explored how both parents and children view and govern ICT in domestic settings. We argued that changes to children's use of technology in the family home is not arbitrary, rather they reflect a process of ongoing negotiation, review and management of both the significance of particular technologies in their everyday lives, the role that technology might play, and its positioning *vis-à-vis* other priorities such as homework, socializing, sport and family time. This process can be thought of as a process of micro-regulation[6] that spans issues associated with the material ecology of the home and the placement of technologies within it, the routines and temporal rhythms of the household, associated values and views about technologies and their relation to identities. As our longitudinal look at these issues suggests, the views adopted by families about the role and place of technologies in the home and in lives of children are provision, ongoing and subject to revision and reversal over time. We argue that these shifts in perspectives are linked to a range of phenomena including the availability of

new technologies, the increasing autonomy of children as they become older, and shifting understandings of technologies as they become less exotic, unfamiliar and strange and become familiar, mundane and domesticated features of the home environment. Finally, we want to suggest that a longitudinal approach is a fruitful way to understanding technology use in domestic settings.

5. ACKNOWLEDGMENTS

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