

1-1-2003

Multiply-mediated households : Space and power reflected in everyday media use

Donell Joy Holloway
Edith Cowan University

Follow this and additional works at: <https://ro.ecu.edu.au/theses>



Part of the [Family, Life Course, and Society Commons](#)

Recommended Citation

Holloway, D. J. (2003). *Multiply-mediated households : Space and power reflected in everyday media use*.
<https://ro.ecu.edu.au/theses/1314>

This Thesis is posted at Research Online.
<https://ro.ecu.edu.au/theses/1314>

Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author's moral rights contained in Part IX of the Copyright Act 1968 (Cth).
- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

**Multiply-mediated households:
Space and power reflected in everyday media use**

EDITH COWAN UNIVERSITY
LIBRARY

by

Donell Joy Holloway
BA (Education), Grad Dip (Media Studies)

A thesis submitted in fulfilment of the requirement for the Award of
Master of Communications
at the Faculty of Communications and Creative Industries
Edith Cowan University
2003

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

ABSTRACT

This study investigates how contemporary Australian families incorporate the consumption of multiple media technologies within their home environments. It uses an approach similar to David Morley's (1986) *Family Television* where he explored the consumption of television programs in the context of everyday family life. He viewed the household (or family) as the key to constructing understandings of the television audience; where there were gendered regimes of watching, and where program choice often reflected existing power relationships in the home.

However since then (a time when most families had only one television set) the media environment of many homes has changed. The addition of multiple television sets, along with newer digital technologies such as computers and game consoles, has introduced a new dynamics of social space within the household. Therefore, the family living room, with its erstwhile shared television culture, has become a less critical site of domestic media consumption.

With the migration of television sets and new digital technologies to other spaces in the home, claims over time and space have become even more intimately involved with the domestic use of media technologies. Consequently, this study critically analyses the relationship between media consumption and the geographical spaces and boundaries within the home.

Drawing upon interviews with all family members, this thesis argues that the incorporation of multiple media technologies in many households has coincided with significant changes to the spatial geography of these homes, along with a rearticulation of gendered and generational power relationships. Extra media spaces in bedrooms, hallways, home offices and 'nooks' have freed up the lounge room, possibly allowing for more harmony and accord within the family, but also reducing the amount of time the family spends together. At the same time the newer media spaces become additional sites for gendered and generational conflict and tension.

This study uses an audience ethnography approach to explore and analyse media consumption at the micro level, that of the individual within the household/family. Twenty-three in-depth conversational interviews and observations

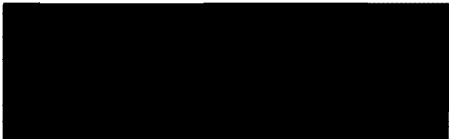
of children and adults living in six technologically rich households in suburban and regional areas of Western Australia formed the basis of this thesis. Themes and issues that emerged from this qualitative research process include the gendered nature of screens in children's bedrooms, the extent to which a media-rich bedroom culture is evident in Australia, the existence of a masculine gadgeteer culture within some families in the study, the social construction of gaming as a gendered (boy) culture, gendered pathways on the Internet and the reintegration of adult knowledge-based work into the family home.

The thesis also addresses digital divide issues relating to inequities in access, technical and social support, motivation and the quality of new digital technologies available in the home.

DECLARATION

I certify that this thesis does not, to the best of my knowledge and belief:

- (i) incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;
- (ii) contain any material previously published or written by another person except where due reference is made in the text; or
- (iii) contain any defamatory material.



Signature

Date

25-2-04

ACKNOWLEDGEMENTS

To my supervisor, Lelia Green, whose enthusiasm and faith in my abilities kept me going. Her continuing support is greatly appreciated.

To my partner David for his help with early editing and the many twilight discussions regarding this project.

To my children, Carlie, Louise and Jordan for being such demonstrative media users and inadvertently guiding me towards this thesis. Thanks also for allowing me the space and time to study and write.

To Linda Jaunzems who, in the face of the computer crashes and power blackouts, cheerfully helped me to get this document formatted and handed in on time.

To Robyn Quin for her help with a final reading. Thanks for the insightful comments.

To all the families who participated in this study for happily contributing to this thesis. Your time, insights and ongoing support is much appreciated.

INDEX

ABSTRACT	i
DECLARATION	iii
ACKNOWLEDGEMENTS	iv
INDEX	v
LIST OF FIGURES.....	vii
CHAPTER ONE	1
INTRODUCTION	1
Introduction.....	1
Genesis of this thesis.....	2
Organisation of the thesis	4
CHAPTER TWO	7
TOWARDS AN AUDIENCE ETHNOGRAPHY OF MULTIPLY-MEDIATED HOUSEHOLDS.....	7
Introduction.....	7
The ethnographic process within social research	8
Audience ethnography as an approach to audience studies.....	10
Cultural studies, audience ethnography and the context of everyday living	13
Technology as text.....	14
Audience ethnography and the multiply-mediated household	15
Hypothesis and research questions	19
Hypothesis	20
Orientating concepts and research questions.....	20
Ethnographic intent of the audience ethnography approach.....	21
Autoethnography and the context of everyday living.....	23
Interview question guide.....	24
Multiply-mediated households: guide questions/topics for interviews	25
Sample Group/Participants	27
Ethical Considerations	29
Limitations to study	30
CHAPTER THREE.....	31
MEDIA TECHNOLOGIES AND THE GEOGRAPHY OF THE HOME	31
Introduction.....	31
Media screens and children’s bedroom culture	32
Parent views about children’s bedroom culture.....	33
The Gendered Nature of Children’s Bedroom Cultures	36
The young gadgeteer’s bedroom culture	40
Bedroom culture and children’s desires.....	43
Children and the geography of family media use in Australian households	46
Conclusion	54
CHAPTER FOUR.....	55
GENDER AND THE MULTIPLY-MEDIATED HOME.....	55
Introduction.....	55
Gender and television-viewing in the multiply-mediated home.....	56
Boys’ (and big boys’) gaming culture.	62

Masculinity and technology: the gadgeteers and non gadgeteers.....	68
Men and women on the net.....	72
Conclusion	78
CHAPTER FIVE.....	80
THE UNANTICIPATED: CASCADING ADOPTION OF MEDIA TECHNOLOGY AND DIGITAL DIVIDE ISSUES	80
Introduction.....	80
The multiply-mediated home and the cascading adoption of ICT's.....	81
Cascading adoption phenomena and the reconfiguration of the geography of the home.....	87
The information divide: Challenges of the do nots, know nots and have nots..	97
Conclusion	103
CHAPTER SIX	106
CONCLUSION: MEDIA USE AS REFLECTED IN EVERYDAY FAMILY LIFE	106
Introduction.....	106
The research hypothesis.....	107
Other themes and issues.....	109
Future Research Directions.....	110
REFERENCES	112

LIST OF FIGURES

Figure 3.1:	Music and Girl's Bedroom Culture by Natalie	37
Figure 3.2:	Rhianna's fantasy bedroom	44
Figure 5:1 :	Hand sketched floor plans of Narberth family home.....	90
Figure 5:2	Hand sketched floor plan of the O'Neil family home	94

CHAPTER ONE

INTRODUCTION

The modern world has witnessed, and in significant degrees has been defined by, a progressive technological intrusion into the conduct of everyday life, of which the most recent and arguably the most significant manifestations have been our media technologies. These technologies, principally in the twentieth century broadcast technologies, have become increasingly central to the ways in which individuals manage their everyday lives: central in their capacity, in broadcast schedules and the consistencies of genre, to create a framework for the ordering of the everyday, and central too in their capacity to provide the symbolic resources and tools for making sense of the complexities of the everyday (Silverstone, 2002, p. 746).

Introduction

The purpose of this study is to explore the consumption of media texts and technologies within the contemporary family home. By taking into consideration the understanding that media consumption does not occur in isolation from wider patterns of household¹ interaction (from the everyday routines and social interaction of all household members) this study uses an approach within which domestic media consumption is understood to be a multifaceted and dynamic process which is embedded in the context of everyday life.

In essence, this research project will attempt to find out how and why various media and information technologies are consumed in the context of everyday Australian family life. The technological composition of contemporary Australian households, which often contain multiple television sets, devices which convert the television screen to a multi-use media screen (such as VCRs, game consoles, DVD players and video cameras) as well as personal computers has radically changed the mediascape of many households (Australian Broadcasting Authority [ABA], 2003,

¹ Please note that the terms family and household have been used interchangeably within this document for the sake of variety. The term family usually denotes a group of people who are related through blood or marriage while household is a broader term which encompasses any group of people living in the same dwelling (house) (OED, 1998). However, within the context of this document the term household refers to family members living together.

pp. 65-7). Therefore families in technologically rich households are experiencing some movement away from a singular television culture; a fragmentation of household communication patterns, and rearticulation of power relationships along generational and gender lines. Furthermore the inclusion of multiple and new media technologies within the home environment are reflected in associated changes in the geography of the home. This in turn sees a change in patterns of consumption where different individuals or groups of individuals hold power or dominance at different times and in different household spaces.

This thesis investigates the changing media environment that is occurring in many family homes and the new dynamics of social space that are associated with these changes. It takes an holistic approach to research into domestic media consumption by incorporating all the screen technologies available within the family home into the study. Central to this investigation are questions concerning power relationships between gender and generation as well as associated transformations of the spatial geography of the technologically complex home.

This introduction provides an account of how I came to choose this topic and method of investigation. It also explains the structure of the entire thesis, and how extant literature is embedded within a number of themed chapters. Finally, an outline of the organization of this thesis is given.

Genesis of this thesis

My own interest in media consumption (in the context of everyday life) comes from a combination of personal and career interests. As a parent to three children I have found myself living through considerable changes to our own domestic media environments over the last two decades. My family has engaged with a succession of new media technologies in a progressively more complex technological environment at home. Furthermore, I have spent many years as a primary school teacher, and seen similar changes with families of my pupils. Many of the parents and educators I have encountered over the years are vitally interested in issues concerning media use and frequently have strong opinions about domestic media use, particularly when it concerns the children they parent or teach.

The reason for relating some autobiographical detail here is to not only to account for my personal interest in the topic, but also to indicate the degree of

identification I share with the families in this study – and thus my choice of research methodology. The quality of my encounters with families participating in this ethnographic audience research is no doubt enriched by the shared positions we have – as families with children. I feel that this positions me as another parent with a greater level of mutual empathy and understanding. In other words

both parties may gain from the non-neutrality of the interviewer-interviewee interaction when the interviewer is a member of the same group as the interviewee and represents herself as such in the interview process, that is to say, when she is an ‘insider’ (Rose, 2001, p. 24).

Nonetheless, some researchers may be concerned with the level of subjectivity in these encounters. I would argue, however, that a lack of subjectivity (or identification with participants) diminishes many participants’ identification with the interviewer, and in turn, participants are more likely to talk with restraint and caution due to a perceived social distance between interviewer and interviewee. In other words this mutuality (and closer/prior relationship) becomes part of the content and structure of the interview and is more likely to bring about greater disclosure and a more reflexive commentary. This is evident in the quality of the interview transcripts I have been analysing.

The interviews reveal that lay theories about media and the family abound, ranging from a strong ‘media effects’ stance to more relaxed attitude to children’s media experiences whereby greater agency is attributed to children and the pleasures of popular culture are celebrated. Sometimes these ‘lay theories’ as expressed by interviewees, as well as individual friends and colleagues, simultaneously embrace conflicting ideas and beliefs about media consumption. Therefore, they are judged as “ambiguous, incoherent and inconsistent” (Seiter, 1999, p. 59) by some social scientists. However, these ‘lay theories’ can also be viewed as refreshingly honest and down-to-earth, given that these ideas and beliefs seem to reflect more closely the inconsistencies and ambiguities of people’s everyday lives – including practices and concerns related to media consumption. Thus, an important aspect of this research is the way in which participants make sense of their home experiences.

Organisation of the thesis

This research project is structured around the themes and issues coming out of participants' own reflections about their media use in the home. Accordingly a pre-emptive or presuming, exhaustive literature review is not presented at the beginning of this thesis. Instead, the discussion of literature expressly related to the emerging themes, is dispersed throughout the themed chapters (in Chapters Three, Four and Five). This approach was adopted in order to be “responsive to the data, to seek disconfirming evidence assiduously, and to defend” (Dick, 2002, *Literature as Emergent*, para.3) any emerging arguments and themes. This additional literature (analysed after the themes emerge) can also be considered part of the research data which is then compared with the emerging theory “in the same way that you compare data to the emerging theory” (Dick, 2002, *Literature as Data*, para.1).

Chapter Two focuses largely on theoretical perspectives related to methodology and research approaches. It explains the rationale for the employment of a critical inquiry perspective and the use of ethnographic methodology to investigate audiences in the context of everyday life. This section commences with an account of ethnography as a social research method by first, explaining the use of ethnographic process within anthropology and sociology, and second, its utilisation within the cultural studies field as a research method that is valuable in the critique of power relationships within the home. The specific approach taken within this research project – that of audience ethnography combined with elements of autoethnographic comment – is also explained and substantiated.

The second chapter also contains relevant literature regarding the actuality of multiply-mediated households as a contemporary trend in domestic media consumption. The chapter also includes discussion regarding the research methods and strategies used within the study. It reviews the planning and management of the interviews with family members, including ethical considerations and special provisions and strategies for including children's voices within the interview process.

The next three chapters (chapters three, four and five) focus on emerging themes and issues that arose during the data collection and analysis stages² of the project. Thus, the third chapter focuses on the relationship between media

² N6 (QRS NUD*IST) software was used to code the fully transcribed interviews.

technologies, geographical spaces and boundaries within the home and the people who use (or don't use) these technologies and spaces. With a particular focus on children's use of media technologies, this chapter argues that the integration of new media technologies into existing homes often transforms the spatial geography of the home in a variety of ways. These transformations are, in part, dependent on decisions made about the location and use of new media technologies in the home. Using data from participant interviews (as well as relevant literature) the chapter also argues that Australian children are not enjoying media-rich bedrooms to the same extent as their UK and US peers, and that a variety of nationally identified (and regionally specific) social, cultural, economic and environmental factors help shape the manner in which media technologies are utilised in different homes (and in different countries).

The overall focus of Chapter Four is on the relationship between gender and media consumption within the multiply-mediated home. It argues that gendered relationships are reflected through differential media consumption and that current consumption practices perpetuate (though sometimes challenge) the gendered nature of family life. This chapter is largely concerned with adult media use in the home and examines the mutual influence of gender and media technologies on media consumption. It explores different sites of media consumption in the (multiply-mediated) home and discusses the significance of these different sites in maintaining the gendered nature of family life, arguing that the family television is becoming a less critical site for variance and conflict between family members. More specifically, the chapter argues that there are other more critical sites of gendered conflict and difference – particularly computer gaming (through the use of game consoles, computer CDs and online games). This is despite the fact that the family television is still a significant site for family media consumption.

Chapter Five deals with two unexpected themes that have arisen over the course of this study. These two themes are not related in themselves, but are allied as they are 'out of the blue' themes that need further investigation. These themes are, the 'cascading adoption phenomenon' and 'digital divide' issues that go beyond the simple binary division of the 'haves' and 'have nots'. Within this chapter I argue that the rapidly changing technological environments evident within the households in this study (and within Australian households in general) are often associated with

the rearticulation of boundaries in the home, and that associated changes in the power balance “are not only possible but inevitable, since every household has a dynamic identity” (Green, 2002, p. 53). This chapter also argues that the ‘digital divide’ is not a straightforward case of the digital ‘haves’ and ‘have nots’ and that access to the Internet at home does not always ensure that digital divide inequalities will be minimised to any great extent.

The final chapter draws together the themes and issues discussed in the body of the thesis arguing that the incorporation of multiple media technologies in many households has coincided with significant changes to the spatial geography of these homes, along with a rearticulation of gendered and generational power relationships. The conclusion also addresses the research hypothesis and question(s), analysing the overall findings in light of the hypothesis and discussing the extent to which this research effectively attends to the question(s) at hand. The main research question pursues questions of gender, generation and power relationships. With this in mind it asks how media technologies are acquired, consumed and managed in the context of everyday Australian family life. The conclusion ends with a discussion regarding possible future research directions. Finally the reference section lists all the texts referred to in this manuscript.

CHAPTER TWO

TOWARDS AN AUDIENCE ETHNOGRAPHY OF MULTIPLY-MEDIATED HOUSEHOLDS

Qualitative researchers are more likely than quantitative researchers to confront the constraints of the everyday social world. They see this world in action and embed their findings in it. Quantitative researchers abstract from this world and seldom study it directly. They seek a nomothetic, or etic, science based on probabilities derived from the study of large numbers of randomly selected cases. These kinds of statements stand above and outside the constraints of everyday life. Qualitative researchers are committed to an emic, idiographic, case based position, which directs their attention to the specifics of particular cases (Denzin & Lincoln, 1998, p. 10).

Introduction

This chapter will focus on theoretical perspectives pertaining to methodology and research approaches associated with this thesis – specifically the use of a critical inquiry perspective and ethnographic methodology to investigate audiences in the context of everyday life. It will begin with an account of the development of ethnography as a social research method and explain the employment of ethnographic process within anthropology, sociology and its application within the cultural studies field illuminating the way in which this research method may help in the critique of power relationships within the home. An account of the approach taken within this thesis – that of audience ethnography combined with elements of autoethnographic comment – will also be given.

This chapter will explain the background to this study; that of the multiply-mediated household as a trend in contemporary media consumption. The contemporary home can be viewed as an increasingly technologically complex environment within which family dynamics are in a state of flux. The sections that follow include an outline of the planning and management of the interviews with family members, including special provisions and strategies for including children's voices within the interview process.

The ethnographic process within social research

Ethnography, sometimes included in discussions of field research or participant-observation research, is a qualitative approach to social research in which researchers (traditionally) observe and participate in small-scale social settings in order to generate detailed descriptions of social life, which are then interpreted and analysed. The methodology usually involves a period of time spent observing people within their own specific setting, as well as conversational interviews with key informants within this locale. The aim of ethnographic inquiry is to gain an understanding of the meanings and perspectives of the people participating in the research project and to consider these meanings and perspectives against the background of the participants' worldview, context and/or socio-cultural perspective. The ethnographic process endeavours to uncover "how situations are being defined by the participants themselves – to identify contextualised meanings and experiences" (Moores, 1996, p. 28).

The origins of this ethnographic approach can be traced back to the 1200s when European explorers and missionaries recorded their own accounts of the exotic lands and people they came across. The expansion of colonial empires and associated trade in the 1800s saw more literate and educated travellers writing their own accounts of the cultures and people they encountered. Academic research into other cultures emerged in the nineteenth century with the development of anthropology as an academic field of knowledge. Early 'armchair' anthropologists relied solely on the reports of explorers, missionaries or colonial officials – often ethnocentric accounts which are now considered extremely racist – not having themselves travelled to the lands being researched. Social anthropologists from Europe first began to travel to these newly discovered lands in the late nineteenth century to learn, first hand, about other cultures (Lawrence-Neuman, 2000, p. 346).

Ethnographic method, as it is today, has evolved from these early anthropological ventures into 'other' cultures, shifting over time from direct observation to a more inclusive process incorporating more consultation and reflection. Bronislaw Malinowski (1884 – 1942), one of the first social anthropologists to live with the social group he was researching, reflected upon the need to include the 'natives' point of view when conducting anthropological studies and argued for the separation of "direct observation and native statements from the

observer's inferences" (Lawrence-Neuman, 2000, p. 346). After publication of Malinoski's writings this methodological practice (of observation along with a meaningful consideration of the participants' point of view) became more and more commonplace within anthropological and social research practices (Lawrence-Neuman, 2000, p. 346; Moores, 1996, p. 28).

Although the origins of ethnography can be found in the study of foreign cultures in colonial times, ethnography has not been limited to the study of non-western cultures or to the discipline of anthropology. Anthropologists have, over subsequent years, carried out research in settings and locales within their own communities and sociologists interested in qualitative research also engage in similar research techniques – utilising both participant observation and conversational interviews. Ethnographic methodology is currently employed in a variety of academic disciplines, including business-based consumer behaviour research, and is “now no longer a characteristically uncritical form of research that merely seeks to understand a culture” (Crotty, 1998, p. 12). Ethnography is also a methodological tool employed by researchers situated in a range of different theoretical standpoints – such as critical inquiry, feminism and postmodernism. Along the way, the relatively prescriptive set of ethnographic research techniques and procedures developed within the field of anthropology has been adapted and altered to suit the broadening theoretical viewpoints and situational problems associated with the specific locales and settings being researched.

Audience ethnography, as employed in the Cultural Studies field (and this thesis) has been adapted to suit the specifics involved in studying audiences in the context of their everyday lives and is, therefore, subject to criticism from more conventional ethnographers (Meers, 2001, p. 138). The research techniques and procedures used do not adhere strictly to the conventions and procedures followed in traditional anthropological and sociological research endeavours. Audience ethnography relies more on conversational interviews and has limited the use of sustained periods of participant observation. This is because the process of participant observation can be seen as particularly problematic given that there are “practical difficulties involved in gaining sustained access to the home. Households are construed as sites of privacy, and intrusions by experts would not be [well] tolerated” (Meers, 2001, p. 141). Further to this, extensive use of participant

observation techniques limits the number of audience-member respondents who can realistically be investigated and collects large amounts of potentially irrelevant data. Hence, audience ethnography is more concerned with ethnographic intention than with ethnographic method and its rigid methods and procedures (Geraghty, 1998, p. 142).

In summary, audience ethnography as used in this thesis and other audience studies research projects (Morley, 1986; Moores, 1996; Livingstone, 1998) finds its origins in the discipline of anthropology. However, audience ethnography does not follow conventional ethnographic procedures, as research processes have been refined to more readily suit the group of participants under investigation - the audience.

Audience ethnography as an approach to audience studies

Audience ethnography is one of many approaches to the study of audiences. The variety of approaches can be viewed as a succession of fluctuations between approaches that have emphasised either the influence “of the text (or message) over its audience” (Morley, n.d., para. 1) or those that emphasise audience resistance to (or individual interpretations of) media texts. The perspectives that focus on the power of the text (or message) over the audience are most apparent within the ‘effects tradition’, whereby the media is theorised as having a direct effect on the audiences. Other approaches also emphasise the importance of text. Screen theory approaches, for example, analyse the textual forms and patterns within media texts and place much importance on the implicit textually-determined messages contained within media texts. Alternatively, some audience studies research approaches have placed emphasis on the importance of the audience. These perspectives include the *uses and gratification* model whereby the audience is considered as users of media texts who choose different forms and genres of media in order to satisfy their own needs and pleasures. In contrast, cultural studies approaches view audiences as actively interpreting (or constructing) their own messages and meanings. These meanings and messages are not completely open but determined by such factors as class, education, occupation, ethnicity, and gender (Morley, n.d, para. 1 - 2).

This thesis fits within the latter framework of cultural studies, a relatively new approach to analysing media production and consumption, which surfaced in

Britain in the 1970s as one attempt to break away from the older 'effects' research and methodology. In this paradigm, the media was no longer seen as an "empty vessel" (Moores, 1996, p. 8) through which messages are sent to audiences; and audiences were no longer viewed as passive receivers of messages sent via the media. Therefore cultural studies brought with it a shift in focus away from "the conception of the audience as an abstract given" (Taylor & Willis, 1998, p. 168) towards a conception of the audience as composed of individuated and active interpreters of media messages. The audience became the focus of attention with researchers paying attention to "what real audiences say about the influences of media in their lives" (Taylor & Willis, 1998, p. 168).

The cultural studies approach was borne out of dissatisfaction with screen theory's conception of the audience. British writers on the left who made contributions to *Screen*, a prominent film journal, were influenced by Althusser's notion of the media as an institution that won "consent ideologically rather than coercively" (Taylor & Willis, 1998, p. 169). Audiences were considered as unwitting receivers of ideological messages. Cultural studies proponents also regarded the media as an institution that attempted to maintain the existing dominant order through the use of ideological messages within media texts. However, cultural studies advocates

rejected the idea that mainstream texts necessarily impose blanket ideological domination over their readers. Rather ... [they] regarded mainstream texts or popular forms as a site of contest between dominant and subordinate groups (Taylor & Willis, 1998, p. 170).

Cultural studies contests the power of the text, which is implicit in both media effects and screen theory research, by taking into consideration both the production of messages and the variances in audience readings of these messages. Stuart Hall's theory of 'encoding' and 'decoding' can be seen as a pivotal development in the cultural studies approach to audience studies in Britain. Earlier Marxist debate tended to illustrate how popular culture (in particular television) reproduced dominant ideologies for re-circulation among the masses. Hall introduced the idea that television is a relatively open text, which can be read differently by different people and suggested that, although television carries a dominant ideology, the viewer is able to negotiate meaning. He argued that there are three possible decodings people might take up when reading texts. These three

decoding positions are dominant, negotiated and oppositional. The dominant position accepts the stance taken by the encoders or media producers. Oppositional readings are those that directly challenge the text's inscribed meanings. Negotiated readings (which according to Hall were the most frequent positions taken) sit somewhere between dominant and oppositional readings. In this case viewers neither fully accept nor reject the dominant reading (Morley, n.d., para. 10). These three reader positions however are not adopted randomly but influenced by the sociological contexts in which the reader is situated. In other words "each reader brings his or her own social history, attitudes and beliefs to bear on the reading of a text so that the encoded meanings will either be accepted, refuted or partially qualified" (Taylor and Willis, 1999, p. 171).

Hall's encoding/decoding model was, however, purely theoretical without reference to any empirical research. Nonetheless it is of great significance because it highlights the notion that meanings cannot be forced upon people and that viewer interpretations of texts are socially patterned. This concept greatly influenced theory, critique and research in this area (Moore, 1996, p. 9).

Therefore, the cultural studies approach concerns itself "with the making of cultural meanings and with the wider political questions of social reproduction and resistance" (Moore, 1996, p. 9). It attends to the socio-economic circumstances of audiences, their class, education level and occupation as well as gender and cultural positions within society. Cultural studies researchers take these varying positions into consideration when assessing the meanings audience members garner from texts.

Broadly speaking, the cultural studies approach is a useful theoretical framework from which to investigate the audience. It acknowledges the dual influences of the text and audience in determining meaning, taking into consideration any socio-cultural and economic conditions that may influence the audience. The approach taken in this thesis comes under the umbrella of cultural studies. More specifically, I have adopted a cultural studies approach that takes into consideration the everyday context of media reception and that is concerned with the day-to-day-practices and settings of media consumption.

Cultural studies, audience ethnography and the context of everyday living

Ethnographic methodologies, as applied to audience studies, have been shaped by previous research within the cultural studies tradition carried out to explore Hall's encoding/decoding theory (see above). The first series of research projects to flesh out Hall's encoding/decoding model were investigations into the British current affairs program *Nationwide*, carried out by Brunsdon and Morley (1978) and Morley (1980). Morley found that the audience's decoding of the program was not necessarily determined by socio-economic determinants. He also found that Hall's three reading positions did not adequately cover all the audience decodings he encountered, (particularly those of black students he interviewed) and that the notion of audience taste was not adequately accounted for within Hall's theory (Morley, 1980, p. 87). Despite this, Morley's research affirmed Hall's main assertion; that meaning does not lie within the text alone but is more dependent on interpretation and negotiation of the reader (Morley, 1980, p. 87).

Following on from Morley's early work, audience studies changed in focus from an emphasis on audience readings of texts (which seemed to provide part of the picture) towards an understanding of the context in which those readings were made. It can be seen as an attempt to gain a more complete understanding of media consumption by situating the activities of audience participants within their everyday environments. Morley's work has been a seminal model for other audience researchers in this area, particularly his study of television reception, *Family Television* (1986). Morley located television viewing within the daily routine settings of the family unit. He viewed "the dynamic unit of consumption to be more properly the family/household rather than the individual viewer" (Morley, 1986, p. 15). By moving towards a "greater engagement with social patterns of taste and preference" and investigating media consumption in the "contexts of day-to-day settings and practices" Morley turned attention to the family unit as a primary site of social power and media reception (Moore, 1996, p. 10). Morley found that patterns of media consumption were heavily differentiated along gender lines and that "masculine power is [was] evident as the ultimate determinant on occasions of conflict over viewing choice...[and was] even more apparent in the case of families who have an automatic [remote] control device" (Morley, 1986, p. 148).

Since *Family Television*, many researchers have investigated power relationships, in the context of media technology and everyday life and “where technology is concerned, issues of class, age and gender are factors which inevitably impinge on the different interpretations and uses of technology” (Taylor & Willis, 1999, p. 179). For instance, Moores (1996) explored the impact of a new technology in his study of satellite television in a variety of households in Wales. He found many “... power struggles between men and women or between parents and children in the private sphere” (Moores, 1996, p. 72). These disputes were generally about the use of time and space in daily life, access to cultural goods, the importance of certain cultural goods and the ‘identity’ of individuals and family. He pointed out that these power struggles, although traced to the introduction of satellite television into household units, were a part of everyday family life.

This thesis follows the tradition of ethnographic audience research instigated by David Morley (1986) and carried on by other researchers (Livingstone, 1992 ; Moores, 1996; Gray, 1992; Wheelock 1992) and focuses on the household as the most significant site of media consumption. Unlike Morley, however, this thesis does not concentrate on issues relating to the text on the screen. Instead, this project gives attention to domestic practices and family relationships (Livingstone, 1992, p.113) as they relate to domestic media use, and society at large.

Technology as text

Moores’ (1996) investigation of satellite television within households in Wales highlighted the notion that information technologies can also be interpreted as texts themselves. Thus, information technologies are understood, discussed and articulated by domestic consumers in a variety of ways. These different constructions can be broken down into two broad categories, media as text and technology as a text in itself. Media texts that are broadcast, played or published through these technologies (such as television programs, video games and web pages) carry with them “meanings that are constructed by both producers and consumers [of these texts] (and by consumers as producers [of meanings associated with these texts])” (Morley, 1992, p. 205). These texts are often open to negotiation and transformation within the cycle of cultural production. On the other hand, the information technologies themselves (as technological artefacts) have socially

constructed meanings associated with them. These are also constructed by both producers and consumers at varying stages of production, sales and consumption of these artefacts. The impact of these two constructions (media as text and technology as a text in itself) adds further dimensions to the ways in which families make sense of their home media experiences.

During the consumption phase of domestic information technologies (with which this thesis is concerned), a variety of gendered, generational and/or cultural interpretations of technological artefacts become possible. For instance, “what the machine is capable of doing is one element which enters in the way we interpret the role and identity of artefacts” (Haddon, 1991, p. 161). The home computer is often touted, by both the commercial and educational sector, as a technology that will enhance children’s educational achievement. Parents also engage with and value the home computer as an educational tool. However, children themselves, although familiar with this line of reasoning, often use and value the home computer in a different manner, as a play/entertainment tool (Downes, 1999, p. 106; Marshall, 1997, p. 74). In this way additional, and sometimes competing, interpretations (and/or discourses) are in contention within the home.

Research into the consumption of media technologies needs to consider media consumption in the home as both text, and technology as a text in itself. In this manner we can provide for more comprehensive understandings of the way in which consumers construct meanings and patterns within the culture of everyday living. This thesis takes ‘the technology as text’ discourse into consideration and has arrived at some noteworthy themes and issues, which, not surprisingly, are centred around gendered interpretations of specific media technologies.

Audience ethnography and the multiply-mediated household

The emergence of new mass media technologies, and the multiplication of personally owned media devices, both old and new, bring with them significant implications for the study of audiences. Such implications include the way audiences appropriate and consume media technologies and the manner in which audiences themselves are changing. Television has stood out, and still does, as the medium that dominates our leisure hours, living rooms and family life. While it may seem unlikely that other (newer) media forms will surpass the scope and range of

television viewing, the emergence of multiply-mediated households which now contain multiple television sets, devices which convert the television screen to a multi-use media screen (such as VCRs, game consoles, DVD players and video cameras), and personal computers have radically changed the technological composition of many households.

Current research into the consumption of information technologies in the family home tends to concentrate on one specific information technology at a time and does not necessarily take into consideration that “the new media do not simply displace but are also integrated with the old” (Morley & Silverstone, 1992, p. 201). Morley (1995) also argues that the study of television consumption needs to be viewed “...in the broader context of the ‘technological culture’ of the household...[and while]...much has been written about the effects of IT (information technology) in transforming society....such perspectives often fall into a kind of technological determinism...” (p. 323) which is to say, this approach can lead to discussion about how technology is changing us. This deterministic outlook, more often than not, overlooks the choices people make themselves about whether or not to introduce these new media technologies to the home environment, and does not always consider how these technologies are taken up, made sense of and explored by individuals and groups in the context of everyday family life.

The oldest screen medium for households, the television, has been thoroughly integrated into daily domestic routines and, over the past 40 years, “media theory has taken its prototype medium to be television” (Livingstone, 1999, p. 64). Nonetheless, the social context of traditional family media viewing seems to be in flux.

The traditional notion of ‘family television’ (Morley, 1986), with its associated hierarchies of gender and generation, is rapidly becoming obsolete, for the very possibility of personal/private television viewing created by multi-set homes is transforming the meaning of both solitary and shared viewing” (Livingstone, 1999, p. 62).

To the multi set home, one can add technologies that connect to television screens, such as game consoles, DVD and video machines, as well as the delivery of more specialised television channels through pay-TV (either satellite or cable). These add-ons are also transforming the notion of shared viewing and appear to be

facilitating a general movement towards the individualisation, or cellularisation, of domestic media consumption (Holmes, 1997, pp. 38-40; Livingstone, 1999, p. 62).

Patrice Flichy (1995) in *Dynamics of Modern Communication* describes a decline of public media consumption during the history of modern media audiences. She argues that the introduction of new media technologies such as the television, transistor radio and record player, have successively fragmented audiences and created more privatised or individualistic forms of media consumption (pp. 152 – 68). Flichy also notes that music technologies, like the transistor and record player, developed in conjunction with the rise of the teenager, transform the family into a place “where individual practices were juxtaposed ... [because] family members could listen to the music they wanted in their rooms” (Flichy, 1995, p. 164). This shift towards the individualisation of media consumption can be expected to continue with the consumption of new media technologies and the location of multiple television sets and computers within Australian homes.³

The rise in the number and range of media technologies in domestic contexts influences both the way families utilise existing space to accommodate these technologies and also the incorporation of new communal (media) spaces in many contemporary house designs (Sherrat, 2002, pp. 45 – 61) and renovated (or extended) homes. Thus, the incorporation of new (and multiple) media technologies within the home is often associated with changes in the geography of households. This has introduced a changed dynamic relating to social space within the household and a “reciprocal (re)construction of the meanings and functions of both the technological objects and the domestic spaces they inhabit” (Caron, 2000, p. 3). These new media spaces can, at times, be sites of conflict, negotiation and resistance; while at other times they can be seen as resolving existing conflict associated with leisure and media use.

The emergence of a bedroom culture whereby teenagers and adult children use their bedrooms as a social space for both socialising with friends and utilising media technologies (Livingstone & Bovill, 1997; Livingstone, 1999), as well as an increase in communal leisure spaces, and relatively private work/study spaces, also indicate a rearticulation of the use and meanings of media technologies within family

³ An exception to this individualisation may be pay TV within Australian homes which tends to draw family members together, once again, around a singular TV screen (Holloway, 2003).

homes. These new communal spaces (such as activity rooms, family rooms, teenage retreats, home theatres) all create opportunities for communal and/or more individualised media consumption while work spaces (such as the home office, study or computer nook) leaves open the likelihood of further separation and fragmentation of shared family leisure time.

Along with the individualisation of media consumption within the home “the diffusion of ICTs into the domestic sphere has coincided with a blurring of boundaries between work and home, between paid and non-paid work” (Holloway & Green, 2003a, p. 2). With more adults working from home and “almost half of all full-time working Australians do[ing] unpaid overtime each week” (Crichton & Delany, 2002, para. 1) changes in the work/leisure divide inevitably entail a renegotiation of meanings and use of new media technologies, along with associated changes in the geography of many households.

The Australian Broadcasting Authority’s survey into Australian Internet usage patterns found that “the study or office (42%) was the most common location for the Internet-connected computer” (2001). The notion of the home study or office carries with it connotations of more private and industrious pursuits and activities (i.e. work and study) carried out away from more communal areas of the home. Therefore the location of the family Internet in a home study or office carries with it implied meanings about the values associated with Internet usage, and may be constructed as a redrawing of some spatial boundaries between ‘the domestic’ and ‘paid work’ (Holloway & Green, 2003a, p. 7).

Calls have been made for further empirical research into domestic media consumption in today’s changing media environment. Moores (1996) suggests that one future research direction might be to “explore the household uses of even more recent communication technologies such as ‘multimedia’ systems or electronic mail and ‘Internet’ facilities” (Moores, 1996, p. 74) while Kayany and Yelsma (2000), in their account of the displacement effects online media have on television viewing, call for future studies to look at family communication patterns, power relations and domestic roles in the context of new media technologies (p. 228). Livingstone (1999) identifies three areas for future research. She calls for a critical examination of claims made about new media audiences within theory, production and policy. She also recommends

the careful tracing of the ways in which audiences appropriate and consume new media goods...[and] the analysis of the ways in which audiences are themselves becoming transformed in response to new media and/or changing social conditions, of which the success of new media are themselves an outcome (Livingstone, 1999, pp. 65-6).

This thesis takes up Livingstone's call for audience research into the consumption of new media focussing on the way in which families are simultaneously consumers of new and old media. The research project focuses on families' appropriation and incorporation of media technologies within the home and the way families are themselves becoming transformed in the light of new media environments. It investigates the influential relationships multiple technological artefacts have on each other and the manners in which these impinge on the geographical environment of domestic spaces.

Hypothesis and research questions

More recent scholarly discussion regarding the domestic consumption of media technologies acknowledges the increasing quantity and complexity of media technologies found in many households. These changes make it evident that research into the domestic consumption of media technologies needs to take into consideration a wider socio-technical and cultural frame than previously undertaken (Morley, 1992, p. 194). This wider framework for considering the domestic consumption of media technologies allows for new research constructions and understandings.

Initially a grounded theory approach was proposed as the basis for this thesis, one that adopts an inductive process whereby "theorizing begins with few assumptions and broad orientating concepts... [and] develops from the ground up as researchers gather and analyze data" (Lawrence-Neuman, 2000, p. 61). In reality, however, this thesis has been influenced by prior theory and/or personal experiences and observations on my part. It appears unlikely that researchers (including myself) could, in any absolute sense, separate and eliminate these influences. Therefore, the research constitutes a combination of the inductive exploratory process (as found in grounded theory) and a deductive confirmatory process (as found in many other research methodologies), since this combination better reflects the reality of the research process.

A tentative hypothesis and research question(s) were formulated to guide the research (see below). These research pointers generate an interplay between the inductive and deductive process, creating a dynamic and productive investigative strategy which benefits from previous theory while at the same time assisting the development of new concepts and useful understandings - more relevant to today's media-rich domestic environments.

Hypothesis

The tentative hypothesis proffered for this thesis is related to perceived changes in family dynamics and consumption patterns. It is speculated that multiple mediation within Australian homes has shifted the balance of power between genders and generations in the home (compared with a single –media theory). Further, the presence of the home computers and multiple television sets has fragmented family consumption of television. The hypothesis is that:

Families in technologically rich households perceive some movement away from a singular television culture, a fragmentation of household communication patterns, and rearticulation of power relationships along generational and gender lines. More specifically, it is proposed that media-rich home environments will reflect changes in the geography of the home. This in turn sees a rearticulation in patterns of consumption where different individuals or groups of individuals hold power or dominance at different times and in different household spaces.

Orientating concepts and research questions

The orientating concepts for this research are relatively broad and concerned with the geography of media consumption in the home. They focus on the way in which media technologies mediate or articulate the experience of space, place, process and community within the daily lives of participating families. The concepts (as translated into question form) are as follows:

Primary Research Question

- How are various media and information technologies acquired, consumed and managed in the context of everyday Australian family life? Why?

Subsidiary Questions

Subsidiary questions pursue issues of time, place, people, and process. They are:

- When do individuals, or groups, use various media and information technologies in the household? Who or what influences these decisions? Why?
- Where do individuals, or groups, use various media and information technologies in the household? Who decides this? Why?
- Who uses various media and information technologies and with whom? Who influences these decisions? Why?
- How do individuals, or groups, use various media and information technologies in the household? Who decides this? Why?

Ethnographic intent of the audience ethnography approach

Moore (1996) and Morley (1986) argue that an ethnographic approach to investigating families and media enables a deeper engagement with, and a wider understanding of, the social complexities associated with household media consumption. Consequently, the approach utilised in this research was a qualitative, ethnographic study of six families, all with resident children. These families had multiply-mediated home environments containing three or more screens (including at least one computer or game console)⁴. All family members including children took part in the project to enable a balanced, holistic representation of each family's interaction with the media screens in their domestic environment.

All families interviewed were volunteers and the prime research method was open-ended semi-structured, conversational interviews. This style of interviewing is a combination of unstructured and structured interview techniques. While unstructured interviews (those without particular questions) tend to reveal a broad

⁴ One family, however, had only one TV and one computer. This family was chosen to allow for some contrast in research data.

range of information which can be difficult to analyse, structured interviews (such as those in a face to face survey) may not elicit any gainful information because the right questions may not have been asked. Thus, the semi structured interview gives the researcher and interviewee some degree of direction while, at the same time, empowering the interviewee to pursue their own agendas – other topics of special interest and/or concern that are related to domestic media consumption.

This “‘conversational’ context of the ethnographic method also underlies the manner in which the contributions of interviewees are integrated within the research. It empowers the participant to set a wider agenda within which the ethnographic research is subsumed” (Green, in press). Thus, this conversational mode of interviewing enables participants to take some control of the research agenda - to add to, or redirect, the researcher’s agenda. (Please see Chapter Five for unanticipated themes and issues relevant to this thesis.)

The sample group is a purposive or judgemental sampling whereby the families involved in this study were chosen from the existing friendship and family networks of the researcher. This sampling method used existing social and family networks and built upon these relationships. It also allowed me to make what I have termed ‘opportunistic observations’ of happenings that occurred before, during and after interviews were undertaken. As the participant families were families known to me, I was often present for extended periods of time which went well beyond the interview times (frequently being asked to stay for tea and/or a couple of wines after the interviews) I restricted successive family-based interviews to no more than two at a time (in order to keep myself alert and interested in the conversations taking place). As a result, I was able to observe the families and their media use over two or three sessions. The six families involved a total of twenty-three interviews.

Although the prime research technique was the use of semi structured, conversational interviews with all family members (as well as opportunistic observation of family members interacting with media screens and each other) less conventional methods of conveying impressions were more appropriate for researching the perspectives of young children in this study (Livingstone, 1998, p. 1). Given that children tend to become restless during sit-down conversational interviews, a variety of strategies aimed at capturing children’s responses to media consumption in the home were implemented. Children were encouraged to

demonstrate their use of different screens in the house while their interview took place. At other times they were asked to draw pictures of themselves and other family members interacting with media screens, or sketch house plans locating different screens throughout their homes. Some older children used TV guides and highlighter pens to indicate their preferred viewing for the week and some used highlighters on their house plans to show the geography of individuals' media use within the home. There was a balance of gender represented by children within the research families with six girls and eight boys interviewed.

Autoethnography and the context of everyday living

The predominant research method used in this project is field interviews. However, this research project also uses autoethnographic elements within the analysis phase of the research process, whereby themes and issues emerging from the interviews are interpreted with the benefit of (and occasional reference to) my own everyday family life. "Autoethnography epitomises the reflexive turn of fieldwork for human study by (re)positioning the researcher as an object of inquiry who depicts a site of interest in terms of personal awareness and experience" (Crawford, 1996, p. 167). I have incorporated autoethnographic elements into this thesis because I have some concern with the lack of transparency about subjectivities within the conventional ethnographic process. I am also strongly aware of the private nature of the family home and the associated difficulties of observing authentic family interactions when carrying out participant observations within someone else's domestic space.

My decision to include an autoethnographic element in this thesis comes partly from my own unease with the notion that ethnographic research is thought of as providing relatively objective accounts and critiques of cultural events and happenings. In my opinion, and others, it is quite likely that the ethnographic researcher may (in her most deluded state) "be more of a copyist of personal impressions than a chronicler of cultural events" (Crawford, 1996, p. 63), that the expert stance taken by the researcher is often clouded by her "own subjective experiences and implicit knowledge...Ethnography then becomes autoethnographic because the ethnographer is unavoidably in the ethnography one way or another, manifest in the text, however subtly or obviously" (Crawford, 1996, p. 63).

Consequentially, it is more likely that a more honest ethnographic experience would occur if the researcher's experiences and subjectivities are expressed and discussed in relation to the subject matter at hand: and in my case this context is that of the multiply-mediated household.

I have also chosen to include autoethnographic accounts of my own multiply-mediated household given that easy access to the other family homes for sustained periods of field observation is rather difficult. An absence of ready legitimate data from participant observation may perhaps explain why most previous audience ethnographies have focused primarily on the interview process (Morley, 1986; Morley, 1992; Moores, 1996; Meers, 2001). Therefore an autoethnographic approach will add a degree of first hand observation of family happenings in relation to the multiply-mediated household.

Along with this, I also feel that the notion of field observation within the family home, particularly observing individuals in the context of their everyday lives, seems in itself an anomaly. This is because families, as a social units, function in the private realm. Rigid boundaries prevent authentic membership of the researcher to any chosen family group. The intervention of a visitor or stranger to the house (especially one who doesn't act like a family member or family friend, but instead, quietly notes and records everyone's movement, behaviour and interactions) is an obvious intervention in the goings-on in most family homes and therefore puts in doubt the authenticity of everyday family life at that moment in time. Autoethnography allows me a strategy to bridge this research gap and I have chosen to incorporate an element of participant observation (from my own authentic family group) by integrating some autoethnographic comment within this thesis.

Interview question guide

The following question/topic guide was used as a platform from which to engage in an unstructured conversational mode of questioning regarding media technologies within the home. Most questions were modified to suit individual participants' (age or interest level), style of language use and to help create an authentic social context. Individual participants directed pace and direction during their interviews and, as a consequence, the order of the guide questions/topics was followed strictly .

Multiply-mediated households: Guide questions/topics for interviews

- Name, age, job, interests and place in the family.
- What screen based machines do you have in your home?
 - ❖ Where are they located?
 - ❖ Why have you chosen these places?
 - ❖ Does it work well?
 - ❖ Would you place things differently?
- Do you remember a time when you didn't have the *****⁵ at home?
 - ❖ Where were you living? What was it like?
 - ❖ What sorts of things did you do? Now?
 - ❖ Work/study/hobbies?
- What was it like when you first got the ***** at home?
- Anything else?
- Do you remember when and why your family got the *****?
 - ❖ What happened?
 - ❖ How did things change after you got the *****?
 - ❖ You? Friends etc? Your family?
 - ❖ Why do you think that is?
- Do you use the ***** anywhere else apart from home?
(work/school/friends)
 - ❖ Where? What for?
- How is it different than using the ***** at home?
 - ❖ Why do you think that is?
- Do you consider yourself a heavy user of *****?

⁵ ***** is substituted for a specific media technology and/or all the screen technologies in the home of the interviewee.

- ❖ Has this changed over time since you first got the *****?
- ❖ Why do you think this is so?
- ❖ What about other family members?
- Do you have any rules or agreements, arrangements about using the ***** at home?
 - ❖ Why do you think you have these rules, agreements etc?
 - ❖ Do you think they work well?
- Has anyone been banned from using *****?
 - ❖ What happened/what for?
- Has anyone got limited/restricted use of the *****?
 - ❖ What happened / why?
- Who do you reckon is relatively (most) competent at using *****?
 - ❖ Why/what are they good at?
- Who do you think gets most use out of *****?
- Who is the boss of (has relative power over) the use of *****?
 - ❖ Who else? Least ? etc. Why?
- Are there any fights/hassles/conflicts/tensions regarding use of *****?
 - ❖ What happens?
 - ❖ Why, who wins out?
- What type of TV programs, videos etc, games, software, web sites etc are you into?
- Do other family members share these interests?
- What sorts of things are other family members into?
 - ❖ Common interests? Are they same as/ different from you?
 - ❖ Do you do things together or separately?
- Do you have any fears, concerns or worries about using the *****?

- ❖ Why/why not?
- Do other family members have any fears, concerns or worries about using the *****?
- ❖ Why/why not?
- What would you miss most/least if you no longer had *****?
- ❖ Why/why not?
- What technology would you miss the most if you had to choose between them?
- ❖ Why?
- Are there any other issues/things of interest about the ***** we haven't covered?

Sample Group/Participants

The foremost reason for choosing familiar family groups was an attempt to overcome some of the problems involved with child participants. A rapport and degree of trust was already established with many of the children involved in the study. The families participating in this study came from a relatively wide range of socio-cultural backgrounds. Educational and income levels were varied, as well as composition of the family. Dual parent, single parent, blended and multi-housed families (where children share time equally with separately housed parents) were represented. The families involved were located in the Perth metropolitan area and a regional town a few hours away from Perth.⁶

Family I: The Narberth family

Neave (40+), Trent (17), Pru (14) and Rhianna (10)

Neave runs a florist business and lives in a large modern home in a coastal suburb in a regional town in Western Australia. Trent who was in his final year at high school at the time of his interview and Pru both attend(ed) a local Catholic high school. Ten-year old Rhianna goes to a local (state) primary school. All the children

⁶ In describing these families I have used pseudonyms and changed some other details due to privacy considerations.

seem to be heavily into their sports, which include hockey, cricket, football and Irish dancing. Their media technologies comprise three television sets, pay TV, two video machines, one (oldish) game console, a personal computer and separate telephone line dedicated to Internet use.

Family 2: The Yates family

Theresa (40 +), William (40+) and Nathan (15)

William, a long-term emigrant to Australia works in the overseas student department at a WA university. William has Eurasian ancestry while his Australian partner Theresa grew up in Perth. She carries out administrative work at a TAFE campus. They live in a well-maintained 4x2 double brick home with a beautifully kept garden in a leafy Perth suburb. Their son, Nathan, attends a private high school nearby. Their media technologies include a PC, a laptop, two televisions, pay TV, a video machine, and game consoles including a Playstation2.

Family 3: The Chalmers-Pierce family

Lakisha (30+), Nicholas (11) and Liam (8)

Lakisha, originally from Poland, is a part time student and volunteer support counselor for a parenting organisation. She lives in a small fibro rental in an older Perth suburb. Her boys, Nicholas and Liam, attend a local community school. They own one television, an older game machine and a PC with Internet capabilities.

Family 4: The Ryder family

Lucy (30+), Rick (30+), Neil (16), Yvette (11) and Natalie (8)

Lucy is a part time nursing assistant and Rick, originally an electrician, is a taxi driver who is currently studying to become a high school teacher. The family lives in a large home (which is still to be carpeted and painted) in suburban Perth. The eldest son, Neil, attends a specialist high school for media/computer students while Yvette and Natalie are students in a local primary school. They have four television sets, two VCRs, a PC with Internet connection and a game machine.

Family 5: The O'Neil family

Nicole (40+), Mick (50+), Hannah (15) and Leah (11)

Nicole works as a part time youth counsellor and has recently married Mick, a widower from Scotland who is currently working as an employment consultant. They live in fibro house on the outskirts of a regional WA town. Nicole purchased the house after the breakdown of her first marriage. Mick owns a house in suburban Perth, which his adult sons live in. His step-daughter Hannah attends a private high school while Leah attends a local primary school. Their media technologies include a family television set, VCR and three computers, two with Internet connectivity.

Family 6: The Rabinur family

Vernan (40+), Lauren (40+), Caleb (15), Daku (13) and Uwan (10)

The Rabinurs live in suburban Perth in a (recently extended) 60s brick home. Lauren, who grew up in country WA, met and married Vernan (from Madagascar) when they were in their twenties. Lauren is a nurse and Vernan is employed as a trades assistant. All the family play soccer. Caleb and Daku attend a local high school while their younger brother Uwan goes to the local primary school. They have two television sets, a DVD player and an Internet connected PC.

Ethical Considerations

An ethics application was submitted to Edith Cowan University Ethics Committee for this project. Ethical clearance has been given. Each participant was asked for his or her consent to participate in this study and parents were also asked to consent to interviews with their children. All participants read and signed information and consent forms before commencing their recorded interviews. Primary school children were given modified consent forms to read and sign, and in one case, the form was read out to the child.

The purpose of the study was explained to all participants. They were told that they could withdraw from the conversation at any time. The process of data collection and use (audio recording, to transcription, to the possible inclusion of direct quotes in the thesis document) was explained. The privacy and confidentiality of all participants was assured. Pseudonyms have been used, and any identifying

information has been excluded from this document. The researcher will hold all the data collected for five years after the completion of this study.

Limitations to study

The aim of this study is to generate meaningful insights and arrive at tentative conclusions about families living in increasingly complex media environments. These insights will be relevant to the families involved. They may also have broader significance to the community at large (Hornig-Priest, 1996, pp. 203 – 204) because, provisionally speaking, conversations with these families have uncovered many insights into the way families make sense of their changing media environment.

This study is unlikely to arrive at results that can be readily generalised to the population as a whole. It is expected, however, that this study will reveal specific patterns and trends, which may provide insights into the dynamics of families now engaging with a more technologically complex and uncertain world. It is hoped that this thesis will help shape, in some ways, the development of new concepts and useful understandings about individuals, families and the use of media in domestic contexts. Hopefully these insights will be more relevant to today's media-rich domestic environments than older media and cultural studies models based on television alone.

CHAPTER THREE

MEDIA TECHNOLOGIES AND THE GEOGRAPHY OF THE HOME

Bhabha (1994) refers to how the regulation and negotiation of spaces are continually remaking boundaries, “exposing the limits of any claim to a singular or autonomous sign of difference – be it class, gender or race”. The same can be proposed for age and the articulation of cultural differences in space that are produced through generational circumstances. Central to Bhabha’s thesis has been the understanding that identity is produced through (in)between spaces which provide terrain for elaborating strategies of selfhood – singular or communal – that initiate new signs of identity, and innovative sites of collaboration and contestation (Matthews, Limb & Taylor, 2000, p. 64).

Introduction

The previous chapter was concerned with theoretical perspectives related to the study of media audiences, as well as the methodological approach and the research strategies used for this thesis. It explained the use of an ethnographic (and autoethnographic) methodology and special strategies used to include children in the study. The second chapter also presented a (tentative) hypothesis and research questions.

This chapter, the first of the themed chapters, focuses on the relationship between media technologies, geographical spaces and boundaries within the home and the people who use (or don’t use) these technologies and spaces. As the regulation and negotiation of space in the home can vary according to the generational circumstances of the family, the “integration of media technologies [also] requires a reorganisation of the home as a social sphere” (Grumpert & Drucker, 1998, p. 423). Within today’s multiply-mediated home, children’s (and their parents’) claims over their own time and space are intimately involved in the use of media technologies within the home.

This chapter will, therefore, explore the relationship between media resources and the physical geography of the home. It will begin with an account of bedroom culture, a phenomenon evident in multiply-mediated households in the UK and the

USA, where children's bedrooms are increasingly becoming sites of entertainment and socialisation, and which is associated with the integration of electronic media technologies into the domestic sphere (Livingstone, 1998; Woodard & Gridina, 2000). It will discuss the extent to which this culture is present in Australia and the gendered nature of bedroom culture as well as children's desire for media-rich bedrooms. This chapter will conclude with an analysis of the relationship between media resources, the physical geography of the multiply-mediated home and the sociocultural environment of the home in general.

Media screens and children's bedroom culture

The notion of a 'children's bedroom culture' refers to children and young people's bedrooms as if they were constructed as a "private space for socialising, identity display and for just being alone" (Livingstone & Bovill, 1999, p. 34). In their examination of young people and media use, Livingstone and Bovill identified this phenomenon in many British families. Seventy two per cent of children had their own bedrooms and older children and teenagers, in particular, regarded their bedrooms as places of privacy as well as places for social engagement – a room away from parental supervision and a room in which to socialise with friends. This private (yet social) space is circumscribed by generational difference (pp. 34 – 5).

Livingstone and Bovill suggest that these generational boundaries within the private sphere of the family home are shaped by parental fear of the outside world and children's apparent boredom with that outside world (or neighbourhood).

Equipping the bedroom represents an ideal compromise in which children are both entertained and kept safe. After all, parents are more fearful of their children's safety outside the home than of any media-related dangers. As many young people do not think there is enough for them to do in their neighbourhood, they're only too happy to receive either new or hand-me-down televisions, VCRs, etc. (Livingstone & Bovill, 1999, p. 34).

All 14 young participants interviewed for this study have their own bedrooms. However, only four had bedrooms with screen technologies located in them; two teenage boys with game consoles connected to television screens, one teenage boy with a television only, and one teenage girl with a hand-me-down computer for study purposes. The majority of the children and teenagers had no screen technologies in their bedrooms although most had CD players (with radio

reception) in their bedrooms. Despite this lack of seriously ‘media-rich’ bedrooms, most of the children in this study had access to a second television set and an Internet connected computer in a room separate from the main family living area.

Both these research observations are in line with a recent Australian Broadcasting Authority (ABA, 2003) survey report, *Research into Community Attitudes into Violence on Free-to-Air Television*, which included a section with updated data concerning “television ownership, pay TV subscription and Internet connectivity in Australian homes, and in particular where they were accessed in the home” (ABA, 2003, p. 65). The report indicated that fewer than eight per cent of families with children locate television sets in their children’s bedrooms despite the fact that three-quarters of Australian families have second or third televisions sets. These second and subsequent sets are located in rooms other than the main family or lounge room and children’s bedrooms (ABA, 2003, pp. 65 – 6). This lack of screen technologies within Australian children’s bedrooms is contrary to Livingstone and Bovills’ UK study (1999, pp. 34 - 34) where sixty-three per cent of children have their own television (twenty-one per cent with video recorders and thirty-four per cent with a game machine linked to the TV).

Parent views about children’s bedroom culture

Children’s bedroom culture is associated with independence and identity display, and these traits are more visible with adolescent children where selfhood is displayed through the use of space to differentiate the self from parent - perhaps to limit social engagement with parents, or to demonstrate independence from parental authority. Most parents within this study were not overly concerned with teenagers’ (and some pre-teens’) displays of selfhood. They viewed these acts of independence as part of a normal transition from childhood to adulthood.

When he [Nathan, 14] was younger, I guess he would do things in the lounge with us. Like he would play his physical games on the floor while we were watching television. But increasingly now as he’s got older, he can decide that he’ll go off and do his own thing. Which means he’ll go into his bedroom and do a game on his TV or watch TV in his bedroom whether it’s with himself or his friends. And that means we don’t do things as much as we used to before, but that’s an age factor thing rather than [anything else] (William, 40+, personal communication, 2003).

Little anxiety about the private use of media technologies was evident in most discussions with the parents in this study⁷. Although parents were generally concerned about excessive use of media technologies (as it may displace time spent in physical activities, chores or homework) they were not worried about their children's private use of media⁸ as an 'age thing' and did not seem overly anxious about any lack of direct supervision or children having choices in the viewing of inappropriate content of television programs, games or websites. There was a range of parental responses to concerns they might have about their children's media consumption. One couple, having found out that their teenage son was accessing and saving pornography, now keep an eye on their son's Internet use. Although they view this behaviour as relatively normal for a teenager, they were mostly concerned with employers (who provided their Internet connection) finding out about this access and that their son needed to develop a more mature attitude to gratuitous sexual displays.

Then of course Theresa [partner] said, well it will really impact on her and her job if at home, it's found that staff are using their access to put [access and download] porn sites..... It seems to me it's all within character. The sorts of things you expect are normal, [for] kids to be curious. And he's been given the books on sex and all the rest so he knows but he shouldn't just be doing gratuitous porn searches (William, 40+, personal communication, 2003).

Other responses range from annoyance at one teenager's sensitivity to, and self-censoring of, television shows -

Yeah, [Hannah, 15] self-censors a lot, much more so than Leah [11] does and she'll be out of the room if – if there's any scenes of or any possibility of violence or sex. She'll be off and out. And she doesn't even know yet if that's going to happen but it just looks like it might happen. Whereas Leah, she'll sit and have a good look! And in fact, we have found it quite frustrating with Hannah because what happens is that Hannah... This is what Hannah does. [Nicole gets up and stands in the doorway between the lounge room and dining area and begins to demonstrate Hannah's movements.] She comes and she stands here and she'll watch from here and she'll hover and then she might kind of sit down [Nicole sits on the arm of the lounge chair by

⁷ One parent within this study, Mick, was very concerned about content issues. These concerns were to do with the violence, educational value and political depth (and even-handedness) of television shows in general. He had a particular dislike of most American television preferring documentaries and dramas featured on ABC and SBS. Another parent was concerned about promotional advertisements for young adult dramas being shown in children's time slots.

⁸ This private consumption was mostly carried out in secondary living areas of the home.

the dining room door] and then [Nicole walks into the dining room and sits on a dining chair that is in sight of the television in the other room]. So when we're watching, it's frustrating to have someone constantly move in and out, in and out of the lounge room. And most of the time, like 90 per cent of the time, it won't be an issue but that 10 per cent when you just can't stand it any longer: "for God's sake, it's either sit and watch or get out". (Nicole, 40+, personal communication, 2003)

- to a rejection of a generalised notion of 'media effects' within their own family.

Well, you'd be worried if you thought that the kids were watching lots of violent movies and it was starting to impact on their social behaviour either in the family or at school but Nathan [14] doesn't seem to have much interest in violent movies. He likes kung fu type things, which appear to be violent, but he seems to separate that out. [It] doesn't affect his behaviour. So in that sense, I'm not worried. There's nothing that indicates any social abnormality or concerns and he doesn't seem to [pause]. We don't worry if he watches sex scenes on TV. It doesn't embarrass us enormously like our parents did. They'd make us change the channel or they'd get all embarrassed (William, 40+, personal communication, 2003).

While for one parent, watching sex scenes with her teenage son still took a little getting used to.

Sometimes I feel a little uncomfortable if there's some sex scenes or something come on the TV and I'm sitting there with my 16 year old thinking, I'm not really comfortable with [this] but he's cool with it. He's okay (Lucy, 30+, personal communication, 2003).

Interestingly, the one parent in this study who did express some concern about the effects of media on children, considered his stepdaughters sensible enough to handle it.

Yeah well, I've got a view that television has got such a tremendous influence on young minds that we really need to be careful about unrestricted access to television. It's like the Internet by the way. And so I'm of the view that if the kids are watching TV, it's something that we'd like to know what they're watching..... The kids are quite good. I'm very surprised that they. Their curiosity is not one of deviancy. You know, they just like the girly sites and they like the horse riding and you know ... Hannah [15] did a very interesting exercise on Hitler so she researched his sites. And some cases, there are some right wing sites that she could have ended up with where they spew out hate and all of that. But I thought well OK, it's a part of the program and it's part of the research that she's got to do. So I'm not too worried if she hits one of those sites, which is possible

when you research things like Hitler, you know (Mick, 50+, personal communication, 2003)

This minimal parental concern is comparable to Livingstone's and Bovill's understanding of children's bedroom culture in British families where "contrary to moral panics about television, parents are more likely to think television affects their child's consumer desires and the amount of reading they do than they are to worry about televised programs" (Livingstone & Bovill, 1999, p. 37). The lack of parental anxiety within this study may, however, be limited to the small sample group. Nonetheless, the recent ABA (2003) study about current attitudes to violence on television also found that, there is a significant decrease in the proportion of the community concerned about these issues. In 2002, 14 per cent of adults spontaneously mentioned violence as a concern compared to 25 per cent in 1989⁹ (ABA, 2003, p. iii).

The Gendered Nature of Children's Bedroom Cultures

Although there is little evidence of screen-rich bedroom cultures within the homes of families in this study and within Australian households in general (ABA, 2003, pp. 65 – 7), there seems to be some difference in the bedroom culture of boys and girls. Marshall (1997) identifies distinctive gender differences in the bedroom culture of boys and girls. Girls' bedroom spaces tend to be devoted to personal music with "transistors, walkmans and portable stereo and CD players" (p. 74) and they are often a site for the fan shrines of pre-teen and early teen girls (Marshall, 1997, p. 74). The girls in the study represented here also displayed an enthusiasm for music technologies with all of them owning their own portable CD players and many of them including their CD players in discussion about screen technologies in the home.

⁹ This study found no apparent reason for this change in community attitudes but suggests that "greater exposure to television and other audio-visual entertainment" (ABA, 2003, p. 2) may have brought with it this change in attitude (p. 2). It seems possible that this fear is now relocated to Internet content.



Figure 3.1: Music and Girl's Bedroom Culture by Natalie (8), the youngest in this study. She spent a great deal of time creating this picture of her new CD player while being interviewed about screen technologies in her house, the focus of this study. Her beloved cat also has a starring role.

According to Marshall (1997), boys' bedroom culture is distinctly different from girls' and is usually associated with video gaming and computers. Marshall ascribes the emergence of a boys' bedroom culture to the domestication of videogames – previously associated with a more public youth culture, which can be traced to the pool halls and pinball parlours of the mid to late twentieth century. Home video gaming tends to be dependent upon access to a television set and with the movement towards multiple television ownership gaming is “no longer at the centre of family entertainment but like the arcade, drew [draws] the user away to an enclave” (p. 72 – 3).

Gaming is central to the lives of the two (of the four) teenage boys in this study who do have screen rich bedroom cultures: Nathan (only child aged 14) and Neil (16 and eldest brother to two sisters). Both boys seem to have created a private media environment as described by Marshall (1997) where “the bedroom is a complex enclave of security, pleasure, vulnerability and privacy” (Marshall, 1997, p.

74). These gaming enclaves seem to be neither private nor public spaces but coexist as both a public and private space, which is shared at times with siblings and friends. At times, these gaming friends share their bedroom enclaves in a reciprocal manner. “My friends’ bought a Playstation 2. I [also] go over there sometimes and play it with him” (Neil, 16, personal communication, 2003).

Despite the private nature of Neil’s bedroom enclave, the character of family life still sees other family members’ contestation and negotiation regarding Neil’s use of the Playstation. Neil’s father and uncles like to play competitively on the Playstation, and Neil’s younger sisters (Yvette, 11 and Natalie, 7) also enjoy gaming¹⁰.

Yvette: And it’s his Playstation but he has to share it. ... We just go in there and say, Neil, we want to use the Playstation and he goes – if he’s not doing it – if he’s not using it, then

Natalie: Yeah, we wait and we go and play with him in there [inaudible 502] but if he’s not playing it, we just say we’re taking the Playstation.

Yvette: Sometimes you have to wait, sometimes you don’t.

(Yvette, 11, and Natalie, 8, personal communication, 2003)

The movement of screen technologies into the bedroom, and also to secondary living spaces established for children and teenagers, seems to build social capital with peers and siblings¹¹. By social capital I simply mean social interaction (as opposed to isolation) as enacted through the lifestyle of these young people, and their patterns of reciprocity and engagement. This form of social capital can also be termed sociotechnical capital, in which there are which “productive combinations of social relations and information and communication technology” (Resnick, 2002, pp. 248 – 249).

This social interaction also tends to bring about a change in the private/public nature of children’s bedrooms with ownership of screen technologies and a change in the social status of the technology’s owner(s). My own son (Nat, aged 11) has a

¹⁰ The children’s Nan buys Neil, and his younger sisters, gender inclusive/appropriate games when she is in Bali. Many WA gamers source their pirated console and PC games from Bali and other SE Asian holiday destinations. DVD movies are now also being sourced in these places by parents and children alike.

¹¹ In this case social capital means the joint knowledge, technical skills, interests, communication patterns and trust developed within these groups give a sense of cohesiveness to the group and provide for social interaction in the future (as opposed to social isolation).

gamer's bedroom similar to these two male teenagers. An early fascination with gaming was brought about through his older sister (now 24) who got her first machine at age twelve. However, nowadays Nat's bedroom enclave is a gendered media space usually frequented by boys (cousins, neighbourhood friends and school mates) and intruded upon occasionally by older sisters.

The geographical migration of the television set, along with new digital technologies, to the bedrooms and secondary living spaces in many family homes has brought with it new dynamics for social space within the household and a "reciprocal (re) construction of the meanings and functions of both the technological objects and the domestic spaces they inhabit" (Caron:3). Equipping bedrooms with television and digital technologies has the ability to change the room's conventional usage – both spatially and temporally. In this way our 11-year-old's bedroom has been transformed into a specialised bedroom culture – a gamer's paradise. By locating a television and game console in this bedroom the technologies are identified as personal property while at the same time allowing for a space that functions as both communal and private, for sharing with siblings and friends and solitary gaming (Holloway, 2003).

Although not being owners of (an idyllic) gamer's bedroom other boys in this study are well established within their own gaming culture. The three boys in the Rabinur family (aged 10 to 15) manage to play video games regularly with the other boys in their child-friendly street. Further, they have even managed to gain a long-term loan of a Playstation.

I've not bought the Playstation or X-box even though the children have asked me but we have a Playstation quite regularly here because [of] the neighbours across the road. There's a 14 year-old boy there who actually doesn't live there anymore but his older brothers and sisters do. He has every contraption you could possibly imagine and he comes over often. So when he comes, he'll bring his Playstation and it'll stay here for months on end (Lauren, 40+, personal communication, 2003).

Notwithstanding the obviously gendered nature of video gaming within the families in this study, Australian Bureau of Statistics (ABS) figures suggest that many girls also play computer games with 58 per cent of girls and 79 per cent of boys reported playing computer games within a two-week survey period in 2001. However, "among those who had played these games, the average time spent on this activity in the most recent two school weeks was nine hours for boys and six hours for girls" (ABS, 2001, *Playing Electronic or Computer Games*, para. 1 - 3). Of

interest as well is the fact that girls' usage peaked at age eleven and then declined to it's lowest for 14-year-old girls (para. 1). It seems however, that adolescent boys who are attracted to game playing often continue gaming into late teens and/or adulthood (Galante-Block, 2002, p. 1).

The young gadgeteer's bedroom culture

Neil, one of the two teenage boys within this study who had screen rich bedrooms, has a new television set, VCR connection, game machine and high tech stereo system. He also has an extensive collection of Playstation games. Having recently purchased his own television set Neil seemed very proud of his media-saturated bedroom spending some time outlining the technical aspects of his interconnected system. He also indicated, at the time of his interview, that he was looking to update and extend his media collection. "Soon I should be getting more, hopefully a new DVD player and a VCR of my own" (Neil, 16, personal communication, 2003).

While Neil's media-rich room is indicative of a well-resourced bedroom culture - a site of independence and privacy (Livingstone and Bovill, 1999, p. 34) this does not seem to be the full story. Careful attention and reflection on the technical language Neil uses, the do-it-yourself activities Neil describes, Neil's career choices at school and the pleasure Neil derives from being a technological sophisticate indicates something more – perhaps the emergence of what Moores describes as a 'gadgeteer culture' (1996, p. 57 – 60). He argues that this is a particular expression of masculine identity and the result of a specific configuration of technology and masculinity: one which usually involves a love of technology, domestic do-it-yourself production of technologies and an unfolding career with that technology (pp. 57 – 60).

At sixteen, Neil seems well on his way towards an adult gadgeteer career. As well as the do-it-yourself assembling and production of media technologies in the family home (see next page), Neil attends a high school out of his local district in order to take specialised media classes. Neil's subject choices at school also indicate an interest in all things technical. "the only thing I have [to do] is English. The rest are choice subjects, mainly media things like media, digimedia, photography and two metals – metalwork classes" (Neil, 16, personal communication, 2003).

Judy Wajcman (1991) suggests that there are “disparate forms of masculinity [which] reflect class divisions, as well as ethnic and generational differences” (p. 143). Neil’s gadgeteer culture seems to be a reflection of the working class background of his family and gadgeteer father¹² (within which it seems that Neil’s expertise and interest has been modelled and/or fostered by other men in the family) although there are distinct generational differences in the types of activities and levels of expertise between father and son. Neil’s father Rick, although not overtly revealing himself as a technical expert or gadgeteer within his own interview is an electrician who showed an early interest in computers. His wife Lucy described their early days with computers:

He [Rick] would sit in front of it and I don’t know if you’ve ever written a program but we used to get books and they’d have the program written in and you’d have to type in all the letters exactly the same as these books. And there was like 100 pages of just typing in letters and they had to be exactly [right or] otherwise. It was like DOS, you know? Yeah I mean – and there was no way I would ever attempt anything like that (Lucy, 30+, personal communication, 2003).

Like his father Rick, technological mastery is important for Neil who has spent some time interconnecting different technologies in the house. His personally-owned television is connected to a VCR in a nearby family room and he has connected all his screen technologies to his stereo system. He plans further do-it-yourself electronic connections: “I’ve been thinking about getting an intercom in my room to go into the kitchen” (Neil, 16, personal communication, 2003). Neil also feels a special connectivity with technology. “I always have something electrical around me. Like when I’m out, I have my mobile on. I just have to use it. I have my phone with me so there’s always something electrical around me” (Neil, 16, personal communication, 2003).

As expected, generational differences circumscribe the new generation of gadgeteer. New digital technologies provide an arena within which the young gadgeteer can construct an identity different from the previous generation (usually fathers). Neil is the computer expert in his house, having taken this mantle from his father Rick in the last few years, and seems to take some pleasure in the personal

¹² Adult gadgeteers will be discussed in the next chapter.

power this generates. When asked if there were any restrictions on what he could do on the family computer Neil stated:

No, I don't think mum and dad know that much about it so I have to explain what I'm doing...The other day Dad was getting our new [inaudible] printer and he was doing a print job and it was coming with computer language when it was printing. [There] was lines of it and he was getting really annoyed with it and I told him to cancel the print job and he got snappy with me. So I said if he's snappy, I won't help him and he shut up. I fixed it and he was like – thank you (Neil, 16, personal communication, 2003).

This reversal of father/son roles has been observed by Ribak (2001) who examined the role the computer has in the negotiation of fatherhood and masculinity. She identified “ a struggle over the meaning of male identity, where the computer is the site – or the tool – for its articulation” (pp. 233 – 4). She also found that father and sons often use computer expertise as a signifier of masculinity and a son's proficiency (over and above his father) reversed the usual omnipotence of fathers creating a father/son dependency¹³.

Wajcman (1994) suggests that while working class masculinity is associated with manual labour and machinery (dirt, noise and danger) or a shop floor culture of working class men; hacker culture is not associated with physical strength or masculine appearance. Rather, hackers tend to “mythologize their work activities in terms of the traditional ‘warrior ethic’ of heroic masculinity” (p. 144). Despite possible differences between classes in masculine technocultures, there seems to be some commonalities in the gendered dynamics of masculine technoculture and identity; some level of obsession or infatuation with inanimate objects (whether it be a computer, hi fi, intercom system, car, or military jet) and a desire to master or control these inanimate objects (Moores, 1996, p. 60) and gain social status from this mastery. These commonalities should not, however, detract from (or oversimplify) the rather complex and interconnected relationship that exists between technology, knowledge, power, masculinity and sociocultural status and identity¹⁴.

¹³ I suspect that further research might reveal some other reactions on the part of fathers to this role reversal. These may include denial, encouragement, resistance or a focus on other (alternative) activities that signify masculinity.

¹⁴ Wajcman also points out that not all men are technologically inclined or adept (1994, p. 143). Please see Chapter Four for further discussion about this topic.

Neil's gadgeteer culture is one form of masculine technoculture. His bedroom signifies a particularly masculine gadgeteer culture as well as a teenage bedroom culture within which his gendered and generational identity and selfhood are displayed. Thus, Neil's gadgeteering also marks a generational difference between father and son, with newer digital technologies providing Neil with the scope for a display of masculine identity distinctly different from his father, Rick.

Bedroom culture and children's desires

Within the family, children's desire to use media technologies (for play, entertainment and leisure) often sets them apart from their parents and elders. The multiply-mediated household is one in which children and young people have a greater opportunity to use media screens in a space away from adults; and to engage in cultural practices (video games, music, web sites and adolescent television shows) often foreign to adult family members. Children's media culture, therefore, holds an ambiguous position. It is linked intimately with consumption yet, at the same time, is inherently foreign to adults. It is located between domestic space and public space and also between communal space and private space in the home.

Children's desire to have free access to media screens away from the parental eye is abundantly evident in their interview responses and in the drawings of their fantasy bedrooms. Teenager Pru (14) is a frequent online chatter – using her extensive MSN contact group/list (consisting of friends and acquaintances from face-to-face social groups). Pru was asked if she would change the location of the screens in her house if she was allowed to do so.

Pru: Yeah, I'd put one in my room.

Interviewer: Why's that?

Pru: So I that I can watch what I want. ... [and] I'd put the computer in my room.

Interviewer: You'd have a computer and a telly¹⁵?

Pru: Yep (Pru, 14, personal communication, 2003).

Pru's younger sister Rhianna (10) also expressed a wish to relocate the family screens to her bedroom. Moreover, Rhianna's fantasy bedroom¹⁶ is reflective of

¹⁵ There was some confusion on my part about what screen technologies Pru was talking about.

¹⁶ Younger children, in particular girls, were more inclined to draw while their interview took place and/or draw as a response to the interview topics.

many children's desires to use their bedroom as a "private place for socialising, identity display and just being alone" (Livingstone, 1998, p. 34). Rhianna's fantasy disco space (below) also seems to distinguish this as a pre-teen girls fantasy bedroom. Pre-teen girls tend to use their bedrooms as "private place[s] for the enjoyment of personal music" (Marshall, 1997, p. 74).

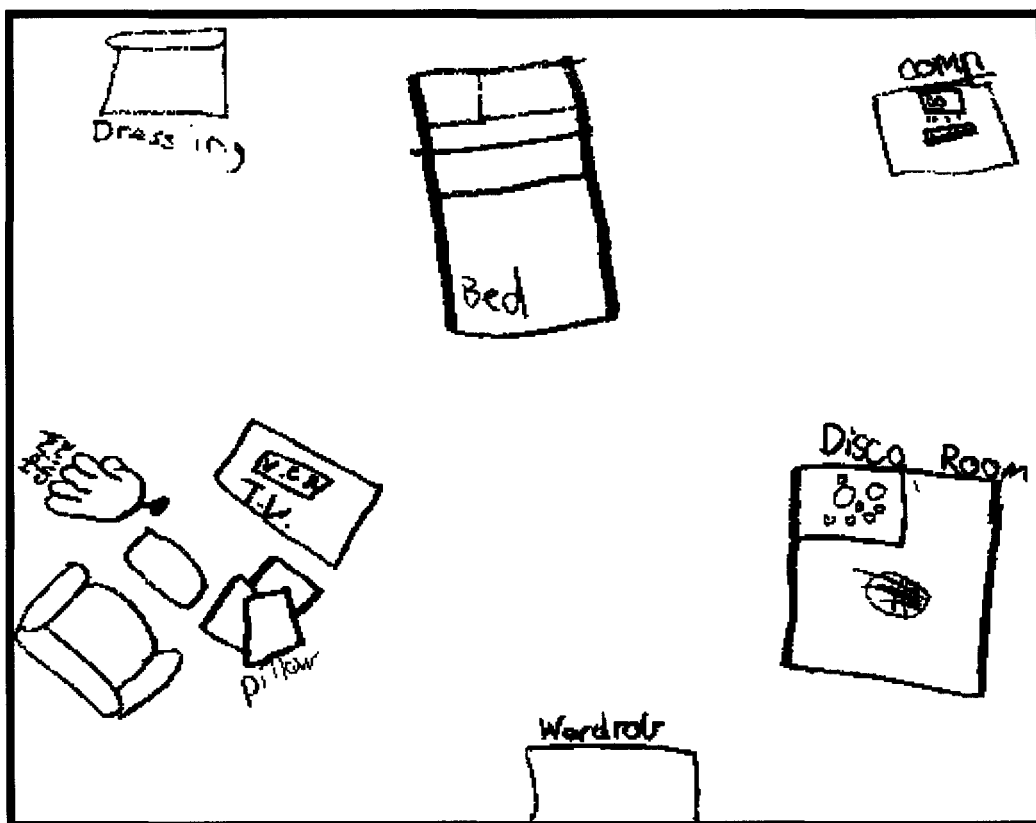


Figure 3.2: Rhianna's fantasy bedroom

Rhianna's fantasy bedroom, with its media technologies (as well as a funky hand chair and disco room influenced, she explains, by retro film, *Austin Powers*) reminds us that contemporary children's culture often seems quite indistinguishable from consumer culture.

Children's involvement in a consumer culture, which is distinctly different from adults', is a relatively new western phenomenon having gradually occurred over the course of the last century. Over this time, there has been a fundamental shift in the social status of children. As children became liberated from the labour market and put into schools; as economic development and improvements in the standard of living provided improved "domestic well being; more clean clothes; more varied

diet; cleaner, larger living spaces; more heating” (Seiter, 1998, p. 302); and as women’s participation in the workforce increased, a children’s consumer culture steadily emerged (p. 302).

Nowadays, children are more likely to be considered as active agents within a consumer culture and are targeted by producers, retailers and advertisers (Seiter, 1998; Cook, 2001). Contemporary children’s culture, which allows for the active agency of children within the consumption process, makes children’s consumer culture both familiar and unfamiliar to many adults. Nonetheless, parents are also caught up in patterns of consumption, which are closely aligned with the realisation and expression of self, and this can help set the context for their children’s behaviour. The dilemma for many parents is that on one level they may dislike the rampant commodification of childhood and on another level they may also want their children to identify with (or fit in with) their peers.

The cultural marketplace is now a key arena for the formation of the sense of self and of peer relationships, so much so that parents are often stuck between giving into a kid’s purchase demands or risking their child becoming an outcast on the playground. The relationship is reciprocal (Cook, 2001, para. 12).

The desire of most of the children within this study to have media-rich bedrooms has not been realised, as there seems to be some resistance (financial or otherwise) on the part of parents to locate these technologies within their children’s bedrooms. When asked, in a follow-up question, via email, the reason why there are no screen technologies in her children’s bedrooms, Neave (mother of three) responded succinctly:

Donell, would not let kids have a TV etc. in their bedrooms as not good for mixing with rest of family, communication, ‘caring and sharing’, and of course fighting. Would never see Trent [17] if TV was in his room. Bad enough with his own CD player and the ‘mother fucka’ music¹⁷ (Neave, 40+, personal communication, 2003).

For families, particularly those with more than one child, it seems that locating the second television or family computer in a child’s bedroom would, predictably, cause struggles over ownership and use of these technologies and placing these technologies in one child’s bedroom (a relatively private space) would

¹⁷ Mother fucka music is a shared term used to refer to heavy metal music loaded with X-rated lyrics. It is one example of children’s (or this case young people’s) consumer culture, which is a link to teenager identity displays and is relatively foreign to (or disliked by) adults.

be inherently inequitable. It would most likely consolidate a sense of ownership for the child lucky enough to have the technology over and above other siblings, who would, no doubt, contest control and power over the technology and/or the use of this private space.¹⁸ Notably, Australian parents in general seem to be resisting their children's desire to locate media screens in their bedrooms with fewer than eight per cent of Australian families with children locating televisions in children's bedrooms (ABA, 2003, p. 66). These Australian findings will be discussed at more length in the next section.

Children and the geography of family media use in Australian households

The integration of new and multiple media technologies within the home brings with it implications for family members over time and space. This in turn may transform the public/private nature of various rooms in the home. Sherratt (2002) notes that there are varying levels of domestic privacy within households. These range from areas that are clearly private...[and] intended for use by one, or at most two people at a time, such as the bathroom or bedroom¹⁹. Conversely, areas that are unmistakably public are those that can be utilised by all family members at once, and are suitable for entertaining guests such as the lounge and dining rooms. Some areas have the ability to be both public and private, adapting to the needs of the inhabitant[s]. These include areas such as the study or home office that can be sectioned off from the rest of the house when required (p. 19).

The incorporation of new and multiple media technologies within the home may bring about new dynamics for social and private spaces within the household and significantly change the public/private nature of many rooms in the home. Accordingly, watching television from your parent's bed, playing video games in your friend's bedroom or online gaming in your mum's study, significantly changes the meaning and functions of the technologies and domestic spaces in which they are located. For this reason, it can be said that the inclusion of media technologies in these relatively private spaces (such as bedrooms or studies) can temporarily

¹⁸ An exception to this state of affairs is Caleb (15) who has a television set in his bedroom while his younger brothers do not. His mother, Lauren, explains that he is the one child in the house who needs no supervision as he gets all his homework done and is generally well organised.

¹⁹ When referring to bedrooms as 'clearly private' Sherratt (2002) is making a generalisation that does not seem to have taken into consideration the social function of many children and young people's bedrooms.

transform these spaces from somewhat private into relatively communal or social spaces - or even spaces available 'for loan' to others. On the other hand, the inclusion of negotiable/publicly accessible media technologies in these relatively private areas will presumably place less pressure on the media spaces dedicated to communal usage (living or lounge room), again changing the dynamics of social interaction within the household and allowing for more individualised, or fragmented modes of consumption in these spaces, and reducing the likelihood and completeness of surveillance.

While, for the most part, computers and Internet connectivity seem to be suited to a more individual mode of consumption²⁰ (Holmes, 1997, p. 38) and television viewing lends itself to group viewing, Australian families are more likely to locate both the second television set and the family computer in relatively communal areas of the house. Within this relatively small scale study, the provision of media screen technologies in secondary living spaces dedicated to children's and young adults' play or leisure (the family room, spare room or activity room) was more prevalent than the provision of screen technologies in children's bedrooms. Further, the family computer was usually located in a study or office – a room that can be both private and communal in nature.

Computers, particularly those connected to the Internet, also seem absent from children and young people's bedrooms. Australian households with children usually have their Internet connected in studies or offices (55 per cent) and in the living or lounge rooms (24 per cent). Interestingly, when comparing households in general to households with children, the number of Internet connections located in bedrooms dropped from 15 to 8 per cent (ABA, 2003, pp. 66 – 7). This may be explained by the greater need to share the household computer between the children or adults in the family. It may also be that some parents prefer to supervise their children's Internet usage, or that household connectivity is restricted by the location of existing landline connections.

Despite the lack of screen rich bedrooms most of the children and young adults who participated in this study do have the opportunity to view or use media screens away from the main communal living area when, and if, they want to. It

²⁰ The family computer is used, at times, by groups of young people for entertainment/leisure activities such as game playing and other joint activities.

appears, from Livingstone and Bovill's (1999) research, that the lack of media screens in Australian children's bedrooms and the provision of media technologies in these secondary living spaces may be a phenomenon specific to Australian households. Therefore, it should not be assumed that patterns of access and use are replicated between western countries of similar living standards.

Demographic factors and the sociocultural practices of particular families and cultural groups within specific countries or regions need to be considered carefully when researchers attempt to track and understand the changes in household geography in relation to incorporation of new and multiple media technologies in the home. One adult participant in this study, William, who spent his childhood in SE Asia and England, theorised about the difference in availability of space in British and Australian homes and related this to the use of space and the location of domestic media technologies:

I think it's probably also physical building space. British flats and houses are very small aren't they? Whereas we've got family rooms, studies, bedrooms, lounge rooms, much more space whereas the British are in a small lounge often and they don't have room for a separate study or office or whatever (William, 40+, personal communication, 2003).

William's observations imply that it may be the lack of communal space separated from the family lounge that drives technology into British children's bedrooms.

Studies from different countries also indicate that the domestic geography of families' media use varies from country to country. U.S. studies indicate that higher income families have more television sets in their homes, but "less well off families are more likely to have children with television sets in their bedrooms" (Woodard & Gridina, 2000, p. 15). This phenomenon, that "family income is negatively related to child television sets" (p. 16), is not entirely explained but seems to be reflective of the limited space (number of rooms) lower income families may have in which to locate their second or third television set. That is to say, lower income families may locate television sets in children's bedrooms because there is no other space within the home to do so – apart from the main lounge room where the family television is placed. As with William's theory of differential amounts of shared space, the size

and layout of particular homes may be a factor that has some bearing on the location of multiple technologies within the home.

In other cases it may be that the size and layout of the family home may have more to do with individual lifestyle choices than income. Lauren (40+) and Vernon (40+) have recently carried out major extensions to their home by adding a second floor to their house. This extension gives them three extra bedrooms (one that is a spare bedroom and now used to board overseas students). These choices (bedrooms over communal living spaces) have left them with one large communal living area and this, according to Lauren is the reason why a television is located in her eldest's bedroom.

This house has one major living area...We have only one major living area. That has the dining table and all the other living things so in that room is the computer at one end. It's a really big room and at the other end is a TV. My eldest boy, who is really good academically and who does his work whether (he's – year 11) without me ever having to say 'do your homework'. He's had a TV in his room for quite a few years because I can totally trust that he will get on with what he needs to do (Lauren, 40+, personal communication, 2003).

Another large study of children's media use indicated that New Zealand children do not have media-rich bedroom environments in comparison with the research reported by Livingstone and Bovills' British study where "twice the number of British children have a television set in their bedroom than do New Zealand children" (Lealand, 2000, p. 16). Lealand suggests that one reason for this difference is climatic variations between the two countries²¹; New Zealand children may spend more time outside their home (p. 16). Similar Australian findings were reported in a study of the viewing habits of Canberra teenagers where only "a few members of focus groups had a television, computer and sound equipment in their bedrooms but this was by no means the norm" (Griffiths, 1998, p. 32). Griffiths suggested that these teenagers' high level of participation in sport may have some impact on their media use:

Unlike British young people the boundary between public and private lives is not so marked. Canberrean parents do not appear to have a fear of the world outside their front door. Canberrean young people

²¹ Australian parents, particularly those living in the northern parts of Australia, are more inclined to keep their children inside in (sun)safer air-conditioned environments during the heat of the day.

have significant leisure time experiences outdoors in public spaces such as sporting events and shopping malls (Griffiths, 1998, p. 33).

Interviews with parents and children in my study indicate that, despite children's desire to locate media technologies in their own bedrooms, parents are choosing to locate second and third television sets, as well as the family computer and Internet connection, in more communally available household spaces such as studies, offices or spare rooms (for computers and Internet connections) and family rooms, activity rooms or spare rooms (for the second television set). It seems that parents in this study view these technologies as shared resources which are better suited to less private locales in the family home (if there is sufficient space within in the home to allow this). It may be that children's desire to locate media screens in their bedrooms may only be realised if, in the future, their parents can afford to, and choose to, duplicate the number of media technologies available in the home to the point where there is no need to share these technologies²².

While children and young people's use of media in multiply-mediated households has been used to exemplify the individualisation of media consumption (Flichy, 1995; Marshall, 1997; Livingstone, 1999; Bovill & Livingstone, 2002) little attention has been given to the patterns of parental media use which may also be indicative of this movement towards individualisation. Parents, as well as children, are choosing to consume media in a more individualistic or fragmented mode away from the whole family, and often within the private domain of their bedrooms. Australian figures indicate that 47 per cent of Australian families with children have located televisions in a bedroom other than a child's bedroom (ABA, 2003, p. 66).

Fears and concerns about the excessive use of the television (and other screen technologies) by children, as well as a general sense of unease about the social isolation associated with excessive private use of media technologies, seems to be in conflict with the more individualised, or fragmented, media consumption of parents. While general attitudes to media consumption see excessive and private media consumption as inappropriate for children, some parents find it hard to reject this for themselves. Hence, the flip side of children and young people's more individualised or fragmented media consumption is that their parents have created corresponding opportunities for themselves to view television (or other media) in a more

²² This potential state of affairs, where all children have individualised access, will still leave questions of surveillance and time management.

individualistic manner; whether it be the television in the family lounge room or their own more private spaces such as the bedroom or study.

The number of media technologies (particularly televisions) located within the family home also seems to be directly related to the size of the family. Australian survey data shows that larger families tend to have more television sets (and subscribe to pay TV) than smaller families (Department of Foreign Affairs and Trade [DFAT], 2001, para. 8). Similarly, the two largest families in this study have television sets located in their parents' bedrooms (as the third or fourth television in the household). The Ryder family have four television sets in their home. Rick (30+) describes the array of television sets located in his house,

Yeah, we've got four TVs. There's the main TV, the children have got one in the activity room, we have one in our bedroom – which are both small portables. The main TV's 68cm and Neil's [16] bought his own TV from money he's earned, which is 68cm, in his room (Rick, 30+, personal communication, 2003).

Rick's partner Lucy is more introspective about having a personal television set and hints at some degree of guilt about having her own television. When adding up the number of television sets in her home she explains that the television set is located in her bedroom for the younger children to use when their TV viewing conflicts with adult conversation.

[I] only recently realised that we had one in our bedroom which was very reflective [reminded me] of when we were younger. We would never, when we first got married, never have thought to have a TV in our bedroom. The lounge room, [inaudible] that's the only place in the house where you ever had a TV. But yeah, we've had a TV in our bedroom for quite some time which works well, cause the kids can be isolated in front of [it] if they need to, cause if there's people here [the open plan family/dining/activity/kitchen] talking and it's such an open house, they [the children] tend to turn the TV up and up so they can hear that and we can be talking but ... So having one in the bedroom and down the activity room is yeah, I don't think I'd change (Lucy, 30+, personal communication, 2003).

A similar situation (large family with more television sets) is evident in my own house with four television sets dotted around the house.²³ What is interesting to

²³ The second television is located in a small flow through room near the bedrooms (usually used by children and young adults as the *second choice* television) and the third is in my own bedroom (occasionally used by my partner, myself and others as an additional second or third choice television). The last, and very ancient, television screen is used only for gaming in my 11 year old's bedroom.

note is that, despite the provision of multiple television sets, the main television still has great appeal for everyone in the house as the 'first choice' television. In our house, proximity to the hub of the house (the kitchen), access to creature comforts such as good heating and a comfortable lounge, the technological superiority of the newest and biggest screen, as well as the draw of Foxtel,²⁴ all make for an enhanced television experience in the family lounge room. Hence, this room is still the prime viewing room, despite individual viewing choice (in the form of extra television sets) being readily available within the house. Associated with this shared family viewing are the inevitable gender and generational struggles over viewing choices.

Other families also find that the lounge room is still a favoured site for television viewing. Only child Nathan (14), who has a game machine and television in his bedroom, still likes to use the main television in his family home whenever he can. His mother Theresa explains:

He [Nathan 14] prefers to use the lounge room because it is the bigger TV. It's also got the heater in it. At this time of the year it is the warmer room. It's also more comfortable, otherwise he has to sit on his bed and I don't think that's comfortable. But also the other thing I think is because I'm usually in the kitchen and that's closest to, perhaps, where I am. It's also closest to where his food and drink is. But I like to think that perhaps it's also closer to [any] interaction with me as opposed to his bedroom which is down the other end of the house. And also I think he'd prefer that, because if he's got his mates over, he'd rather to have his mates in the lounge room than his bedroom (Theresa, 40+, personal communication, 2003).

Patrice Flichy (1995) in her discussion of the movement towards a personal television culture, suggests that while households are incorporating multiple television sets, the second or third set is used far less than the primary television set. This is because, she asserts, television is aimed at household viewing, not individual viewing. While Flichy suggests that the creation of more media consumption spaces reduces the opportunity for family conflict (1995, p. 166), she predicts that the individualisation of television viewing will not be as pervasive as the transition from family radio listening to individualised modes of listening. From the study reported here, this prediction seems to be well founded. Shared whole-of-family viewing still

²⁴ Foxtel, and pay TV in general, seems to draw family members back to the main lounge/living area (ABA, 2003; Holloway, 2003) and will be discussed later.

takes place in the research families, although it is interchanged with smaller coviewing groups and individual viewing. (See next chapter.)

Despite the apparent reduction of opportunity for family conflict; gendered and generational disagreement and associated power issues²⁵ still exist within the family lounge rooms of households participating in this study. While the technological superiority of the main television set (and the inviting environment of the family lounge room) draws family members together, viewing choice occasionally seems to be an issue making the family television set a site of likely conflict.

Narrowcasting practices of pay TV and of some free-to-air broadcasting, target specific audience groups, which often seems to underscore gender and generational differences in viewing choice. This may be another reason for continued generational and gender conflict within the home, particularly with pay TV where there is, typically, only one set available for this media choice. With narrowcasting, broadcast programmers or producers target specific demographic groups. This seems to be at the core of pay TVs' programming strategy where programs or channels focus on one subject or a few closely related subjects. Channels such as *Lifestyle*, *Nickelodeon*, *MTV*, *Fox Sports* and *Sky News* are a few examples of the 44+ channels on Foxtel targeting specific demographic groups. Necessarily, with only a handful of channels, free-to-air television networks still gear their programming to a more generalised audience. Nonetheless, they too are beginning to engage in forms of narrowcasting, either segmenting similar programs that appeal to specific groups into adjacent time slots or by programming their channel/network to suit a specific audience. Australia's Channel Ten network, for example, predominantly provides programs targeting teenagers and young adults "and has positioned itself as a youth network to its advertisers" (Gotting, 2003, para. 4). Consequently, "with programs designed to appeal to specific family members, the stakes are even higher and the [living room] battle has only just begun" (Holloway, 2003). This is particularly so for those families with pay TV subscriptions.

²⁵ Gendered and generational issues are discussed in full in the following chapter.

Conclusion

The manner in which families integrate new media technologies into existing homes tends to transform the geographical environment of the home in a variety of ways. These transformations are, in part, dependent on decisions made about the location of new media technologies in the home. Generally speaking, families in this study (and other Australian families) are choosing to locate these technologies in more communally accessible spaces in the home rather than the more private spaces of their children's bedrooms. This is despite the fact that most families have more than one television set. Consequently, further research into families' use of multiple media technologies and the geography of the home is needed, particularly in the context of the spatial dimensions of the Australian home, the size of the family and the gender and generational balance of each particular family.

The results of these studies remind us that a variety of nationally identified (and regionally specific) social, cultural, economic and environmental factors may well be at play in the domestication of media technologies. Therefore, similar patterns of access and use should not be assumed to occur among families from diverse backgrounds or even within Western countries of similar living standards. The place of media in everyday family life is not only dependent on the specific features of different media technologies “ but also on the social, economic and cultural processes of diffusion and appropriation” (Livingstone, Bovill & Holden, 1999, p. 47). Such considerations necessarily result in complexities in patterns of access and use. In particular, the cultural, environmental and economic issues concerning the availability of space within the home and the associated location of media technologies seem worthy of further study and analysis.

What we can say about families in this study, however, is that there appears to be a parental reluctance to allow children to appropriate screen technologies to private (children's bedroom) space where alternatives exist for consumption patterns and practices are that are less visible and less regulated; and where issues of equity between siblings might be raised.

CHAPTER FOUR

GENDER AND THE MULTIPLY-MEDIATED HOME

The accounting practices through which people understand and explain the role of domestic technologies in their lives reflect their gender relations and family dynamics. Talk about the television or the telephone, for example, is imbued with notions of who lets who use what, of moral judgements of the other's activities, of expression of needs and desires, of justifications and conflict, of separateness and mutuality (Livingstone, 1992, p. 114).

Introduction

The previous chapter explored the relationship between media technologies, geographical spaces and boundaries within the home and the people who use (or don't use) these technologies and spaces. While it took into consideration matters concerned with the gendered use of media technologies, the main focus of the last chapter was on children's use of media technologies within the home, a generational perspective. The overall focus of this chapter is to examine the relationship between media consumption and gender in the multiply-mediated home – particularly how gendered relationships are reflected through differential media consumption and how media consumption perpetuates (though sometimes challenges) the gendered nature of family life. This chapter is primarily concerned with adult media use in the home and examines the mutual influence of gender and media technologies on media consumption in domestic settings. It explores different sites of media consumption in the (multiply-mediated) home and discusses the significance of these different sites in maintaining the gendered nature of family life.

The first section of this chapter examines domestic television-viewing practices and generational alliances. Shared whole-of-family viewing still takes place in homes with multiple television sets, although it is invariably supplemented by smaller coviewing groups and individual viewing. These coviewing subgroups are usually the result of gendered and generational alliances. It also seems that conflict about program choice has been replaced, to some degree, by conflict concerning where to watch. The migration of television sets to other sections of the

home has not replaced the family lounge room as the favoured site to watch television. The second section of this chapter is concerned with computer gaming – a highly gendered leisure activity within the scope of this study. This is followed by a discussion concerning the relationship between technology and masculinity (as expressed by the men and women in this study) and emphasises differentiation in masculine culture – particularly in relation to domestic technologies. The last section analyses men and women’s use of the Internet, exploring gendered differences in attitudes to and utilisation of the Internet. I will bring these somewhat varied topics together to argue that newer screen technologies (such as computer games and the Internet) are the more critically gendered sites of domestic media consumption where issues concerning power, ownership, competency and mastery continue to be enacted.

Gender and television-viewing in the multiply-mediated home

Generalisations can readily be made about gender and the domestic consumption of media technologies. The television viewing habits of men, women, girls and boys have been commented on extensively (Morley, 1986; Fiske, 1987; Kinder, 1991; Buckingham, 1993; Culpitt & Stockbridge, 1996; Blumenthal, 1997; Griffiths, 1998; Livingstone & Bovill, 2002). These contributors have all made valuable observations about differentiation and disparities between the genders. My own proviso to these observations, however, is that many individuals in this study (male and female) share many of the same tastes and preferences in television viewing. Despite some gendered preferences in program choices they often watch the same television programmes. Mature age students Rick (30+) and Lucy (30+) share their evening television together. “Yeah, we generally share the same likes and dislikes of TV shows. The sort of 7:30 onwards [slot], we’re generally watching together if we’re not doing assignments” (Rick, 30+, personal communication, 2003). These commonalities often go unrecognised within this field of research and I feel it is important to call attention to this mutuality before discussing any disparities and differences in viewing preferences and practices. These commonalities may also be linked to life cycle stages within the family where for instance: older children may start watching news and documentaries (with their parents as their own worldview expands); or younger siblings may ‘grow into’ watching similar programs to their teenager siblings (such as music videos, soaps and the like).

The preferred location for television viewing remains the family lounge room for most people in this study. This is despite the fact that there is less compulsion to watch in this locale, as most family households have second or third television sets “because if there was one TV you couldn’t agree. You couldn’t agree on what *we wanted to watch* [my emphasis].” (Rhianna, 10, personal communication, 2003). Rhianna’s use of the word ‘we’ implies that she expects to watch television with others in her family. From my own observations of Rhianna’s household, I noted that these coviewing groups are variable. They range from whole family viewing to gendered groupings (mum + daughters or sister + sister) or to generational groupings (sisters + brother).

Thus, family members still tend to prefer to share their television viewing experiences with others in the family: sometimes with the whole family and at other times with smaller subgroups. Information from participants in this study supports the argument that the nature and frequency of coviewing subgroups within the home is dependent on gendered or generational alliances (and the occasional particularised alliance based on mutual interests not associated with gender or generation). “Well, we [mum and daughters] watch girlie shows on TV sometimes, like *Kath and Kim*. Mick [step dad] hates that, you know” (Hannah, 15, personal communication, 2003).

These viewing alliances are often temporary and changeable, and occasionally traverse expectations about gendered, generational and cultural viewing preferences.

Donell: Are there any TV programs that you watch together or share together?

Lakisha: Sports usually or like when the AFL was on, [the] Friday night game and stuff like that.

Donell: [surprised] Are you into Aussie rules?

Lakisha: Yeah [I’ve been in Australia] eight years! With the boys [Nicholas 11 and Liam 8] starting to play team sports. That’s how it started for me. Tennis, I love tennis. The boys come and watch it with me but they don’t have much patience for it. [We watch] some movies [and] some programs like *The Human Body* or *Sandra Sully Presents* or that sort of things.... nature, educational things.

(Lakisha, 30+, personal communication, 2003)

These alliances are not always made on the basis of a mutual (or shared) interest in a specific program or genre. Lakisha finds that watching children's programming with her boys gives her a sense of family sociability or connectedness.

Sometimes I make a point of actually coming in here and sitting with them even though I might not be interested in the program because it just might [pause]. It's a time to sort of connect a little bit and feel [inaudible 988] So sometimes I actually watch *The Simpsons* with them (Lakisha, 30+, personal communication, 2003).

Although individualised media consumption is on the increase (especially in multiply-mediated homes), findings from this study show that "these extra media spaces have freed up the lounge room possibly allowing for more harmony and accord within the family" (Holloway, 2003). The availability of extra television sets and other digital media spaces in the home means that individuals (and subgroups) can choose to watch elsewhere thus easing potential conflict over the main television set in the family lounge room. This lack of compulsion to watch television together (in the family lounge room) may well add to feelings of togetherness when shared viewing does take place. This is because family members are freely choosing to participate in a shared viewing experience over and above individual program choices.

Thus, despite many gender differences in media choices that are available in the multiply-mediated home, there is still a significant overlap – where males and females (women, men, boys and girls) share television programs together. This shared viewing is based either on shared interests or on the substitution of individual program choice with the privileging of togetherness. This mutuality and accord needs to be acknowledged and understood as part of the wider set of familial practices – as a rearticulation of family sociocultural practices within which communality and sociability are often expressed and enacted through media technologies, particularly the television.

It is difficult to make generalisations about gendered viewing preferences and practices between adults (and between children) in this study, as different types of family structures and sociocultural backgrounds may be just as important as gender in terms of program preferences. Additionally, the age of children, and their position in the family (gender composition and birth order), may be as important as differences between boys and girls. According to the respondents, mutuality and

accord take place more often than overt conflict about viewing preferences. This is not to say that individual family members do not have different (and conflicting) television viewing preferences. However, more often than not, “television viewing remains largely a social activity and as such is related to wider patterns of household interaction” (Petrie, 1995, p. 4). Nevertheless, and in contrast to Morley’s (1986) study, individual preferences are catered for in most multiply-mediated households (with the availability of second and third television sets) and less emphasis needs to be placed on “the role that group [or whole family] viewing plays in mediating the free exercise of individual preference” (Morley, 1986, p. 18).

Children and teenage interviewees in this study readily discussed their viewing preferences²⁶. As expected, they displayed gendered and generational preferences in their choices. Younger primary-school-aged boys and girls preferred cartoons²⁷ and children’s dramas. The younger girls liked the soaps their older sisters watched (*Home and Away*, *Passions*, *Neighbours*). Older girls seem to prefer soaps while some loved the US talk shows (the trashier they were, the better the entertainment value) and music videos. Teenage girls’ interest in music videos overlaps, in respect to television viewing choice, with their teenage brothers. Interestingly, not all the boys in this study showed a preference for watching sport. Teenage gamers, Nathan (15) and Neil (16), are disinterested in televised sport. Nathan’s father William, who is a sports fan, commented on this phenomenon.

Interestingly, he’s not at all interested in sport, which is interesting. He doesn’t like team sport like basketball or soccer or footy and whatever. He used to watch footy a bit more when he played football but he’s got total disinterest in sport, which is unusual (William, 40+, personal communication, 2003).

Within the households in this study it was not ‘what you watched’ but rather ‘where you watched’ television that fuelled argument and debate, particularly between children. The majority of participants in this study prefer to watch their television in the main living area of the house. The main (communal) living area usually contains the biggest/latest model television available to the household, the

²⁶ Some children were also happy to choose their viewing preferences using a current television guide and a highlighter pen. These children were Hannah (15) and Leah (11) from the O’Neil family and Trent (17), Pru (13) and Rhianna (10) from the Narberth family.

²⁷ There were some differences in the type of cartoons boys and girls watched with boys preferring to watch Japanese cartoons if available.

most comfortable seating and adequate heating in winter. Neave explains why her children still prefer to use the main television set.

Well they will only use it [the second television upstairs] if there's, if [pause] Because it's more comfortable down there, 'cause the couch is comfortable and it's close to the kitchen. So they prefer to watch the TV down there, and they'll only use this one [upstairs] if there's something they really, really want to watch (Neave, 40+, personal communication, 2003).

Neave's youngest daughter Rhianna gives more detail about the family hierarchy involved in using the main television set.

Well, I've been up there [upstairs with the second television set] quite a lot actually, and Trent [17] doesn't really use it because he just tells me to go upstairs when he wants to use the main TV, and, [sighs] yeah (Rhianna, 10, personal communication, 2003).

Neil (16), who has bought his own television set (and whose family have four other television sets), describes his younger sisters' fights over viewing television programs and videos in the main living area (which is just outside his bedroom door).

Neil: Yvette and Natalie have fights all the time about what to watch Natalie wants to watch a show or Yvette wants to watch a show and they both want to watch it in there [the living room] so ...

Donell: That's still a popular place to watch from?

Neil: It's like where the main viewing comes from, yes. I don't really watch much TV in there anymore (Neil, 16, personal communication, 2003).

Conflict over using the main television set seems to be even more prevalent in the two families in this study who subscribe to pay TV. The Narberth and Yates family acknowledge the difficulties they encounter when sharing their Foxtel-enhanced main television set. This is because Foxtel is limited to one outlet per household – and is therefore usually located in the main living area of the family home (ABA, 2003, p. 67). In addition to this, the forty or more channels available on Foxtel, all with programs designed to appeal to specific family members, make the channel selection stakes even higher and seems to exacerbate competition and conflict about what to watch.

In the Yates household, William and his only child Nathan (15) find themselves at odds over Foxtel channels, usually over sport programs versus animé style cartoons respectively.

The only pressure is that Foxtel is only on one [television set] so the better quality picture is over there [points at main television] but the program for the free to air television is there as well too (William 40+, personal communication, 2003).

In the Narberth family, however, the youngest (Rhianna, 11) is able to hold her own against her older sister Pru (14). “But Foxtel , yep, yeah, yeah, we fight over it, over what we want to watch, and Pru wants to watch Channel V, and I want to watch Nickelodeon, and yep” (personal communication, 2003). Similar experiences have been occurring in my own home since our subscription to pay TV. There has been “a return to the living room politics of family television viewing somewhat reminiscent of Morley’s *Family Television* where sharing the family television reflected and highlighted existing family power relationships and struggles” (Holloway, 2003, para. 9). The introduction of pay TV in Australia challenges the general movement towards an individualisation of media consumption within the family home and seems to (re)situate the politics of television viewing back in the family living room.

In the face of gendered and generational differences in viewing preferences it appears that some degree of mutuality and accord exists in the multiply-mediated home. Family members are often sharing their television experiences, sometimes as a whole family and at other times within smaller coviewing groups that are based on gender and generational alliances. Conflict and arguments are more likely to occur about where to watch television than about what to watch. Thus, in contrast to Morley’s (1986) study, individual preferences are catered for in most multiply-mediated households (with the availability of second and third television sets) and less emphasis needs to be placed on the family lounge room as the most critical site of domestic media consumption. An exception to this, though, is households with pay TV subscriptions where conflict over viewing preferences (within the main living room) is somewhat amplified.

Boys' (and big boys') gaming culture.

One noticeable theme emerging in this thesis is the gendered nature of computer (and/or video) game playing²⁸ within the family home. Boys, and the occasional dad, spend more time playing computer games than other family members and often claim ownership of computer games and the game console. Most of the boys within this study attested to their fondness for gaming (although not all were allowed, or could afford, to play computer games to the extent they would like). Interestingly, gaming is the prime reason for television sets being located in participant children's bedrooms²⁹, specifically in two teenage boys' bedrooms (Neil 16 and Nathan 14). This is similar to Marshall's portrayal of bedroom video gaming as the realm of adolescent boys (Marshall, 1997, p. 74). This is replicated within my own family³⁰ where this migration of gaming to the bedroom has brought with it a new set of dynamics for social space within the household and a "reciprocal (re)construction of the meanings and functions of both the technological objects and the domestic spaces they inhabit" (Caron, 2000, p. 3). Equipping bedrooms with gaming machines

has the ability to change the room's conventional usage – both spatially and temporally. In this way our 11-year-old's bedroom has been transformed into a specialised [boys'] bedroom culture – a gamer's paradise. By locating a television and game console in this bedroom the technologies are identified as personal property while at the same time allowing for a space that functions as both communal and private, for sharing with siblings and [male] friends and for solitary gaming (Holloway, 2003, para. 6).

These changes to geographical boundaries see a rearticulation of gendered relationships in the home – with individual ownership and a dedicated social space within the practice of a boys' gaming culture.

Participation in gaming is not restricted to teenagers and young boys. Those people who were children when video games first took off are now adults with many

²⁸ For the purpose of this discussion computer games will be defined as those games, which are played on a screen with the use of computer technology. Conflicting use of the terms 'video games' and 'computer games' is evident in academic debate about computer games. Some use the term 'video games' to include arcade games, console games and PC games (Chandler) while others use the term 'computer games' to include both console and PC games (Cassel & Jenkins, 1998, p. 7).

²⁹ Caleb (15) is the exception with just a television in his bedroom.

³⁰ My eldest daughter Tammy (24) was an early adopter of video gaming. Her younger brother Nat (11) originally inherited her old machines but now possesses a current model in his own right. My middle daughter Shani (22) showed little interest in gaming.

men (and some women) continuing to play video games (Galante-Block, 2003, p. 1). Nowadays “gamers are an aging group - the average gamer is 28 years old” (Galante-Block, 2003, p. 1). Two adult participants in this study, Rick (30+) and Mick (50+) both acknowledge their interest in gaming³¹. Rick, who grew up with computer games, is still an avid gamer (both console and PC games).

The golf one, I play. I like interactive games or adventure games so things like *Tomb Raider*, *Aliens*, those sort of games where you participate as a character, character games. About the only games I play on the computer are role playing games. I play *Command and Conquer* and the series of *Command and Conquer* and *Warcraft*. The *Warcraft* games which is pretty similar, and I play against a friend of mine (Rick, 30+, personal communication, 2003).

Access to the household computer is also an imperative for many gamers. When Rick’s son (and fellow gamer) Neil (16) was asked who used the family computer the most he was quick to respond “Dad, even though it’s Mum’s computer. He bought it for her for Christmas a couple of years ago but Dad seems to think it’s his computer” (Neil, 16, personal communication, 2003). It is worth noting here that Neil’s access to the family computer has also been restricted lately as both his parents are studying.

Although the gendered nature of the gaming culture may seem inconsequential, the gender disparity within the gaming scene potentially has a wider significance. As computer games “are the means by which many young people make their way into the cyberworld” (Spender, 1995, p. 186) and “computer-related careers are expected to increase” (Hale, 1995, p.1) the existing disparity in gender representation in computer related industries is likely to be perpetuated. For most children, computer games are the gateway to new digital technologies and ways of organising information (Hale, 1995, p.2). Thus girls’ general lack of engagement with computer games may hinder the development of computer literacy skills, and interest levels, requisite for future educational and employment opportunities.

An understanding of the popularity of gaming within boys’ play culture is not simply a one-dimensional matter. The social construction, and mutual shaping, of gender within the gaming culture (by designers, marketers and children themselves) all have some bearing on this phenomenon. The rather obvious gender stereotyping

³¹ Not surprisingly, these two men’s names also come up as adult gadgeteers. See following section.

that is evident within most computer games, the designing and marketing of games that appeal to boys and men, as well as the social construction of a segregated boys' and girls' play cultures, all contribute to the shaping of a gendered gaming scene (Cassel and Jenkins, 1998, p. 7).

The gendered content evident in computer games (the characters, narrative and style of game) may possibly turn girls off playing these games. Spender (1995) observed that "the main aim [of many computer games] seems to be to kill as many people as possible, with a preference for violence against women" (p. 186). Computer games, on the whole, fit into the genres of both narrative and game - and are often reconstructed to appropriate traditional folk narrative. This postmodern rechannelling of the content, elements and structure of traditional narratives tends to amplify and perpetuate gender stereotyping (Sherman, 1997, pp. 1 – 2). The cultural coding and marketing decisions behind gaming have led to a strong male orientation in computer games (Kinder, 1991, p. 102). Cassel and Jenkins (1998) also acknowledge that these games "provide a prime example of the social construction of gender" (p. 7) as they contain very specific and symbolic constructs with which children gain an understanding of their culture (Provenzo, 1991, p. 75).

Even though there is obvious gendered content within most console and PC computer games, one might question any socialising effects these games may have on girls due to their low rate of participation in the genre³². Adult female gamer Tammy³³ (24) suggests that "girly girls, you know the ones who get into Barbie and that, wouldn't play computer games anyway" (Tammy, 24, personal communication, 2003).

Gaming companies have designed computer games that include stronger and more competent female characters (Cassel and Jenkins, 1998, p. 8). However, while trying to construct strong female characters most companies are held back by the need to "design a character that appeals to their core audience – notably men" (Oldham, 1998, p. 2). Sex appeal, or the 'babe factor', is incorporated in these representations in order to maintain the interest of older male players. Lara Croft, the central character in *Tomb Raider*, was the forerunner for many of the current

³² This is notwithstanding the fact that women's participation in the gaming scene is slowly increasingly, particularly in online gaming (Humphreys, 2003, p. 2).

³³ Tammy is my own daughter.

action women in computer games. Revealing clothing worn over enormous breasts, micro-thin waists and long-line legs seem to be the physical norm.

It is questionable whether or not these eroticised stereotypes appeal to women. Lara Croft's producers, Eidos Interactive, maintain that *Tomb Raider* interests and involves both men and women while other designers maintain that she is not the type of character females would like to play (Oldham, 1998, p. 3). Amy Ng, *PC World Online* games editor, asks designers not to "insult us by making us play exaggerated sexpots with inappropriate clothing" (Ng, 1998, para. 2). Closer to home, Tammy (24) finds that Lara Croft is, "rather sad. I don't know any girls who play it, only boys....young men who think she's sexy. They all get stoned and sit around together playing with her" (Tammy, 24, personal communication, 2003).

Tammy's comment highlights the fact that girls may be 'put off' certain games by the social context in which these games are played, as well as the gendered content within the games themselves. Hence, not only the content and marketing of computer games needs to be considered when looking at the gendering of gaming culture, but also the social context of gaming. Children and young people tend to actively appropriate this new technology into their own play and leisure culture and interviews with the gamers in this study indicate that gaming is well established within these boys' (and male adolescents') play culture – as a social medium that they can share³⁴.

This social dimension is evident despite early predictions and research (and commonly held opinions) indicating that playing on the computer is a socially isolating activity that would undermine children's play and friendship interaction. The computer was generally regarded with great suspicion. "It is [was] a common assumption that computer games lead to children becoming socially isolated.... In other words the computer destroys social relations and playing" (Jessen, 1995, p. 3). These predictions do not seem to hold true with the gamers in this study, or with gamers in general (Jenkins, 1998). William (40+) finds that his 14-year-old's gaming pursuits always have a social element to them. "In Nathan's case it is [computer] games that are facilitating kids working together. Not out in the playground but three

³⁴ The origins of boys' gaming culture, (as the domestication of videogames – previously associated with a more public youth culture) can be traced to the pool halls and pinball parlours of the mid to late twentieth century and is now part of many boys' bedroom culture (Marshall, 1997) and has been discussed in Chapter Three.

or four of them working on strategy games and having fun with it” (William, 40+, personal communication, 2003).

The gendering of the gaming culture also reflects the general segregation that occurs within children’s play culture. Within children’s cultures “gender is a highly visible source of individual and social identity.... [and other categories such as race, age or class tend to be] more ambiguous and complex” (Thorne, 1998, p. 322). Children tend to gather together in gender groups over and above other social categories and are more likely to play in separate, and gendered, play spaces. One of the spaces where boys now gather is the virtual play space of the computer game.

On the last birthday [invitation] card he [Nathan 15] got from a friend to go to a party [it] said Nathan, will you bring your PS2. That was put in the invitation and all the kids got it. Everybody needed to do something like this – bring something and then [in] brackets, Nathan, bring your PS2. So all the kids.... want to do that and they share it (William, 40+, personal communication, 2003).

Henry Jenkins (1998) suggests that these virtual play spaces are gendered spaces where individual and social identity is shaped and consolidated. He incorporates understandings about boys’ play culture to explain how these virtual play spaces have become gendered. Jenkins makes analogies between traditional boys’ culture and computer games where the settings, pace, plots and actions are similar to traditional boys’ books and styles of play. Jenkins maintains that these virtual play spaces, just like boys traditional (spatial) play spaces, are segregated play spaces with little interaction or overlap with girls’ play spaces. Hence, computer games can be viewed as another play space where boys’ masculinity is shaped and demonstrated to others (Jenkins, 1998).

The process of gender separation characteristic in children’s play culture may also shape girls’ disinclination to participate in the gaming scene. Social approval for computer gaming is often governed by other children and “children who choose alternative playing patterns risk social sanctions” (Funk & Buchman, 1986, p. 219).

The concerns that the gender disparity in computer gaming will effectively widen the gap between genders, both in computer literacy and subsequent employment opportunities, have been taken up by a variety of champions. Industry representatives, girl gamers, women designers, educators and scholars are all concerned about the gender bias of computer games (Cassel and Jenkins, 1998, p. 4)

and the gaming industry is actively exploring the girls' market (Cassel and Jenkins, 1998, p. 15). There is no indication that families in this study discourage their girls from gaming and parents do not seem averse to furnishing their daughters with gaming equipment if their girls showed an interest. "Well, if Hannah [15] said to me that she'd love a gaming machine, I would say yes because I would think that, for Hannah particularly, it would be a great help to her" (Mick, 50+, personal communication, 2003). Parents, along with the occasional grandparent, are also buying computer games for their daughters. "Nan keeps on buying us computer games" (Natalie, 8, personal communication, 2003).

Mum bought me *Detective Barbie* and *Sticker Designer*, but you need a camera.... You can take photos of you[rself], and then you put the CD in, and then you plug the camera in, and then you download the photos onto the background of the sticker you want. And then you print them out (Rhianna, 10, personal communication, 2003).

The success of the Barbie games and the production of other 'feminine' games, supports the belief of some entrepreneurs that "female gamers need games that are gender specific" (Ng, 1998, para. 7). However, the promotion of gender specific software is problematic for many feminists in the field who question whether the end justifies the means. Marsha Kinder feels that trying to reach girls through gender specific games just reinforces existing sexist stereotypes (Kinder interviewed by Greenwald, 1996, p. 49). Gender specific or 'feminine' games may also marginalise girls and women's engagement in an established gaming culture putting them outside what may be considered 'real gaming'. In any case, Yvette (11) and Natalie (8), who have a selection of gender specific and gender inclusive computer games, find that their access to the family Playstation is limited.

The girls usually have their other cousins, like female cousins, so they're not really into – like with the cricket or the golf [Playstation games]. So they'll go and find something else to do and then when it's free, they'll play more of the girly or kiddie type games rather than sport type games (Lucy, 30+, personal communication, 2003).

In summary, computer gaming within the families in this study is a highly gendered activity with most of the boys (and some fathers) engaged in this form of entertainment. Using the family computer for computer gaming gives a specific gendered meaning and function to that technology and the domestic space it occupies. At the same time, the use of game consoles for computer gaming is

associated with the reconfiguration of household space and the privatisation of media consumption. Both types of gaming are imbued with gendered and generational concerns over ownership, power and control.

Within the households studied, computer gaming is well established as a boys' (young and old) play culture and is a medium that they can share within their gendered social groups. This gender disparity is of some concern, particularly for children, given that computer gaming is often a gateway into the adult (work) world of computers and the Internet. The parents in this study do not seem to be holding their daughters back from playing computer games (by overtly discouraging them). Rather, the content and marketing of computer games, along with the gender segregation evident within children's play culture (where boys and girls collectively construct separate play cultures that do not overlap with each other) seem to have some influence on the shaping of this gendered gaming culture.

Masculinity and technology: the gadgeteers and non gadgeteers

One gender theme that emerged during this study was the specific relationship between technology and gender – one that is most often associated with masculinity. The men in this study displayed varying degrees of 'attachment' to technology. This attachment ranged from gadgeteers, who had a passion for all things digital, to two fathers who had little personal interest in information technologies.

Moore's (1996) identifies four main aspects of a gadgeteer's relationship with technology. They are; an unfolding career with technology, a do-it-yourself mentality, the use of trade and technical language as an exclusive discursive practice and an ongoing desire and anticipation for the next technology purchase or new innovation (pp. 57 – 9). Within this study I was surprised to find three males (two adults and one teenager) who are gadgeteers - hobbyists who have a passion for electronic/digital gadgetry. Mick O'Neil (50+), Rick Ryder (30+) and Rick's son Neil (16)³⁵. These participants displayed all of the characteristics that Moore's identified as expressions of a gadgeteering culture.

³⁵ Neil's (16) gadgeteer culture has been discussed in Chapter Three in a subsection titled The Young Gadgeteer's Bedroom Culture.

Both Mick and Rick recounted their earlier experiences or ‘careers with technology’ at great length and in the loving detail that only nostalgia brings. Mick, at over fifty, has had a long career with technology and has memories of the earliest home computers. What follows is only a part of a longer discussion regarding his early experiences with technology:

I myself, I’ve always been an electronic tinkerer. You know, I’ve [inaudible] amplifiers and I’ve fiddled around [with] radios and – and that sort of stuff. I actually bought my first computer when they first came out. I remember the – it was the first Tandy machine. It was a little 16 megabyte machine and got a little tape recorder with it and you hooked it up into your television and you spent all night trying to create a program right? I was fascinated by that. And I moved on to different machines very quickly in succession. I remember the first Dick Smith computer that came out. It was one you built yourself and you know, I got all the soldering irons out and I put that together. I remember a machine that came out before Tandy where you literally had to build it yourself and all you got was blips on a screen. There was [were] no pictures, just blips on a screen. It meant that you’d created a program. Just little blips on a screen, that’s all it was. When was that? That would have been about 1979/80 (Mick, 50+, personal communication, 2003).

While Rick also has fond memories of his first ‘machine’.

Great little machine. We had that in about ’88 I suppose and it was a tape drive and then we upgraded and got a disk drive which was where they [had] four inch disks. The old big floppies like pieces of cardboard. Yeah. Yeah, we had a disk drive and that was really good (Rick, 30+, personal communication, 2003).

Rick’s use of the term ‘we’, nonetheless, is used rather loosely. The rest of his family testify to Rick’s ownership of the home computer(s). “We’ve always had a computer but it’s always been Rick’s domain” (Lucy, 30+, personal communication, 2003). In contrast to Mick (who is the resident ‘expert’ in the O’Neil home and is relied upon to set up things and troubleshoot if things go wrong) Rick’s family are all relatively high users of media technologies. Rick is also experiencing some rivalry from his son Neil (16) who is fast overtaking him in some technical areas. (See Chapter Three for more discussion regarding this generational takeover/handover.)

Rick and Micks’ position as gadgeteers within their families is in contrast to another adult participant, William, who acknowledges his lack of interest and expertise in all things technical – particularly the family’s VCR.

William: [When] I need something done, I just [say] ‘what do I do now’ and then they tell [wife and child] me what to do or they do it. Yeah.

Donell: In what way would Nathan or Theresa help you?

William: Well in Nathan’s case, it’s condescending; Dad doesn’t know anything about technology. It’s more banter rather than anything definite about it. Theresa just doesn’t really – she doesn’t bother, she just does it (William, 40+, personal communication, 2003).

William’s partner Theresa (40+) and his son Nathan (15) are both more adept at using all the media technologies available in their home. And until recently, William felt he had little need to fully grasp the workings of computers at home or at work.

I guess because I’m in a management level job, there’s always been people in the office – you know when I’ve got 20 staff - who are more expert at knowing how to do spreadsheets, the accounts side or word processing or whatever. So I’ve never really got [the] need to learn those programs. I just need to know that they’re available, that someone else knows the techniques (William, 40+, personal communication, 2003).

The computer tasks Williams identifies as not essential for him to know (spreadsheets, accounting programs and word processing) are considered feminised clerical tasks and generally associated with lower echelons of office hierarchies. While previously a high status (male) occupation, “clerical work went from being men’s work to being culturally defined as ‘female’ within the space of a few decades early in the [twentieth] century” (Brinton, 2002, p. 2).

William’s lack of interest in computer and Internet technologies reminds us that “the concept of ‘masculinity’ is neither homogenous, fixed or unified, but diverse, differentiated and shifting” (Maier & Messerschmidt, 1998, p. 325). As an organisational manager, William’s masculine practices seem more orientated towards mastery and control of the organisational environment (through attainment of organisational goals) as opposed to achieving mastery and control over particular technologies.

Nonetheless, William’s view that as a manager it is unnecessary for him to master clerical skills has been challenged recently. He has found that computer competencies are essential for him now that he is now undertaking post-graduate

studies. He has recently taken the plunge as a part-time student and finds that his son Nathan (16) and partner Theresa (40+) provide a helpful support network. At the time of his interview his son Nathan had recently helped him prepare a Powerpoint presentation.

When I did the Powerpoint presentation for my assignment, he helped me work it out. [pause] I didn't know how you did arrows and timing for the presentation. So [I] try and learn myself... although he was learning at the same time [at school] but he could learn quicker than I could (William, 40+, personal communication, 2003).

Unlike our gadgeteers Rick and Mick, who are passionate about computers, software and technology in general, William isn't completely at ease with technology that may be complex, unforgiving of any errors made or not particularly user-friendly. At the same time he isn't overly afraid of using technologies. Like many men and women from the baby boomer generation, who are in danger of being displaced in the workforce, he has taken the decision to become a competent user of these technologies.

It is becoming increasingly difficult for many men (and women) to attain control and mastery of domestic digital technologies. Gary Chapman, director of the '21st Century Project'³⁶, suggests that conventional notions of masculinity (and its association with technological competency and mastery) are being challenged by the ever increasing complexity of everyday technology. "Now, the only thing you see inside a TV or radio is a completely indecipherable circuit board. Many men are totally helpless when their computer, essential to their work, ceases to function" (Chapman, 1998, p. 1). Although men are surrounded by technologies that give them a feeling of comfort and control (over the television, computer and other ICTs) it is this very technology that may confront masculinity by stripping them "of expertise that was once key to masculine identity" (Chapman, 1998, p. 1). Consequently, most men's claims to independence, competence and mastery through the use of technology may well be eroded over time. Alternatively, masculinity may acquire new sets of characteristics that are less dependent on complete mastery of complex digital technologies. Perhaps also, some men will "redouble their emotional

³⁶ The 21st Century project is based at University of Texas in Austin and focuses on the social implications and trends of new developments in information technologies and telecommunications (see <http://www.utexas.edu/lbj/21cp/>)

attachment to objects -- cars, stereos, computers and gadgets, generally -- as a source of identity” (Chapman, 1998, p. 1).

Interviews with men in this study show that the relationship between masculinity and technology is not always homogenous. Masculinity is expressed in a variety of ways and, in some cases, may not be related to technological competence at all. Class, generational differences, ethnicity, and career pathways may have some bearing on these differences. Nonetheless, the mastery and control of technology, as a prevailing expression of masculinity, is enacted in most of the households within this study.

Men and women on the net

Information technologies can be used to perpetuate the existing roles of individuals within a family and the gendered nature of family life. Conversely, the use of Internet technologies within the domestic realm may alter family life and gender roles within the home. These changes are evident in this study where most of the men and women are competent, and regular, Internet users. Nonetheless they displayed distinctive gender differences, both in their attitude to (or thoughts about) the Internet and in the types of activities they used the Internet for. Men tended to speak more about the capabilities of Internet technologies as well as their own capabilities and their level of mastery. Women, on the other hand, were more inclined to discuss the functional and social aspects of the Internet. Women tended to be more instrumental in their use of the Internet while some of the men in this study also used the Internet for leisure purposes such as recreational surfing and game playing.

Men and women in this study displayed distinct gender differences in the manner in which they spoke about Internet technology. Feminine voices tended to discuss the functional and social aspects of the Internet - about how this was integrated into work life and home life and whether or not it was beneficial to their everyday lives. “For my study, I definitely do [use the home Internet], And also I’m doing a little bit of [contract] work and so I’ll use it for that. And I’ll also use it for personal emails, for communication” (Lauren, 40+, personal communication, 2003). Nicole, who carries out paid work from home, describes how the home Internet is integrated into her workday routines.

Every day I get the email to see what our emails are. I do daily accounts on the computer. I do Internet banking. The first thing I do is Internet banking and emailing so that's the use of the Internet, mainly that I use (Nicole, 40+, personal communication, 2003).

Not surprisingly, two of the mothers in this study, Lauren (40+) and Neave (40+), choose to limit their at-home Internet use because (as full time workers outside of the family home) they are[were] often weary of using this technology by the time they came home from work. Thus their own personal use of the Internet at home is, by choice, limited to very essential (functional) activities only.

I had it [Internet access] at work and I had a personal email address at work and so I could do my work emails and also personal emails at work and I didn't want [pause]. When I came home, there was no way that I wanted to sit on my computer. But I did use it for uni. That would be about all that I'd use it for (Lauren, 40+, personal communication, 2003).

This is not to say that social/emotional work with family members is neglected -.

Yeah, I send her [daughter] funny little emails and stuff from work. I send some to Trent [son] too, you know, some of the ones that are a bit more raunchier, that kind of, Trent can take. So that's not, yeah, that's not here [at home] (Neave, 40+, personal communication, 2000).

- or interaction with friendship groups. "She's only around the corner. We don't even see each other that often although our kids go to the same school. So email's a really good way to keep in contact with each other" (Lucy, 30+, personal communication, 2003).

Although male participants did discuss the functional uses of their computers, they also tended to chat about the technical object, its capabilities and the level of mastery they had over it.

With the Internet as I say, forgetting just the email, just going back to the Internet, the Internet's fantastic. Anything I want to know about is there. It's just a matter of refining your searches and that's just practice, just experience (Rick, 30+, personal communication, 2003).

Some men and boys assumed the role of the household's 'resident expert' and often spoke with great facility about their technological expertise throughout their interviews.

Yeah, I use graphics, we've scanned in photographs I've done projects where I've had to submit a lot of data with graphs [online]

and PowerPoint, CorelDraw [inaudible] to manipulate images. Yeah, that type of area. (Mick, 50+, personal communication, 2003).

Despite the gendered differences in discourse about computers and the Internet, men and women in Australia are on line in similar numbers (Nielsen//NetRatings, 2002). The Internet is a complex and multifaceted technology with many potential uses. Therefore, similar numbers do not necessarily mean similar uses. Findings from this study, and others, show that there are distinct differences in the virtual pathways women and men take (see Holloway & Green, 2003b). Women seem to be integrating the Internet into their everyday lives in a manner similar to that previously seen with the telephone which, in many ways, has “increased women’s access to each other and the outside world...[and] improved the quality of women’s home lives” (Wajcman, 1991, p. 105). In the same way that the telephone has become a feminised, or woman friendly, technology (Moyal, 1992, p. 5) some women now appear to have “embraced and feminised the Internet in their own distinctly female manner” (Holloway & Green, 2003b, p. 2).

Early findings from a qualitative West Australian study³⁷ into families’ use of the Internet has found that

Women are choosing their own pathways for nattering on the net, tending to reinforce their existing social networks, which usually consist of offline friends and family. They are also task-oriented when they get on the Internet, and inclined to use the Internet for purposeful activities that are closely aligned with their everyday (offline) lives and priorities. These offline interests or priorities include family/household-oriented tasks and interests, hobbies and pastimes from their ‘real’ lives (as opposed to new interests engendered by their ‘virtual’ interactions) (Holloway & Green, 2003b, p. 3 – 4).

Women in this study also use the Internet as a means to communicate with friends and family (for the relatively gendered role of family-relationship maintenance). In addition to this, they used the Internet to carry out tasks that have a direct relationship to their everyday lives. Nicole (40+), a social worker, discussed the different Internet pathways and motivation levels she had noticed between herself and her partner. She tends to use the Internet for emails (personal and work),

³⁷ This study, in which I am involved as a research assistant, is titled *Family Internet: theorising domestic Internet consumption, production and use within Australian Families* – and is funded by an ARC-Discovery Grant.

personal banking and for professional, work-related information. However, she finds that her partner Mick (50+) uses the Internet more extensively to

follow up [on personal] interest subjects. Subjects that he's interested in. Whereas I rarely do that because I just find it annoying because I find just the fact that it takes up so much time. I get frustrated with that and I couldn't be bothered with it [surfing for information] so it's only for work. (Nicole, 40+, personal communication, 2003).

Mick enjoys surfing the net to satisfy his curiosity and personal interest in a myriad of topics. His latest searches (at the time of his interview) ranged from the mathematical structure of certain portions of the Bible, to how the Reserve Bank works in Australia, Aboriginal issues, mining exploration and the latest ICT products and developments. Mick and Nicoles' patterns of Internet use are similar to other Australian findings which indicate that women use the Internet instrumentally and seldom see themselves as using the Internet to "play with, fix or master the technology" (Singh, 2001, p. 397). Some men in this study, do however, spend their time and energy surfing the net for information not directly related to work, study or family tasks, but to topics of interests that are often stimulated by their 'virtual' interactions. This also includes playing online games. (See previous section on gaming.)

Women in this, and other, studies tend to use email more frequently than men to communicate with friends and family members (Pew, 2000: Boneva, Kraut & Frohlich, 2001) and appear to have personalised this technology with more relationally-focussed communication. Women use email to sustain (and enjoy) contact with distant family members and friends. This appears to be a very significant element of these women's Internet worlds. Lucy (30+), who revealed that she really didn't warm to computers and the Internet until six years ago when she discovered email, finds that sending and receiving emails is a large part of her social life.

Yeah, that was the starting point of – yeah, I enjoyed it [inaudible]. I'm just still amazed at how much information there is there to access and emails I love. I love the idea of – even though friends of ours are just around the corner and we see them regularly, I can open the email and send them an email daily. I'm really trying to encourage my family 'cause they're living in Albany now to get into email (Lucy, 30+, personal communication, 2003).

One male participant in this study, however, displayed a completely different (yet gendered) attitude to the Internet, whereby he feels the need to limit his Internet use to work related activities. (This is despite the fact that most men and boys in this study extend their use of the Internet to tasks beyond work, study or their immediate family.) During his interview, late adopter William (40+) made interesting distinctions between the types of uses that he and his partner had for the Internet. William only uses the Internet for what he terms ‘work’ uses, while he describes his partner, Theresa’s, home Internet uses as more private or personal. The private or personal uses he categorises his partner as carrying out include checking joint bank balances, searching for holiday information and helping their son find information for homework. In contrast, he points out that his own Internet use is only related to his working life:

I just do [the Internet] very specifically for work. I’m looking at other universities’ websites ‘cause I want to see what they look like or I want to gather some information about a job or something or other. So I use it more for work rather than anything social. Like I don’t use it to book hotels or whatever. It’s just an information search.... I’ve never used it for private purposes.... Emails, the emails is all [for the] work that I do. I rarely send a personal email (William, 40+, personal communication, 2003).

He contrasts his own Internet use with his partner, Theresa (40+):

She’ll use it for some personal stuff like checking bank balances, a bit more of that sort of [thing]. And if for instance, we’re thinking of going on a holiday, although it’s been a while now, we were [pause] She did some research on accommodation in London and Paris on the Internet, finds out that sort of information quite easily (William, 40+, personal communication, 2003).

What William describes as personal stuff clearly comes under the realm of the domestic. William’s thoughts about Internet use seem reminiscent of those held during the early stages of the domestication of the telephone in the late 19th and early 20th century. Early use of the telephone centred around its functional use in the business world, a place where men prevailed (Marvin, 1998, pp. 22 – 3). When women did gain access to the telephone they were assumed to be technologically incompetent and frivolous and trivial in their use of the telephone. “Talkative women and their frivolous electrical conversations about inconsequential personal subjects were contrasted with [the] efficient, task orientated, worldly talk of business and professional men” (Marvin, 1998, p. 23). It should be noted here that William

does not view his partner as technologically incompetent. Rather he seems to contrast the domestic (as feminine, private and personal) with work (as masculine, public and worldly).

Contradictions did appear in William's values and attitudes towards the Internet when, later in our conversation, he described using the Internet to buy and sell personal stocks and shares. At this stage he did make the distinction between using the Internet for personal communication and doing personal things on the Internet.

Not personal communication [but] I will do some personal things like buying shares and that. But that's again the convenience of that. I can do that [stocks and shares] at work and sometimes I do, but I've got more time to do [it] at home particularly if I want to read up some research on share prices or whatever so I do that sort of thing..... I love it yeah. Great fun (William, 40+, personal communication, 2003).

Although a contradiction to William's original statements about not using the Internet for 'personal stuff' this does not seem inconsistent with the notion that the Internet should be associated with the worldly tasks of business and professional men. Further, buying shares is not social/emotional work in the way that emailing friends and family is.

Gendered differences in discourse about the Internet, as well as men and women's actual use of the Internet, point towards the construction of the Internet as a gendered medium through which the role of the family and the gendered nature of family life appears to be perpetuated. Women are using the Internet to help with gendered tasks such as communicating with family and friends and managing the home (along with everyday tasks associated with work and study). Men are more likely to display mastery over the technology or construct the Internet as a tool fostering proficiency in their business and professional lives. The different Internet pathways (or virtual spaces) men and women are taking and making further strengthens the argument that the family living room, with its shared television culture, has become a less critical site of domestic media consumption.

Conclusion

Gender relationships within the home are often reflected through differences in media consumption. In this way, domestic media consumption sometimes challenges and sometimes (re)constructs the gendered nature of family life. Domestic screen technologies are technologies that are imbued with gendered disparity and difference, both in the way men and women appreciate and identify with these technologies and the manner in which they are utilised. Television viewing is an activity through which these gender differences are expressed. However, with the migration of multiple television sets into bedrooms and secondary living spaces in many homes, there appears to be less concern with ownership and control over viewing choices (thus less conflict) when families watch television. Nevertheless, some conflict still occurs. In some instances this conflict has more to do with 'where to watch' than 'what to watch'. Paradoxically, families who have subscribed to pay TV appear to be returning to the family (living room) politics reminiscent of Morley's (1986) *Family Television* where sharing the one pay TV outlet often reflects and highlights existing family power relationships and struggles.

Computer gaming, on the other hand, is a highly gendered activity, and as such, is not a site of overt conflict and concern between genders. Within this study, computer gaming is well established as a male (young and old) play culture and as a medium they often share with other males in extended friendship circles. This gender disparity is of some concern, particularly for children, given that computer gaming is often a gateway into the professional world of computers and the Internet. The content and marketing of computer games which targets male gamers, as well as the gender segregation that occurs within children's play culture, both seem to have some bearing on the gendered nature of computer gaming within the home. This decidedly gendered play/leisure culture is enacted within the family home and, as such, gives a specific gendered meaning and function to that technology and the domestic space it occupies.

Masculinity is often associated with technology. Accordingly, many men and boys within this study position themselves (or are positioned) as technologically competent regarding media technologies in the home, and in relation to other family members' media use. However, masculinity is expressed in a variety of ways, and in some cases may not be related to technological competence at all. Class,

generational differences, ethnicity, and career pathways may all have some bearing on these differences. Nonetheless, the mastery and control of technology, as a customary expression of masculinity, is largely evident within the families in this study.

Men and women's attitudes to, and use of, the domestic Internet situates the domestic Internet as a medium through which the role of the family and the gendered nature of family life is perpetuated. Women tend to use the Internet to help with gendered tasks such as communicating with family and friends and managing the family home (along with everyday tasks associated with work and study).

All in all, it can be argued that gendered differences and disparities in the use of domestic media technologies are evidenced in many contemporary Australian family homes. However, the critical site for the construction and enactment of gender differences and disparities (through domestic consumption of screen technologies) has extended beyond the family living room to other household locales. These locales include bedrooms, offices, studies and secondary (communal) living spaces. These new locales also allow more individualised or fragmented modes of media consumption in the family home and further strengthen the argument that the family living room has become a less critical site of domestic media consumption.

CHAPTER FIVE

THE UNANTICIPATED: CASCADING ADOPTION OF MEDIA TECHNOLOGY AND DIGITAL DIVIDE ISSUES

In the past, when new communication and information technologies appeared on the market, it very often took several decades to establish mass distribution. Today our life has speeded up. Not only do technologies spread much more rapidly, but the time separating the introduction of new forms is much shorter. This phenomenon has brought in its wake the need to redefine more traditional household technologies, such as television and traditional telephony. The borders between the different technologies are fading. All this contributes to redefining the way we appropriate technologies, both as individuals and communities. The dichotomy that defined technology as a work tool or leisure item tends to disappear and with it the lines drawn between public and private spheres (Caron, 2000, p. 2).

Introduction

The last chapter concentrated on gender and the consumption of media in the multiply-mediated home, in particular how gendered relationships are reflected through differential media consumption and how media consumption often perpetuates (at the same time as it sometimes challenges) the gendered nature of family life. The general focus of this chapter is to present two noteworthy themes that are not directly related to the research questions. This study uses a combination of an inductive exploratory process (as found in grounded theory) and a deductive confirmatory process (as found in many other research methodologies). (See Chapter Two for further explanation.) Participants in this study engaged in semi structured conversational interviews within which they could direct the pace and direction of the discussion. Consequently, new themes and understandings, which were not anticipated at the beginning of this project, emerged over the time of the interviews. Two unexpected themes have arisen over the course of this study. These are: the ‘cascading adoption phenomenon’ and digital divide issues that go beyond the simple binary division of the ‘haves’ and ‘have nots’. These two themes, although not thematically related, are presented together in this chapter as ‘out of the blue’ themes that need further investigation – and will be explored further below.

The first two sections of this chapter focus on the rapidly changing technological environments evident within the households in this study – and I believe within Australian households in general, since there is no reason to believe that the research households are all atypical. In these sections I discuss the notion of cascading adoption (the rapid adoption of new technologies, which are often linked in some way to existing household technologies) and how this is implicated in the transformation of the geography of the home. Given that the integration of new and multiple media technologies is often associated with the rearticulation of boundaries in the home, “movements in the power balance are not only possible but inevitable, since every household has a dynamic identity, and this [rearticulation of boundaries] impacts upon its own ICT consumption life-cycle” (Green, 2002, p. 53).

The third section of this chapter discusses issues relating to the commonly held understandings about the digital divide. Through my investigation of multiply-mediated families (most with Internet technologies³⁸) it was evident that, when it came to using the Internet, different levels of motivation, technical competency and quality of available technological resources existed between families and within families. These differences had some bearing on an individual’s autonomy and his/her proficiency of Internet use. Thus, “merely having access does not mean that a digital divide has been solved because a divide remains in their capacity to effectively use the Internet” (Hargittai, 2002, para. 5). The existence (or lack) of support networks also had some bearing on a person’s willingness to engage in Internet use. The digital divide, therefore, is not a straightforward case of the digital ‘haves’ and ‘have nots’. Access to the Internet at home does not always ensure that digital divide inequalities will be effectively minimised.

The multiply-mediated home and the cascading adoption of ICT’s.

A rapid adoption of media technologies is evident in most of the families within this study. Many family members also identified new technologies they would ideally like to purchase. These new technologies either augment the technological function of existing screen technologies (DVD players, pay TV, CD burners, ADSL), improve on dated technologies (large screen TVs, and upgraded computers) or catch the overflow of consumption in the home (2nd and 3rd television

³⁸ All but one of the families in this study had the Internet connected in their family home.

sets and computers). All these functions (to augment, improve or broaden consumption) represent some variation of the ‘cascading adoption phenomenon’, a notion conceived by Caron (2000) whereby “the introduction of a technology into the home brings about the beginning of an unforeseen event: the adoption of another technology” (p. 7). That is to say, for example, the introduction of a home PC can often lead to the purchase of a printer, scanner, burner, upgrades or another PC.

Individual family members, particularly children, desired multiple television sets or computers in their homes – especially located in their bedrooms. Multiple sets within a home capture the overflow of consumption desires within the domestic context; thus allowing for conflict avoidance and a more individualised mode of media consumption. When asked why she wanted a personal TV and computer, Rhianna (11) explained “cause [then] I can watch Foxtel, and then ‘cause I have a few computer games, I can play on that. And I have a few videos as well that are mine” (Rhianna, 11, personal communication 2003).

When asked what he thought about the changes he had seen in his home, Rhianna’s older brother Trent (17) discussed the pros and cons of multiple screen ownership within his family.

Trent: It probably has changed, ‘cause nowadays, ‘cause there’s more things to choose from, like you want to go on the computer or watch the other TV, it draws the family apart a lot more, than it used to. Like, 10 years ago, there was only one TV, everyone had to watch the same thing and everyone was together, but now, you just do whatever you want and then, it just separates the family more.

Donell: So is that, people in different parts of the house, perhaps, is it good in some ways?

Trent: Yeah, because then you get more choices, it’s more interesting and stuff like that. You had to watch one thing, and if you didn’t, didn’t like watching it, then it’s too bad. You just have to watch it, but, now you have the choice to go and watch something else (Trent, 17, personal communication, 2003).

Families in this study have found themselves in an ongoing process of adopting or purchasing more and more ICTs. It should be noted, however, that the adoption of new technologies is dependent on available resources and is not solely a matter of individual and household choice. Nonetheless, this ‘cascading adoption’ trend, as identified by Caron (2000), is evident within almost all the families in this

study. Although Caron confines his notion of the cascading adoption phenomenon to telecommunication devices (telephone, mobiles, email etc) in the home, this study indicates that the phenomenon can be applied to a broader range of communication and information technologies – with the oldest domestic screen technology (television) included:

When we were in the other house in Medina, we only ever had the TV in the main room. So yeah, until six years ago, that was the only TV we had and then we got one portable which grew into two portables 'cause we got one for the back room and then Neil's just recently bought his TV (Lucy, 30+, personal communication, 2003)

Along with multiple television sets a myriad of add-on technologies have migrated into most family homes. Thus, over the years, many families have added video recorders, remote controls, game consoles, satellite dishes and set top boxes (for pay TV) to augment and enhance the function of the family television(s) and, more recently, may be in the process of adding set top boxes (for digital broadcasting) as well as DVD players. "We've got a video and a DVD. The DVD's yet to be hooked up. We only got it last week" (Mick, 50+, personal communication, 2003). Research, development and early adoption of digital technologies also points towards the integration of set top boxes with interactive (back channelling) options in the near future and perhaps the full convergence of television and interactive Internet technologies (Guy, 1996, p. 30; Kinnaman, 1995, p. 86)³⁹.

Caron's cascading adoption phenomenon is also apparent when considering computer and Internet technologies where "not only do technologies spread much more rapidly, but the time separating the introduction of new forms is much shorter" (Caron, 2000, p. 2). A glance around at my own computer station effectively highlights this point. My own list of added technologies includes a recently installed CD burner and a megabyte upgrade. Earlier technological add-ons are also evident. An extra telephone line has been installed to free up the telephone while the Internet is in use. There is the digital camera, printer, CD drive, scanner, speakers and a sub woofer. Planned future technological upgrades include wireless networking to enable movement of information between computers in different locations within the

³⁹ It should be added here that market diffusion of these new technologies is never ensured (Miles, Cawson & Haddon, 1996, p. 67).

home (currently housing three adults and one school aged child⁴⁰) and broadband access. Of significance here is a phenomenon identified by Cameron (2003) coined 'net drag' where broadband uptake is

beginning to negatively affect the quality of the Internet experience for narrowband users – not so much because of the time it takes to interact with other users connected to a *broadband* service, but because the whole Internet environment has shifted to contain more content and applications designed for people connected to broadband.... [and where] users of dial-up modems are taking more time to complete Internet-based tasks today than they did two years ago (p. 3).

This is, no doubt, another driver for 'cascading adoption' of ICTs. Conversely, net drag may well heighten the disparities in the quality of Internet access, particularly for those families who do not have the resources to continually upgrade, for example to broadband, or add to their existing ICTs.

It should be noted here that although the domestic uptake of media technologies is dependent on available resources as well as individual and household choice, the social shaping of consumption is a two way process. The design, production and marketing of products is socially shaped, but additionally impacts upon and helps alter the shape of the domestic environment. In other words, the cascading adoption phenomenon is driven, not only by household members' choices but by (a more limited number of) social actors within the industry where "capabilities of core technologies is [are] seen as allowing for new applications opportunities" (Miles, Cawson & Haddon, 1992, p. 68). In this way, existing communication and information technologies are envisaged, designed and marketed, and seem to be embedded in a continual cycle of product innovation.

These may range from minor improvements in familiar applications (e.g. somewhat smaller devices), through to major transformations of products (eg new combinations of devices, substantially new functions associated with devices), and to radically new products (with little in common with established products) (Miles, Cawson, & Haddon, 1992, p. 68).

Compatibility problems between add-on technologies and existing domestic technologies can sometimes lead to further (cascading) adoption of media

⁴⁰ Fluctuations have occurred in the last two years with adult children moving back and forth and teenage foster children being looked after. At times, during this research, there were 4 adults and three school-aged children in my household.

technologies. Add-on technologies that either improve the function, or change the functionality, of existing core technologies (such as telephone lines, television sets and computers) are a significant part of the technological environment within the homes of participant families in this study. The integration and/or compatibility of old and new technologies is, at times, problematic for families with respect to both television and computer technologies. An inability to connect the old and new can also lead to further (unwanted) technology consumption. Neil (16), whose family already had four television sets, found that he couldn't connect his newer Playstation to the less used television sets in his house. The competition for the main family set (biggest and newest with an up-to-date connection) left him unsatisfied since it was heavily booked for family viewing.

Cause the Playstation didn't work on the old TV. It's the main reason why I got my own TV. Because it didn't have AV plugs so if you wanted to play Playstation, you had to go out the front but [you] had an argument if someone wanted [to watch] out there because I couldn't play Playstation (Neil, 16, personal communication, 2003).

Further technological add-ons or improvements are planned in many of the households participating in this study – and in a few cases new innovations are anticipated with pleasure – as in the case of gadgeteer Mick. “I'll go onto, computer sites just to see what the new technologies coming up are, you know” (Mick, 50+, personal communication, 2003).

Despite planned and anticipated technological add-ons and improvements the uptake of new ICTs within some households is not always a pre-planned or long-standing desire. It can be a spur of the moment decision; a serendipitous outcome driven by unforeseen happenings. When revisiting two of the families within this study I found that they had each recently purchased new or add-on technologies. Family members had not anticipated the purchase of these technologies at the time of the initial interviews, six months earlier. One family had purchased a new, more powerful computer for the household while another now has broadband access. The reasons for getting upgraded technologies are not always simple or unidimensional. A combination of pester power, changed work conditions (with less IT support) and the prospect of improved connectivity led Theresa (40+) to make the change⁴¹.

⁴¹ Theresa chose from the options of using cable, landline or ADSL when moving to a new service provider.

Theresa sent me an email giving a full explanation of the reasons for getting broadband:

We now access the Internet via broadband. I think this was from April 2003. There's a number of reasons for this: It's quicker, Nathan [15] was nagging cause ADSL is a better connection than the dial up modem for his gaming (which kept cutting out), and work advised staff that it was no longer supporting the option of giving staff access to the Internet from home (as they could not guarantee that this was complying with their AARNET responsibilities) via the dialup modem. And it is a much better service/access from/via the new ISP (Theresa, 40+, personal communication, 2003).

Generalised understandings about technology, which often situate male household members as the main users, deciders and procurers of ICTs, do not seem to hold true within the scope of this study. Women in this study seem to be making many of the purchasing decisions regarding new or add-on technologies, either solely or with some consultation with their partners. It may be that gendered roles relating to motherhood are at play here because "as in other spheres relating to the domestic, the wife may act as [domesticity] facilitator, or even manager of the home environment" (Wheelock, 1992, p. 109). In this way many women assume, or are expected to assume, teaching and managing roles within the home⁴². This role can include making the final purchasing decisions for the household: "I decided that it was a better service option, less frustration on our at-home use. If you know what I mean. Xxx Theresa" (Theresa, 40+, personal communication 2003).

In brief, most of the families in this study seem to be adopting newer, and add-on, media technologies into their homes at a rate faster than a generation ago, and even faster than they anticipate. This is because the uses and functions of today's media technologies in the home often become wider than originally anticipated and have unanticipated consequences – like Neil's purchase of a fifth TV. This can happen through the use of add-on technologies, the acquisition of newer technologies (which improve on dated technologies) or the incorporation of multiple technologies (which catch the overflow of consumption in the home). Women in this study are closely involved in the 'cascading adoption phenomenon'. Their position as managers of the home environment often sees them as procurers of new media technologies for the home. Further study into the cascading adoption of media

⁴² See Chapter Four for a fuller discussion regarding gender and technology in the home.

technologies within the home (and women's position as procurers of media technologies) is crucial if researchers are to gain a comprehensive understanding of the gender dynamics involved the domestic consumption of media technologies.

Cascading adoption phenomena and the reconfiguration of the geography of the home

The rapid adoption, and duplication, of ICTs within domestic environments has seen a reorganisation of private and communal space within these homes. This is despite the fact that the diffusion of technology into the domestic environment is not the sole determinant of change within the home. In many cases, nonetheless, it may be that the arrival of new and multiple technologies within the home allows family members to reconsider, change and alter, the geo-spatial layout of the home.

Whereas technology is not the sole cause of the changes we see in our homes, it is often the occasion and catalyst for redefining the operating structures of society and the daily experiences of people, their work, family life and communities (Gumpert & Drucker, 1998, p. 424).

While "each household will utilise technology and space differently, based on their own individual requirements" (Sherrat, 2002, p. 66) this study indicates that substantial changes are occurring at an accelerated rate within the geography of many homes. Furthermore, new ICTs do not simply replace the old, but they offer instead more complex and wide-ranging opportunities for interactivity and communication. In this sense, the location and use of a growing number of technologies needs to be taken into account by the households in question and, I would argue, by researchers in general. We are no longer in a research environment where we can look solely at one technology – even a multi-faceted technology such as the Internet.

Homes are created within a (socially constructed) technological culture. Changes in technological culture have, in the past, led to transformations in the design and function of houses. Just as the rise of the automobile has effectively shaped the design of many cities, it has also shaped many suburban homes - with the two-car garage standard in new home designs (Gumpert & Drucker, 1998, p. 427) . Similarly the domestic uptake of new and multiple ICTs may be a catalyst for redefining the design of the home of the future (Gumpert & Drucker, 1998, p. 424).

Changes are already taking place in new Australian homes, with home offices, computer nooks and home theatres incorporated into off-the-plan home design and construction (Sherrat, 2002, p. 66). Many families, however, are not in the market for a new house because “not everyone will be able to, or want to, build a new home” (Sherrat, 2002, p. 64) in order to accommodate the rapid adoption of ICTs. Families in this study are ‘making do’ and, as a consequence, are effectively realigning the spatial geography of their existing homes to include technology use not thought of when their homes were designed. They are often reappropriating rooms for technologically-related purposes where none was originally intended and, at times, adding extensions to their homes.

The incorporation of technological resources into the home is a dynamic process open to continuous modification with respect to geography of the home environment and is, to some extent, a challenge for families within this study. Some families seem to be trying out ‘the fit’ of these technologies – testing to see how these technologies fit into different spaces in their homes and different timeframes of their users’ lives. This effectively redefines the relationship of technology users to the temporal and spatial elements of the home. This ‘trial and error’ approach was clearest in families where the cascading adoption of computer and Internet technologies was most evident. This seemed to be due to the challenges (or problems) associated with the private/communal nature of domestic engagement with media screens, parental supervision of ICT use, the desire to consume these technologies in an individualised manner within a communal/domestic context and the division of paid work, domestic work and leisure within the home.

In some cases the desire of children and young people to consume ICTs in a private manner (away from common areas frequented by parents) is in conflict with parental desire to control, or supervise, children and young people’s media consumption. Green (2002) suggests that one reason for the need of parents to “control children’s access to media and communications is that consumption is so pleasurable that the child or younger adult might be reluctant to exercise self-control” (p. 49). In one family, the household computer was moved to a more communal area of the home so that parental control could be more effective. When revisiting Neave (40+), newly separated mother of three, I found that she has recently replaced and reconfigured the domestic location of the family computer in order to

supervise more easily her daughter's 'excessive' use of the Internet. Fourteen-year-old Pru readily acknowledges that she monopolises the family computer "'cause I've got MSN, and, I can talk to my friends and stuff" (Pru, 14, personal communication, 2003).

Instant Messaging, particularly the use of MSN Messenger, is a highly popular activity among teenage girls in rural and metropolitan WA⁴³. The girls tend to chat with groups of existing offline friends – usually from school. This is somewhat "reminiscent of teenage girls' use of the telephone (in their mother's generation) where much time was spent on the phone chatting with existing girlfriends and the odd boy – usually from school" (Holloway & Green, 2003b, p. 15). What parents see as excessive use of instant messaging is also a generational 'sticking point' in many families, again, in a manner similar to teenage girls' past use of the telephone. This is largely because teenage-driven chat tends to monopolise the Internet connection (and/or telephone line) and interfere with time available to spend on other activities such as homework, chores, getting adequate sleep or participating in outdoor (fresh air) activities. "Sometimes Pru (14) will sit up here all night, you know, like, and she used to come down and help, you know, round the house or whatever" (Neave, 40+, personal communication, 2003).

With these concerns in mind, Neave took the opportunity (when purchasing a new computer at the behest of her children) to relocate the Internet connection to a more easily supervised room. She moved the computer from the 'upstairs room' (a planned extension added to the house a few years earlier, previously earmarked for older children's media and social use, and isolated from the main living area) to a downstairs room. This new computer space (also a guest bedroom) is adjacent to the main communal living area (which comprises an open plan kitchen, dining and living area and a formal lounge room nearby) and can readily accommodate walk-by supervision.

⁴³ "MSN Messenger is the most popular instant messenger service in Australia with 64 per cent of online teenagers using MSN Messenger" (ninemsn, 2002).

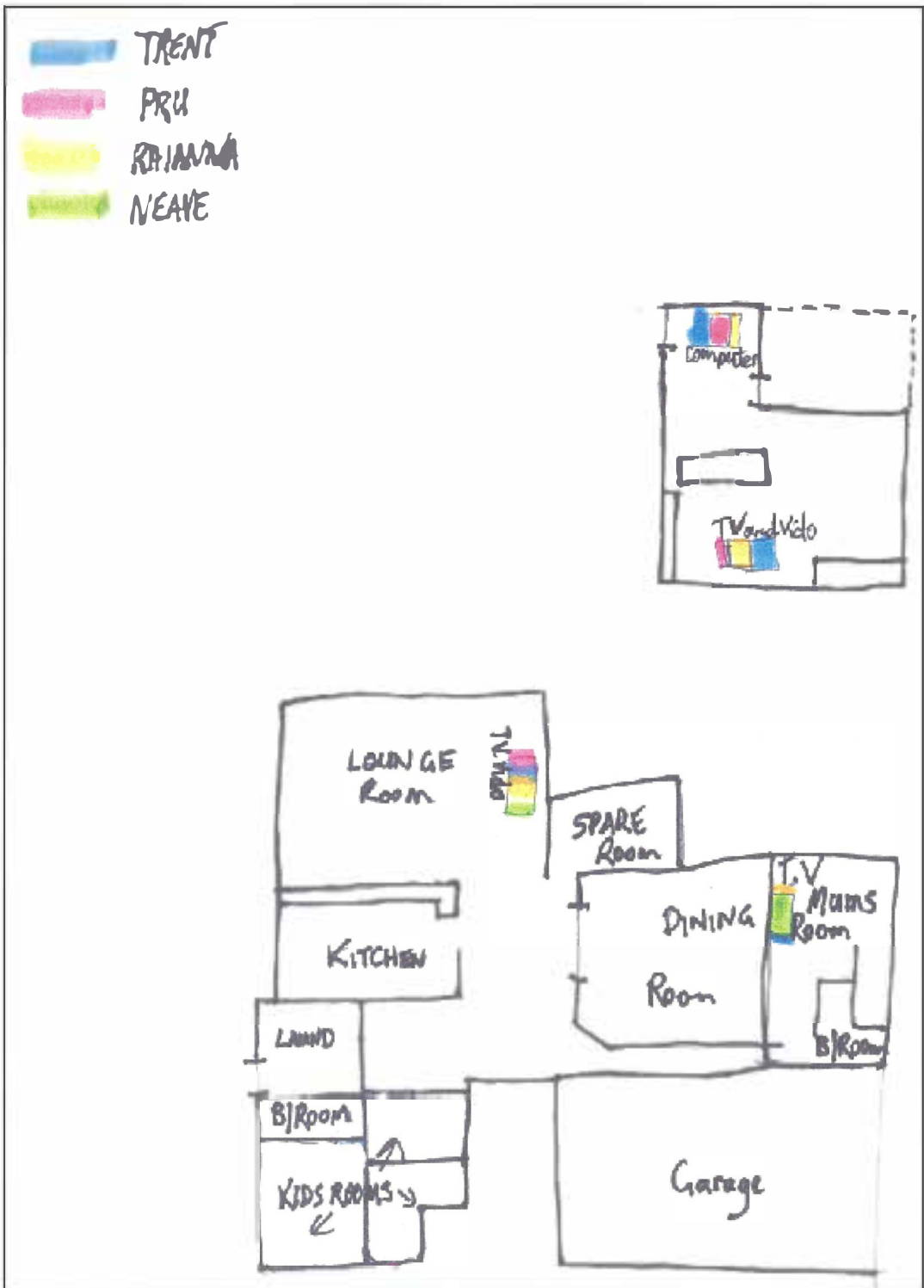


Figure 5:1 : Hand sketched floor plans of Narberth family home before computer move (by Trent). Media spaces by Trent, Pru and Rhianna.

The alterations to the physical location of media and screen technologies in this way have also shaped changes to the spatial and temporal geography of the rest of the home. In this case, the upstairs room is now hardly ever used and, as I found

on my last visit, weekend guests (who stay in the guest room) are now frequently visited by teenagers, who are used to gaining access to the Internet in this room.

This is but one example of how “individual households incorporate the technological material of everyday life into a continuing conversation about power, responsibility, interconnectedness and separateness” (Green, 2002, p. 48). In this case, parental power and/or control was effectively enforced through the physical reorganisation of technologies and of boundaries within the home. At the same time, nonetheless, the children and young adults (10, 14 and 17) in the home had their own pay-off - in the form of a faster computer.

Telework, or the trend towards the reintegration of adult paid work into the family home, is also associated with a reorganisation of boundaries and function of domestic spaces. Thus, changes to the geography of the home (related to multiple media use) can be not only associated with the private consumption of media, but also with changes to employment/work practices in many developed/western countries. The past few decades have seen a considerable increase in the number of people “working in self-employment, in micro small businesses, or under casual, part-time, subcontract, franchised, telework or homeworking arrangements in industrialised countries” (Quinlan & Mayhew, 200, p. 3). Recent employment trends also reveal “Almost half of all full-time working Australians do unpaid overtime each week” (Crichton & Delaney, 2002, para. 1). Previously there was a “clear separation between work and home spheres of life, between the hours of work and the hours of non-work” (International Labour Organisation [ILO], 2001, para. 4)⁴⁴ However,

these distinctions – between home and paid work – are now less clear for many families. These changes in work practices are concurrent with the spread of information and communication technologies (ICTs), particularly the Internet, into the family home. The diffusion of ICTs into the domestic sphere has coincided with a blurring of boundaries between work and home, between paid and non-paid work (Holloway & Green, 2003a, p. 6).

The physical home, post domestic teleworking, therefore integrates a “functionality that is alien to its predefined role and consequently it will need to be reconfigured,

⁴⁴ See <http://www.andrewbibby.com/wcp/bibl.htm> for an online version of this document.

both spatially and temporally, to accommodate the evolving demands of its occupants” (Sherrat, 2002, p. 63).

The incorporation of ICTs for adult work seems to be a spatial problematic within some homes. The O’Neil family, consisting of Mick (a 50+ gadgeteer who works as an employment consultant and often takes work home), Nicole (40+ who runs a counselling service from home) and their two daughters, Hannah (15) and Leah (11) exemplify some families’ ongoing pursuit of the ‘perfectly configured’ (mediated) domestic environment. They have had, over the last few years, a continuing conversation, including some disagreements and trial runs, regarding the placement of ICTs within their home.

The O’Neil’s home, a 50’s fibro house, has had a succession of internal reconfigurations, as well as some modest extension and improvement over the past few years. These changes are closely involved with the incorporation of new, and multiple, ICTs within the home; particularly computer and Internet technologies dedicated to the reintegration of work and home duties. The location of the Internet-connected computers in the home has been a point of friction between the adults in this family. Mick, who works mainly outside the home, prefers to set up his computer/office space in a communal area of the home (the dining room), while Nicole has strong feelings about the separation of work and family life within the domestic context.

He [Mick] prefers to be right in the middle of the family on the computer and he’d be happy to be on the computer while we watch telly and he’d come in and out and flow between you see? So if there was something interesting on telly, he’d stop that and come and in there [points to lounge room] and then when he’d finished that, he’d come back to do it and [get] on the computer. That’s how Mick would like it to operate but I say “no, it’s too much mess” and because the dining room is there to eat. And then I want another place completely for office/admin stuff because it just all. [pause] What happened was that all your social stuff gets caught up with all your work stuff you know? All the paperwork (Nicole, 40+, personal communication, 2003).

The desire to separate work space from domestic space - and particularly the desire to separate Mick’s office/study mess from the communal area of the house - has led to a sequence of internal moves within the house. Nicole had earlier set up a combined office/consulting room at the back of the house but needed to keep this

separate from Mick's work/study space, due to the private nature of her counselling sessions. Consequently, a daughter's bedroom was converted to an office area. This was to be used primarily by Mick and the girls. However, it did not seem to be a successful solution to the problem given that Mick still spread his 'mess' around, and works late at night keeping others awake. A new consulting room was then built, separate from the house, so that Nicole could separate the home office from the consulting space (ensuring privacy of counselling sessions). Mick now has full use of Nicole's old office/consulting room and Nicole now uses Mick's (converted bedroom) office area for her paperwork.

It's great that Mick's got his own area so we know that if there's any paperwork for Mick, it can go into that room and he can sort it out. So from time to time, he can just go in there and shut the door and do his own thing. Yeah (Nicole, 40+, personal communication, 2003).

Both adults seem satisfied with their individual office/study spaces as-is. Now, however, their daughter Leah (11) is not happy with her side of the bargain – which is a sleep-out in a flow-through area of the house. Further changes are afoot:

It isn't ideal because we can all walk through and traipse through it [Leah's bedroom] and so she doesn't have her own privacy completely.... She's beginning to complain a bit about that, now that we do walk through. Still, so you know, that's what we would like to do, would be to create her a [more private] bedroom. We are thinking, one of the things we can do is to actually put a sliding door – glass sliding door through that way [points to dining room wall] so we all go out the – outside through that way and seal off her room (Nicole, 40+, personal communication, 2003).

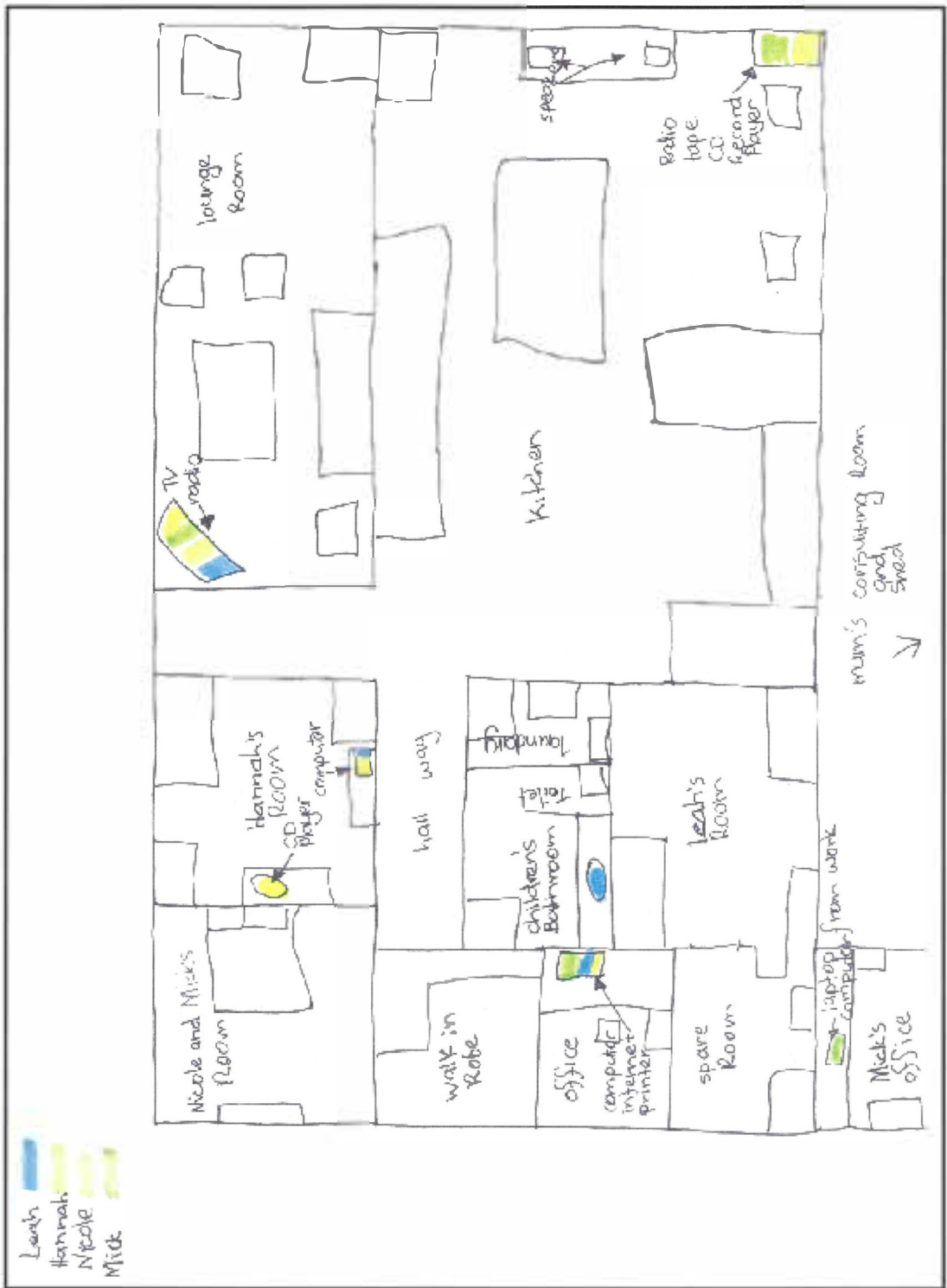


Figure 5:2 Hand sketched floor plan of the O'Neil family home (by Hannah, 15). Media spaces by Leah and Hannah.

The O'Neil's ongoing conversation about the use of domestic space and the integration of work into the geography of the home presents significant, and relatively new, challenges and dilemmas to family life. Such conversations, however, are not separate from other household issues concerning the use of space

and time in the home. These are often part of a wider dialogue concerning family routines and the function of private and communal spaces in the domestic sphere, as well as the inclusion of media technologies within these spaces. These conversations emerge from attempts to make sense of the rapid changes occurring within the multiply-mediated home, to inject the family's (or individual's) needs and values into these changes and shape the way these new and mediated technologies work for the individual or family by taking some control of these technologies in the home.

These ongoing conversations (and decisions) also involve challenges to the customary function of a room. The O'Neils, for instance, seem to have a continuing dialogue about the use of their dining room (This is on top of the previous issue concerning Mick's computer mess).

We were talking about moving it [the family television] the other day because of the DVD and Mick was suggesting we bring it in here, into the dining room [so that it can then be connected to the stereo system] and I said I don't like the idea of it in the dining room because of telly-watching at dinnertime... I don't want to watch television at dinnertime and it means we can just all relax together in the lounge room, watching TV so that's where it is so [inaudible] to me, it's relaxing time, you know? (Nicole, 40+, personal communication, 2003).

Long-established family routines may at times be in conflict with the manner in which new, and multiple, media technologies are incorporated into the layout of the home. In this case the possible relocation of the television (to integrate it with the DVD and stereo) challenged existing sociocultural practices, which involved the customary use of the lounge room (for communal viewing) and the separate use of the dining room (for communal dining). For Nicole, changes to the function of these rooms challenged her family (that-eats-together) values, making it an unacceptable option. On a more recent revisit to their home I have found that their DVD player is now hooked up to the television in the lounge room and the family is still considering how to make the best use of its audio functions. "We didn't connect it with the stereo as yet because we haven't had the time or worked out the logistics of it yet. Life has been very hectic" (Mick, 50+, personal communication, 2003).

ICTs expand people's capacity to communicate with the outside world and, in the domestic context, they also give people more things to communicate about. This capacity to communicate through ICTs may, in turn, make it difficult to disengage

from work responsibilities, because the continuous connections these technologies afford allows work to constantly infiltrate the home (Gumpert & Drucker, 1998, p. 7). For this reason, “it is increasingly difficult to compartmentalise one’s life into home and office” (p. 7). In the O’Neils’ case they have been in the process of reconfiguring the geography of the home in order to give some sense of separation between home life and work. For Nicole, with her work located solely at home, the need to disengage the domestic from work responsibilities seems most pronounced. These issues are also part of a wider dialogue regarding the use and function of private and communal spaces in the home, the inclusion of media technologies within these spaces and the maintenance of established family routines.

The challenges families experience when incorporating media technologies into the home is not limited to well-resourced families (or to just to those who possess multiple media technologies and live in relatively spacious homes). Although the scope of this study is small, it comprises families with a range of incomes⁴⁵, and it seems that those families who have less (less media technologies) also have less space (rooms). Therefore, fitting new media technologies within an existing home is still an issue to be considered. Single mum, Lakisha Pearce⁴⁶ (30+) finds that trying to fit the few media technologies they own into their small home is somewhat challenging. With both the television and computer located in the lounge room Lakisha finds that combining the two activities in the same room works for her family, but is not necessarily ideal. “Well, yes, it works. I mean that’s – a bit of a space consideration. I suppose if I had a separate study the computer would be in a separate study” (Lakisha, 30+, personal communication, 2003). Living in an older home (with a separate kitchen) Lakisha also has concerns regarding the physical separation she experiences when her boys (11 and 9) are watching television and is considering moving the computer into the kitchen so that she can help and supervise her boys when they use the computer and Internet.

⁴⁵ Two families in this study are living off social security pensions. The Ryders receive Austudy payments, while husband Rick is at university, and Lakisha Pearce receives a parenting payment for sole parents. It is the Pearce family who seem to be obviously less resourced than other families in this study. They live in a small rental property and do not have many media screens in their home.

⁴⁶ Lakisha lives with her sons, Nicholas (11) and Liam (9). They have one television set (along with a video player and game machine) as well as an old, hand-me-down computer. The computer is Internet ready but Lakisha has chosen not to connect at this stage. (See next section.) They live in a small 50’s fibro rental.

One problem that I have is sometimes when the boys come in here [the lounge room] and watch the TV, they're [away] from me. They sort of disappear and I'm in there [in the kitchen] working and doing things – cooking or whatever in the kitchen and they just sort of flop out and so with the computer and also especially for school work where they do move closer to me so we can have conversations and I can assist them.... Maybe [when the boys are older] the computer would have to go in the kitchen with the Internet access so that there would be sort of an integration of – and supervision and that sort of thing (Lakisha, 30+, personal communication, 2003).

This qualitative investigation into the use and negotiation of domestic media technologies and the geography of the home highlights the rapid at-home changes many families go through as their family matures and changes. Although the adoption of new media technologies may appear to be a positive, uncomplicated progression, it crystallises a time when families often reconsider, alter and change the geo-spatial layout of their homes. Some families take a trial-and-error approach when appropriating new, and multiple, media technologies into their home in an attempt to make sense of these rapid changes and inject the family's (or individual's) needs and values into their use. These households are in the process of shaping (socially constructing) the way the screen technologies work for the individual or family by taking some control of the placement and use of these technologies in the home.

The information divide: Challenges of the do nots, know nots and have nots

Much of the literature recording the spread of the Internet is concerned with differences between those who do not have Internet access and those who do; or the disparity between those who make use of the Internet and those who do not (Hargattai, 2000). Social commentators, government bureaucrats, educators and researchers alike comment with concern about differential access and skill levels between groups in our community. Their discussions are often framed in terms of the national or public interest – where reducing the digital divide will help Australia's economic and social development within a global information economy, thus giving Australia an economic edge⁴⁷. Government entities have been established (at all levels of government) to engage with issues involved in the information economy.

⁴⁷See http://www.govonline.gov.au/Projects/access/Connecting_Communities/Digitaldivide.htm for the National Office of the Information Economy (NOIE) list of articles, reports, initiatives and projects aimed at bridging the digital divide.

The National Office for the Information Economy (NOIE) emphasises the economic benefits that full participation in the information economy will bring to Australia:

The global consensus on the positive contribution of ICTs to economic and social developments is rising. The role of ICTs in development highlights the major social changes they have on the way people conduct their daily activities in work, education, health and at home. ICTs have changed the way people view and use information. Information-based goods and services are increasingly becoming major sources of wealth, as information becomes the driving force of the information economy (NOIE, 2002, para. 2).

Nonetheless, as the divide between the 'haves' and 'have nots' diminishes over time (with most Australian families with children already having Internet connectivity) "a greater understanding of the digital divide as based on different degrees of access to information technology" (NOIE, 2002, para. 6) is needed. Differences in the quality of technologies available as well as personal motivations, support networks and the existing skill levels of individuals need to be taken into consideration when trying to understand differences in access and proficiency with ICTs.

Adults in this study are well aware of the prevailing discourse regarding the educational and economic significance of ICTs for their children's futures. William (40+) enjoyed discussing broader issues regarding the digital divide at both a national and global level.

There's the social issue beyond the family like for instance, in school, there's increasing concern for those families who don't have computers at home, who don't have access to the Internet because it's just reinforcing the difference between the haves and the have nots. The haves have always (now we're in the information age and the knowledge economy) those who have access to more information and know how best to use it are the ones who are going to get the jobs, who are going to get the promotions and all the rest because there's less and less manual jobs around for people and there's more and more for people who use knowledge so it's creating a divide in societies like Australia which are technologically advanced but there are still differences in income groups and such. It's creating a divide in the world between the poor countries and the rich countries like – if you look at 400,000,000 Internet users in the world, there's 180,000,000 in the US, there's 150,000,000 in Europe – they're the big users. There's 3,000,000 in Africa so there's a digital divide in the world (William, 40+, personal communication, 2003).

Participant parents all value home computing and Internet access as being important for their children's future – both as a proficiency that will be needed for

their children's future work and as an educational tool. They also seem aware of the limitations implicit in school exposure to computer technologies and the Internet. Although schools have an important function in closing the gap between the Internet 'haves and have nots', home access to the Internet is considered a more significant indicator of children's educational attainment than having access at school (McLaren & Zappala, 2002; Holloway & Green, 2003a). Schools, at this stage, have a limited capacity to make significant inroads into minimising the digital divide. The limited ratio of computers per child, the time constraints involved with teaching a full class of children and the amplification of technology/gender issues which occurs in the classroom⁴⁸ all mean that schools have a difficult task ahead if they aim to negate differences in domestic access.

Lucy (30+) discusses her daughter Natalie's (8) limited classroom computer experiences.

They don't even use the computers in their classroom. They very rarely – they had a program last year where they sent emails but it was the parents sending the emails, typing the emails and sending them, because you've got 30 kids to get through. If you let them send their own emails, you might be there [forever] (Lucy, 30+, personal communication, 2003).

Whereas Nicole (40+) explains why she believes her two daughters (Hannah 15 and Leah 11) have different skill levels, and interest in, using the computer and Internet.

When it first came out, there were only a minimum numbers of computers around the school... but it was the boys who would take up that time at school. So Hannah [15] never really [got into it]. We didn't have it at home, and, you know it's only recently that it's been there. So Leah [11] definitely grown up with it in the house whereas Hannah hasn't" (Nicole, 40+, personal communication, 2003).

All but one of the families in this study has access to Internet technologies in the home. Despite this near ubiquity of Internet presence, inequitable access (digital divide) issues were clearly evident. Some children had limited access to computer technologies within the home due to sibling and generational competition for the computer(s), some lacked the social support needed to provide assistance and encouragement, and others had outdated hardware, uninteresting software and connectivity issues to deal with.

⁴⁸ See Spender (1995, pp. 99 – 146) for an insightful discussion regarding technology and gender within educational institutions.

Sole parent Lakisha (30+) and her two boys Nicholas (11) and Liam (9) had previously borrowed a friend's computer until another 'hand-me-down' computer was recently given to them. Although they have a modem they have not yet connected to the Internet, as Lakisha is hesitant to go online. She explains her reasons below.

I suppose, like in turning on computers and popping onto the Internet that I've – it's sort of like I'm not really prepared to do all the necessary [work involved]. Like as in getting a different computer or having this one upgraded and like I don't really feel I've got the space in my life to engage myself with another whole concept of issues. I mean, they know, you get sort of [inaudible] to learn – the learning curve. Not that I feel daunted by the learning curve but I just know it takes up so much time because I have worked with computers. And if something crashes, something doesn't work and then you've got this and got that and emailed jammed or stuff. So I'm a bit reluctant to get into all that side of things so maybe I'll have to leave it until the boys get older. And what's the best plan and the right usage? And like I sort of feel it'd be a whole new monster. Apart from money that you tie up and stuff which I'm always, obviously in my position, quite cautious about committing myself in that area because there's no point if you're hopping on the Internet unless you've got the right tools to work with it and yeah ... we'll see. Probably by the time when Nicholas [11] can take over that part of things! He's very keen. He's very keen... Sometimes I think it would be interesting and sometimes I'm really annoyed that I ring up places and they say, we've got a website (Lakisha, 30+, personal communication, 2003)

Lakisha's reluctance to hop onto the Internet bandwagon (for a combination of reasons ranging from lack of financial resources, lack of social and technical support, an unwillingness to put in the hours of mental application needed to master the Internet and a general mistrust in the reliability of the technologies involved) all indicate that the reasons for a digital divide are complex and multifaceted. Her disinclination to get connected is understandable. As a sole parent (without family and work connections in Australia) Lakisha seems not to have the technical and social networks which can provide ready "access to other users who can offer advice, encouragement and practical support" (Murdock, Hartmann & Gray, p. 150), particularly when undergoing 'the learning curve' [her words] stage of Internet adoption. Other women within this study appear to have acquired their computer and Internet skills through workplace exposure. Pru (14) explains why her mother, Neave (a small business woman) is able to help her in using the Internet. "She [mum]

just picked it up along the way...cause she has it at work” (Pru, 14, personal communication, 2003).

Green (2002) explains that the diffusion and adoption of domestic technologies is incremental and, once this diffusion is at the late adoption stage, there are usually plenty of “people willing and able to support the process of technology adoption” (p. 10). She also suggests that Internet diffusion is not yet at this stage. Most adult users (within this study) have been introduced to the Internet through their workplace where technical support tends to be available. On the other hand, those families without workplace attachments (and consequent support networks for sustaining the continuing learning and problem solving involved in Internet adoption) may be struggling to find the motivation and sustained effort needed to master Internet use in the home – as is the case with Lakisha and her family. This situation, where workplace experiences allow for an easier transition to Internet use in the home, may be a transitional and generational one. Most children and young people are taught basic computer and Internet competencies at school and have social networks that can assist and encourage the use of these technologies. This is conceivably one of the reasons why Lakisha prefers to wait until her eldest son, who is showing a keen interest in all things digital, is competent to take over as the technical expert in the family.

For these reasons, and others, simple binary divisions which classify the ‘haves’ and the ‘have nots’ when discussing inequality of access and use of computer and Internet technologies need to be expanded upon. Providing extra technological resources is not necessarily the answer. Instead we need to look at different aspects of people’s computer use and online experiences. Hargittai suggests that there are five dimensions along which divides may be present in the community. These include:

The technical means (software, hardware, connectivity quality); autonomy of use (location of access, freedom to use the medium for one’s preferred activities); use patterns (types of uses of the Internet); social support networks (availability of others one can turn to for assistance with use, size of networks to encourage use); and, skill (one’s ability to use the medium effectively) (Hargitti, 2002, para. 5).

The issue, therefore, is not just access to the technical hardware of computer and Internet technologies, but rather that the “differences in availability of services,

technology fluency, motivation, and opportunities to learn may lead to a two tiered world of knowers and know-nots, doers and do nots” (Tapscott, 1998, p. 256).

While a clear majority of Australian families with children have home computers and are connected to the Internet (ABA, 2003), their children’s individual experiences, interest levels and technological competencies vary. Experience with technology is positively related to proficiency of use and for most young children, at-home computer experiences (particularly playing computer games⁴⁹) form the gateway to gaining familiarity and experience with computers and Internet technology (Hale, 1995, p. 1: Spender 1995, p. 186).

However, the relative quality of the technologies available in the home may have an impact on children’s enjoyment of, and proficiency with, these technologies. “That mouse is pretty pathetic so it becomes a bit tricky to do it. It’s a bit of hard work logging [clicking] on something if you’re doing a lot you know” (Lakisha, 30+, personal communication, 2003). Those children with limited software (games), unreliable hardware or peripherals, or with connectivity issues are less likely to be attracted to, or gain experience with, computers and Internet (largely because the opportunity to engage with the computer in a manner that is exciting to them is limited). Lakisha’s son Liam (8) does not play on his family computer because “it’s just boring ‘cause we don’t have any match games and we don’t have the Internet” (Liam, 8, personal communication, 2003). Liam and his bother Nicholas (11) prefer to play computer games at friends' houses and have a good understanding of what they are missing out on.

Donell: So is there a difference between using it [computers] at other kids’ homes and here?

Liam: Yes it’s much more fun.

Donell: Why do you reckon that is?

Liam: We don’t have that many games and that’s all

(Nicholas, 11, personal communication, 2003).

Using their computer at home underlies their relative exclusion from Internet culture, and thus may be a ‘threatening’ re-statement of their comparative poverty, rather than simply being ‘boring’. Although both boys seem to have the social (boy

⁴⁹ Please see Chapter Four for a discussion regarding computer gaming.

culture) networks which would encourage use of computers and the Internet, they lack the at-home technologies to fully engage in this culture. Thus while the boys are engaged with a social network that would encourage the use of computer and Internet technologies, their lack of technological resources means that they experience a significant degree of digital inequality.

Lakisha's family is a clear-cut case of inequitable access to computer and Internet technologies. Nonetheless, there are other, more subtle, examples of inequality of access (or mini digital divides) within the families in this study. These range from a lack of social networks that would encourage the use of computer and Internet technologies (particularly for some girls in this study), and limited autonomy of use due to competition for the family computer (especially by older siblings and parents), to a lack of technical expertise within the family (or access to someone you can turn to for assistance while using the computer and Internet).

To conclude, the digital divide is not an uncomplicated case of the digital 'haves' and 'have nots'. Universal access alone does not ensure that the digital divide will be minimised to any great extent. Variations in the quality of the technologies utilised, autonomy of use, the availability of relevant support networks (social and technical) and individual motivation levels all need to be taken into account when considering the reasons why people do not use the Internet. Future technological developments and the 'cascading adoption phenomenon' may see further exacerbation of the digital divide as:

the tendency of many families to add to and update their home ICTs may, in the future, see households where all family members are wired up individually, "where the divide between those homes with 'just one' computer and those with 'one computer per person' could suggest differences in social and ICT organisation as great as those differences between have/have not households." (Holloway & Green, 2002, p.9).

Conclusion

Caron's 'cascading adoption phenomenon', whereby families are engaged in an ongoing process of incorporating newer (and more) screen technologies into the domestic context (often as a consequence of previous acquisitions) (2000, p. 7) is clearly evident within most of the families in this study. These multiply-mediated homes are very different from the homes described in Morley's (1986) *Family*

Television where television viewing was a round-the-hearth family tradition, “ a time when only one television set was available to most families – a time when dads, and the occasional mum, ruled the television viewing habits of the family” (Holloway, 2003, para. 4).

Family television viewing seems [seemed] to be part of a relatively recent (round the hearth) tradition, which followed from the family piano, phonograph and the radio. These traditions re-established the home and family as a place where parental authority overrode the dangers of the outside world. Radio broadcasters in the 1940s endorsed the family radio as a way to promote family togetherness because (as they saw it) ‘the house and hearth have [had] been largely given up in favour of a multitude of other interests and activities outside, with the consequent disintegration of family ties and affections’ (Flichy, 1995, p. 158). Television viewing followed suit as another round-the-hearth family tradition (Holloway, 2003, para. 3).

Today’s multiply-mediated homes move media technologies (and family politics) out of the living room and disperse these into most rooms in the home. The contemporary domestic context presents researchers with a complex sociocultural environment which is continuously ‘under construction’ – as family members engage in metaphorical conversations and exchanges about incorporating new and multiple media technologies into the spatial geography of the home and routines of family life. Future research, which situates multi-screen media consumption within the context of everyday life, is called for. Such research needs to engage with the complexities of multiple mediation in the contemporary family home rather than continuing to approach media consumption only through the investigation of a single medium, genre or text.

Digital divide issues which go beyond the simple binary division of the ‘haves’ and ‘have nots’ are noticeable within the families participating in this study. Hence, although quantitative research provides us with an awareness of the digital divide (and the social inequalities likely to come from this), further qualitative investigation is needed to fully understand the ‘whys and wherefores’ of Internet usage (and non usage). Some understanding of the difficulties, motivations and support people experience (or don’t experience) may best be garnered through the use of qualitative or conversational research methods. Further research using this mode of investigation (similar to the audience ethnography used in this study) is recommended so that participants can tell their individual stories in order to “explain

how situations are being defined by the participants themselves – to identify contextualised meanings and experiences” (Moore, 1996, p. 28). In this way, the information poor can represent themselves (to some degree) rather than being spoken for by researchers and commentators who may “erroneously put themselves in the place of people with far fewer information resources, and imaginatively reconstruct how they would feel if they were in such information-reduced circumstances” (Green, 2002, p. 103).

CHAPTER SIX

CONCLUSION: MEDIA USE AS REFLECTED IN EVERYDAY FAMILY LIFE

Introduction

The ethnographic research which shapes the main body of this work has been organised so as to take into consideration the range of screen technologies typically available in most family homes. Families with school-aged children were chosen as the subject matter for this study because, as a demographic group, they are the forerunners in multiple-media use. With three-quarters of Australian families with children living at home owning two or more television sets, as well as higher than average ownership of computers and Internet connectivity (ABA, 2003, pp. 65 – 7: ABS, 2003), these households lead the way in the trend towards greater complexity in domestic media environments. Thus, “methodologies that focus on a single medium and particular types of text seem inappropriate to the understanding of [the] contemporary mediascape” (Meers, 2001, p. 141). Instead, in the light of today’s complex mediascapes, it becomes increasingly important to focus on the way in which families are simultaneously consumers of new and old media – as with this particular research project.

The availability of multiple and new media technologies within the family home allows for expanded cultural consumption within the domestic context. This study has investigated the implications of these expanded opportunities for consumption, both in the way families and individuals shape the manner in which these technologies are utilised and in the way in which these technologies and texts have an impact on the sociocultural environment of the family. As we can see from the families in this study, media is frequently consumed within the context of everyday family life and, therefore, plays a central role in articulation of sociocultural practices within the family. For this reason this thesis has endeavoured to gain a critical understanding of these processes within the multiply-mediated home with the intention of gaining some knowledge about the relationship between the private space of the household and society at large.

It is now left to reflect on the themes and issues presented in this thesis and draw them together in terms of the research hypothesis and the research methodology used. Thus this conclusion will address the hypothesis, analyse the overall findings in light of the hypothesis, give an overall summary of the findings and discuss the extent to which this research effectively attends to the topic at hand. This section concludes with a discussion regarding possible future research directions.

The research hypothesis

As previously presented in Chapter Two, the hypothesis for this research project is that:

Families in technologically rich households perceive some movement away from a singular television culture, a fragmentation of household communication patterns, and rearticulation of power relationships along generational and gender lines. More specifically, it is proposed that media-rich home environments will reflect changes in the geography of the home. This in turn sees a rearticulation in patterns of consumption where different individuals or groups of individuals hold power or dominance at different times and in different household spaces (p. 20).

For the most part, this study affirms the hypothesis presented. It is quite obvious that most contemporary family households have seen a move away from a singular television culture (where families had only one television set available for the singular purpose of viewing free-to-air television broadcasts) to the situation where screen technologies (and family politics) have migrated out of the living room and dispersed into other rooms in the home. This is not to say, however, that the family living room is now free of conflict or inequity. Although the provision of multiple television sets and new media technologies has, to some extent, alleviated discord about viewing preferences, conflict still exists. In some families conflict about 'where to watch' has replaced conflict about 'what to watch'. In other cases pay TV, with only a single outlet being available in most family homes, has brought about a return to living room politics similar to that discussed in Morley's (1986) *Family Television* study.

Claims over time and space in the domestic context are intimately involved with the consumption of media technologies. Thus, the migration of screen technologies to other spaces in the home has reflected (and been reflected in)

changes to the geography of the home. These extra media spaces in secondary living areas - such as family rooms, activity rooms and teenagers' retreats, and in some bedrooms, studies and spare rooms - have fundamentally changed the nature and function of many rooms. For instance, the appropriation of media technologies into private domestic spaces (such as individual bedrooms or home offices) has transformed these rooms into spaces that are both private and public. These spaces are, at certain times, utilised for communal activities such as television viewing or gaming; as well as for private work and study. These media spaces have also become new (additional) sites for gendered and generational conflict and tension. In this sense, the family living room has become a less critical site of domestic media consumption.

The use of screen technologies by children participating in this study revealed that, although only a few of the children had screen technologies located in their bedrooms, there is some evidence of a gendered bedroom culture (similar to Marshall's (1997) description of children's bedroom cultures) with some boys using their bedrooms for computer gaming and/or television viewing. Parents in this study were not overly anxious about the content of the television programs with which their children were engaging. Rather, they were more concerned with excessive media use taking time away from other activities such as homework and household chores. It may also be that the 'moral panic' previously associated with children's television viewing has been replaced by community and parental concern about the content of computer games and Internet interactions.

Children's bedroom culture -- a phenomenon evident in households in the UK (Livingstone, 1998, 1999) and the USA (Woodard & Gridina, 2000), and which is increasingly linked with the use of screen technologies -- is far less evident in Australian family homes (ABA, 2003). The possible reasons for such differences between family mediascapes include nationally identifiable (and regionally specific) sociocultural, economic and environmental factors. Such matters as house size and number of rooms help shape the manner in which families appropriate media technologies within their homes. Consequently, similar patterns of media access should not be assumed when considering the media use of families in various western countries of comparable living standards, or even between families in the same geographical location(s).

This thesis investigated the gendered nature of family media consumption in the multiply-mediated home. It argued that gendered relationships are reflected through differential media consumption and that current consumption practices perpetuate (though sometimes challenge) the gendered nature of family life. Through the exploration of different sites of media consumption in the home I have found that there are specific sites of gendered conflict and difference – particularly computer gaming (through the use of game consoles, computer CDs and online games). Nonetheless, the family television is still a significant site for family media consumption. As expected, gender differences were found in television viewing preferences, although these preferences were often catered for with the provision of second and third television sets in the family home. Internet use was also bounded by gender differences, both in the manner in which men and women perceive the Internet (a tool for specific activities versus a tool to be played with or mastered respectively) and the types of activities they used the Internet for.

This study confirmed that the relationship between technology and masculinity is not a uniform one. Masculinity is expressed in a variety of ways and, as with one participant in this study, may not be related to technological competence at all. A variety of sociocultural factors may have some bearing on these different expressions of masculinity. Relevant factors include class, generational differences, educational levels, ethnicity, and career pathways. Nevertheless, the control and mastery of technology, as a prevailing articulation of masculinity, is evident in most of the households within this study.

Other themes and issues

While the hypothesis proffered at the beginning of this research project has been adequately confirmed, what makes this thesis more noteworthy is the opportunity that participants had to speak for themselves. This opportunity provided participants with the occasion to tell their own stories and verbalise their personal perspectives on a variety of topics and, consequently, has resulted in the emergence of themes and issues not previously envisaged. These include ‘the cascading adoption phenomenon’ (Caron, 2000) and issues concerning the digital divide that go beyond the simple binary division of the ‘haves’ and ‘have nots’.

Most families within this study found themselves in an ongoing process of adopting new media technologies (which are often linked in some way to existing household technologies). These newly-purchased media technologies are usually allied to existing media technologies in the home. These new technologies either augment, improve on or broaden consumption of media and of existing ICTs. Moreover, this ‘cascading adoption phenomenon’ is often associated with a reconfiguration of the geography of the household. As such, this dynamic represents a complex sociocultural environment which is continually ‘under construction’ as family members take part in exchanges about the incorporation of new and multiple screen technologies, and set about integrating these technologies into the domestic spaces of their homes.

Discussions with adults and children in this study have also called attention to an understanding that the digital divide is not an uncomplicated case of a division between the digital ‘haves’ and ‘have nots’. Differences in the quality of the technological resources available within each household, the availability of relevant support networks (social and technical), autonomy of use within individual households and individual motivation levels all have some bearing on access and levels of use of the Internet. Therefore, universal access to Internet technologies may not ensure that the digital divide will be minimised to any great extent.

Future Research Directions

While the research hypothesis has, in general, been confirmed, this study has been limited by the scope of this project (a Master’s thesis that has time limitations and a workforce of one), which in turn limits the size of the sample group. Therefore, it goes without question that further research into this area needs to entail a larger sample group and cover a broader range of families – including well-resourced families who are early adopters of new screen technologies such as wireless networking, ADSL, and convergent technologies. Nonetheless, I feel that the quality of the information obtained has delivered an in-depth understanding of the media consumption in the context of everyday family life (within the multiply-mediated home) and provided generalisable understandings relevant to many contemporary Australian households.

As with most research endeavours, particularly those using an ethnographic (or open ended) approach, this study raises more questions than answers, thus generating strong possibilities for future research trajectories. (Some of these research directions have been addressed in the body of this thesis). As this study was limited to screen technologies in the home, perhaps the most obvious future direction would be to explore a broader range of communication technologies available within most multiply-mediated homes. This would include devices such as radios, CD players, phones (mobile and landline), palm tops, digital cameras and gameboys – and any new consumer-based media technologies that become available in the near future. Exploring the full range of information technologies will enable researchers to view the information environment of a home in a more holistic manner.

Families in this study appear to be taking control of their own information technologies by engaging with, and participating in, the formation of their own information environments. They also take part in ongoing conversations regarding the location and use of new, and multiple, media technologies in the home. Thus, the research families are in the process of shaping (socially constructing) the way in which these technologies work for the family (or individual family members) by taking some control of the use of these technologies in the home. Hence, with many families' media environments in an ongoing 'under construction' phase, research approaches that attach importance to the social shaping of media consumption may more readily give voice to the role consumers play in affecting their own domestic media environments and consumption patterns.

In conclusion, it is important that media theory, media methodologies and media-related research ventures investigating the domestic consumption of media technologies be reconsidered in order to take into account the contemporary multiply-mediated home. Conventional research approaches which usually examine the domestic consumption of single media technologies (or genres) within the home need to be broadened to take into account the complex and interconnected technological environments which characterise many contemporary Australian households. Existing research models and trajectories need to be further refined in order to address the issue of contemporary media consumption in the family home.

REFERENCES

- Australian Broadcasting Authority [ABA]. (2003). *Research into community attitudes into violence on free-to-air television*. Australian Broadcasting Authority. Retrieved June 12, 2003, from <http://www.aba.gov.au/tv/rcsearch/projects/pdfrtf/ViolenceOnTV.pdf>
- Australian Bureau of Statistics [ABS]. (2003). *Transport and communication: Household use of computers and the Internet*. [Feature Article]. Retrieved October 16, 2003, from, <http://www.abs.gov.au/Ausstats>
- ABS. (2001). *Children's Participation in Cultural and Leisure Activities*. (Publication No. 4901.0). Retrieved October 10, 2003, from <http://www.abs.gov.au/Ausstats>
- Bhabba, H. (1994). *The location of culture*. London: Routledge.
- Blumenthal, D. (1997). *Women and soap opera: A cultural feminist perspective*. Westport CT: Praeger.
- Boneva, B., Kraut, R., & Frohlich, D. (2001). Using E-mail for personal relationships: the difference gender makes. *American Behavioural Scientist*, 45(3), 530-549.
- Bovill, M., & Livingstone, S. (2002). *Bedroom culture and media use*. New York: Columbia University, Fathom Knowledge Network. Retrieved April 3, 2003, from <http://www.fathom.com/fculture/122231>
- Brinton, M. C. (2002). *Gendered offices: A comparative-historical examination of the feminization of clerical work*. Ithaca, NY: Cornell University, Department of Sociology. Retrieved September 18, 2003, from <http://www.yale.edu/leitner/pdf/Brinton.doc>
- Brunsdon, C., & Morley, D. (1978). *Everyday television: Nationwide*. London: BFI.
- Buckingham, D. (1993). *Children talking television: The making of television literacy*. London: Falmer Press.
- Cameron, A. L. (2003, July 9 -11). Net Drag: The understated discrimination in trickle-down models of broadband rollout. *Proceedings of the Australia and New Zealand Communication Association Conference (ANZCA03)*. Retrieved September 18, 2003 from http://www.bgsb.gut.edu.au/conferences/ANZCA03/Proceedings/papers/cameron_full.pdf

- Caron, A. (2000, November 26-29). New communication technologies in the home: a qualitative study on the introduction, appropriation and uses of media in the family. *Proceedings from International Forum of Researchers Conference, Sydney*.
- Cassel, J., & Jenkins, H. (1998). *From Barbie to Mortal Kombat: Gender and computer games*. Cambridge: MIT Press.
- Chandler, D. (n.d.). *Video games and young players*. Aberystwyth: University of Wales, Department of Film and Television Studies. Retrieved April 20, 2001, from <http://www.aber.ac.uk/media/>
- Chapman, G. (1998, Nov 23). Technology puts new spin on the American male. *Los Angeles Times*, pp. 1-1.
- Cook, D. (200, August 21). Lunchbox hegemony: Kids & the market place, then and now. *Lipmagazine*. Retrieved March 3, 2003, from http://www.lipmagazine.org/articles/featcook_124.shtml
- Crawford, L. (1996). Personal ethnography. *Communication Monographs*, 63(2), 158-170.
- Crichton, S., & Delaney, B. (2002, December 16). All work, no pay for overtime brigade. *Sydney Morning Herald*. Retrieved March 8, 2003, from <http://www.smh.com.au>
- Crotty, M. (1998). *Foundations of social research: Meaning and perspective in the research process*. Sydney: Allen and Unwin.
- Culpitt, M., & Stockbridge, S. (1996). *Families and electronic entertainment*. Sydney: Australian Broadcasting Commission.
- Denzin, N. K., & Lincoln, Y. S. (1998). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (pp. 1-34). Thousand Oaks CA: Sage.
- Department of Foreign Affairs and Trade [DFAT]. (2001). *Australia in brief: Way of life*. Australian Department of Foreign Affairs and Trade. Retrieved March 2, 2003, from <http://www.dfat.gov.au/>
- Dick, B. (2002, Dec 29, 2002). *Grounded theory: A thumbnail sketch*. Coffs Harbour, NSW: Southern Cross University, Southern Cross Institute of Action Research. Retrieved June 24, 2003, from <http://www.scu.edu.au/schools/gcm/ar/arp/grounded.html>
- Downes, T. (1999). Children's and parent's discourses about computers in the house and school. *Convergence: The Journal of Research into New Media Technologies*, 5(4), 104-111.
- Fiske, J. (1987). *Television culture*. London: Routledge.

- Flichy, P. (1995). *Dynamics of modern communication*. London: Sage.
- Funk, J., & Buchman, D. (1996). Children's perception of gender differences in social approval for playing electronic games. *Sex roles: A journal of Research*, 35, 219-228.
- Galante-Block, D. (2003, May 17). Growing trends spawn more releases: older gamers are opening up a broader market of more mature titles this year. *Billboard*, 115, E-6(2).
- Geraghty, C. (1998). Audiences and ethnography: Questions of practice. In C. Geraghty & D. Lusted (Eds.), *The television studies book*. London: Hodder Arnold.
- Gotting, P. (2003, May 14). TV so dull, even young avoid it. *The Sydney Morning Herald*. Retrieved June 10, 2003, from <http://www.smh.com.au>
- Gray, A. (1992). *Video playtime: The gendering of leisure technology*. London: Routledge.
- Green, L. (in press). Attempting to ground ethnographic theory and practice. *Australian Journal of Communication*, 30(2).
- Green, L. (2002). *Technoculture: From alphabet to cybersex*. Crows Nest Australia: Allen and Unwin.
- Greenwald, J. (1996, Nov 11). Barbie boots: Mattel's new chief is using an old playmate to get girls as hooked on computers as boys are. *Time Magazine*, 148, 48 - 50.
- Griffiths, P. (1998). Teenage viewers of television: A study of the viewing culture of 13 and 14 year old Canberreans. *Proceedings of Communications Research Forum, Canberra*. Retrieved June 10, 2002, from, <http://www.ica.ogit.gov.au/papers98.htm>
- Gumpert, G., & Drucker, S. J. (1998). The mediated home in the global village. *Communication Research*, 25(4), 422-438.
- Guy, S. (1996). What's in the soup? *Telephony*, 230 (1), 30-34.
- Haddon, L. (1991). The cultural production and consumption of IT. In H. Mackay & M. Young & J. Beyon (Eds.), *Understanding technology in education* (pp. 157-175). London: The Falmer Press.
- Hale, E. (1995). *The gender gap in cyberspace*. Retrieved May 5, 1999, from <http://ask.library.com/>
- Hargittai, E. (2002). Second-level digital divide: Differences in people's online skills. *First Monday*, 7(4). Retrieved May 17, 2003, from <http://www.firstmonday.org/>

- Holloway, D. (2003). Sharing Foxtel: The kids are back around the hearth again. *M/C: A Journal of Media and Culture*, 6(2). Retrieved May 24, 2003, from <http://www.media-culture.org.au/>
- Holloway, D., & Green, L. (2002, October 2-3). What do family members think they're doing when they're using the Internet @ home? *Proceedings of Communications Research Forum, Canberra*. Retrieved February 2, 2003, from, http://www.ica.ogit.gov.au/forum_program_02.html
- Holloway, D., & Green, L. (2003a, July 9 -11). The Sesame Street effect: Work, study, play and the family Internet. *Proceedings of the Australia and New Zealand Communication Association Conference (ANZCA03)*. Retrieved October 10, 2003, from, <http://www.bgsb.gut.edu.au/conferences/ANZCA03/Proceedings/default.htm>
- Holloway, D., & Green, L. (2003b, Oct 1-2). Home is where you hang your @: Australian women on the net. *Proceedings of Communications Research Forum, Canberra*. Retrieved October 25, 2003, from, <http://www.ica.ogit.gov.au/index2.html>
- Holmes, D. (1997). Virtual identity. In D. Holmes (Ed.), *Virtual politics: Identity and community in cyberspace* (pp. 26-45). London: Sage Publications.
- Hornig-Priest, S. (1996). *Doing media research: An introduction*. Thousand Oaks, Calif: Sage.
- Humphreys, S. (2003, July 9-11). Online multi-user games: Playing for real. *Proceedings of the Australian and New Zealand Communication Association Conference (ANZCA03)*. Retrieved September 27, 2003, from, <http://www.bgsb.gut.edu.au/conferences/ANZCA03/Proceedings/default.htm>
- International.Labour.Organisation. (2001). *World Employment Report 2001: Life at Work in the Information Economy*. Geneva: Switzerland, United Nations. Retrieved March 10, 2003, from, <http://www.andrewbibbv.com/wep/bib1.htm>
- Jenkins, H. (1998). *Complete freedom of movement: Video games as gendered play spaces*. Cambridge MA: Massachusetts Institute of Technology, Comparative Media Studies. Retrieved May 24, 2001, from , <http://web.mit.edu/21fms/www/faculty/henrv3/pub/complete.html>
- Jessen, C. (1995). Children's computer culture. *Dansk Paedagogisk Tidsskrift*, 5.
- Kayana, J., & Yelsma, P. (2000). Displacement effects of online media in the socio-technical contexts of households. *Journal of Broadcasting and Electronic Media*, 44(2), 215-229.
- Kinder, M. (1991). *Playing with power: In movies, television and video games*. California: University of California Press.
- Kinnaman., D. E. (1995). Cannibalism, convergence, and the mother of all networks. *Technology and Learning*, 16(3), 86.

- Lawrence-Neuman, W. (2000). *Social research methods: Qualitative and quantitative approaches* (Fourth ed.). Boston: Allyn and Bacon.
- Lealand, G. (2000, July 3-5). *Some things change, some things remain the same: New Zealand children and media use*. Paper presented at the ANZCA Conference, Ballina NSW.
- Livingstone, S. (1992). The meaning of domestic technologies: A personal construct analysis of familial relationships. In R. Silverstone & E. Hirsch (Eds.), *Consuming technologies: Media and information in domestic spaces* (pp. 113-130). London: Routledge.
- Livingstone, S. (1998). *Children, young people and the changing media environment: What's happening in the bedroom*. Paper presented at the Children's Summit on New Media, London.
- Livingstone, S. (1999). New media, new audiences. *New Media & Society*, 1(1), 59-66.
- Livingstone, S., & Bovill, M. (1999). *Young people new media*. London: London School of Economics and Political Science, Department of Media and Communications.
- Livingstone, S., Bovill, M., & Holden, K. (1999). Children's changing media environment: Overview of a European comparative study. In U. Carlsson & C. Feilitzen (Eds.), *Children and media: Participation and education*. Geneva: UNESCO.
- Maier, M., & Messerschmidt, J. W. (1998). Commonalities, conflicts and contradictions in organizational masculinities: Exploring the gendered genesis of the Challenger disaster. *The Canadian Review of Sociology and Anthropology*, 35(3), 325-345.
- Marshall, P. D. (1997). Technophobia: Video games, computer hacks and cybernetics. *Media International Australia*, 85, 70-78.
- Marvin, C. (1988). *When old technologies were new*. New York: Oxford University Press.
- Matthews, H., Limb, M., & Taylor, M. (2000). The 'street as thirdspace'. In S. L. Holloway & G. Valentine (Eds.), *Children's geographies* (pp. 63-79). London: Routledge.
- McLaren, J., & Zappala, G. (2002). The 'digital divide' among financially disadvantaged families in Australia. *First Monday*, 7(11). Retrieved May 17, 2003, from <http://www.firstmonday.org/>
- Meers, P. (2001). Is there an audience in the house? *Journal of Popular Film and Television*, 29(3), 138-144.

- Miles, I., Cawson, A., & Haddon, L. (1992). The shape of things to consume. In R. Silverstone & E. Hirsch (Eds.), *Consuming technologies: Media and information in domestic spaces* (pp. 67-81). London: Routledge.
- Moore, S. (1996). *Satellite television and everyday life: Articulating technology*. Luton UK: University of Luton Press.
- Morley, D. (n.d.). *Audience research*. Retrieved April 22, 2002, from, <http://www.museum.tv/archives/etv/A/htmlA/audiencerese/audiencerese.htm>
- Morley, D. (1980). *The 'Nationwide' audience: Structure and decoding*. London: BFI.
- Morley, D. (1986). *Family television: Cultural power and domestic pleasure*. London: Comedia.
- Morley, D. (1992). *Television audiences & cultural studies*. New York: Routledge.
- Morley, D., & Silverstone, R. (1992). Domestic communication: Technologies and meanings. In D. Morley (Ed.), *Television audiences & cultural studies*. New York: Routledge.
- Moyal, A. (1992). Women calling: The gendered use of the telephone. *TeleGeography*, 5 - 11.
- Murdock, G., Hartmann, P., & Gray, P. (1992). Contextualising home computing: resources and practices. In R. Silverstone & E. Hirsch (Eds.), *Consuming technologies: Media and information in domestic spaces* (pp. 146-160). London: Routledge.
- National Office for the Information Economy [NOIE]. (2002). Digital divide. Retrieved Aug 27, 2003, from [http://www.govonline.gov.au/Projects/access/Connecting Communities/Digitaldivide.htm](http://www.govonline.gov.au/Projects/access/Connecting_Communities/Digitaldivide.htm)
- Ng, A. (1998). *Games women will play*. Retrieved April 4, 2001, from <http://www.planetquake.com/QWF/articles.html>
- Nielsen//NetRatings. (2002). *Women are gaining on the web: Female surfers on the increase in Hong Kong and worldwide* [Online Press Release]. ACNielsen. Retrieved June 21, 2003, from <http://www.nielsen-netratings.com>
- ninmsn. (2002). *MSN Messenger – Australia's most preferred instant messenger service with 3 million users*. Retrieved Aug 12, 2003, from http://ninmsn.com.au/support/releases/messenger3milusers_230402.asp
- Oldham, J. (1998, May 25). Few makers of video games are playing to women. *Los Angeles Times*.

- Pearsall, S. et al (Eds.). (1998). *New Oxford dictionary of English*. (1st ed.). Oxford: Oxford University Press.
- Petrie, D. (1995). Young people, television and daily life. In D. Petrie & J. Willis (Eds.), *Television and the household: Reports from the BFI's audience tracking study* (pp. 11-31). London: British Film Institute.
- Pew Internet and American Life. (2000). *Tracking online life: How women use the Internet to cultivate relationships with family and friends* [Report]. Pew Research Center. Retrieved July 10, 2003, from www.pewinternet.org
- Provenzo, E. (1991). *Video kids: Making sense of Nintendo*. Cambridge: Harvard University Press.
- Quinlan, M., & Mayhew, C. (2000). *Evidence versus ideology: lifting the blindfold on OHS in precarious employment*. Sydney: University of New South Wales, Industrial Relations Research Centre. Retrieved March 8, 2003, from <http://www.irob.unsw.edu.au/html/WkngPapers/WP138.pdf>
- Resnick, P. (2002). Beyond bowling together: Sociotechnical capital. In J. M. Carroll (Ed.), *HCI in the new millenium* (pp. 247-272). New York: Addison-Wesley.
- Ribak, R. (2001). Like immigrants. *New Media and Society*, 3(2), 220-238.
- Rose, D. (2001). *Revisiting feminist research methodologies*, Ottawa, ON, Canada: Status of Women. Retrieved October 23, 2003, from http://www.swc-cfc.gc.ca/pubs/pubs_c.html
- Seiter, E. (1998). Children's desires/mothers' dilemmas: The social context of consumption. In H. Jenkins (Ed.), *The children's culture reader* (pp. 297-317). New York: New York University Press.
- Seiter, E. (1999). *Television and new media audiences*. Oxford: Oxford University Press.
- Sherman, S. (1997). Perils of the princes: Gender and genre in video games. *Western Folklore*, 56, 243-258.
- Sherratt, K. M. (2002). *Internet technologies: A catalyst for change in domestic architecture*. Unpublished Masters of Professional Communications Research Project, Edith Cowan University, Perth.
- Silverstone, R. (2002). Complicity and collusion in the mediation of everyday life. *New Literary History*, 33(4), 745-764.
- Singh, S. (2001). Gender and the use of the Internet at home. *New Media and Society*, 3(4), 395-416.
- Spender, D. (1995). *Nattering on the net: Women, power and cyberspace*. Melbourne: Spinifex.

- Tapscott, D. (1998). *Growing up digital: The rise of the net generation*. New York: McGraw-Hill.
- Taylor, L., & Willis, A. (1999). *Media studies: Texts, institutions and audiences*. Oxford: Blackwell Publishers.
- Thorne, B. (1998). Boys and girls together...but mostly apart. In H. Jenkins (Ed.), *The children's culture reader* (pp. 318-336). New York: New York University Press.
- Wajcman, J. (1991). *Feminism confronts technology*. Sydney: Allen and Unwin.
- Wheelock, J. (1992). Personal computers, gender and an institutional model of the household. In R. Silverstone & E. Hirsch (Eds.), *Consuming technologies: Media and information in domestic spaces* (pp. 97-112). London: Routledge.
- Woodard, E. H., & Gridina, N. (2000). *Media in the home 2000: The fifth annual survey of parents and children*. Philadelphia : University of Pennsylvania, Annenberg Public Policy Center. Retrieved April 24, from, http://www.appcpenn.org/02_reports_releases/report_2000.htm