Playing With Steam:
An ethnographic enquiry into Melbourne household gaming

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

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Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed. I acknowledge the support I have received for my research through the provision of an Australian Government Research Training Program Scholarship.

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Table of Contents

List of Tables and Figures................................................................. vii
List of Frequently Used Acronyms.................................................... ix
Abstract......................................................................................... 1

Section I—Settings ................................................................. 2

Chapter 1. Introduction ................................................................... 3
    Research context........................................................................ 3
    Thesis structure ....................................................................... 6

Chapter 2. Context ........................................................................ 12
    Setting the field......................................................................... 12
    What is Steam? ......................................................................... 13
    Melbourne, internet access, and the NBN.................................. 36

Chapter 3. Literature review ....................................................... 47
    Digital ethnography .................................................................. 48
    Platform studies ....................................................................... 56
    Media studies .......................................................................... 59
    Games studies ......................................................................... 65

Chapter 4. Methodology .............................................................. 72
    Recruitment and demographics .............................................. 73
    Data collection methods ........................................................ 76
    Contextualising play ................................................................ 86

Section II—Discussion .................................................................. 96

Chapter 5. ‘I love to host’: Location and LAN parties ...................... 97
    LAN Parties in the gaming literature ........................................ 99
    Steam and its servers .............................................................. 100
    Barry: File sizes and lengthy downloads .................................. 102
    Albert: Nostalgia, CS, and fluid play ...................................... 105
    Casey: Account sharing and the ‘single computer party’........... 108
    Play styles ............................................................................... 113
    Sharing and ownership ............................................................ 118
    Limitations of the NBN ............................................................ 122
    Conclusion .............................................................................. 127
Chapter 6. ‘Some time to ourselves’: The home and spatiality
- Domestic spatial configurations
- Participants and their homes
- Francis: Context based Steam usage and access
- John and Belinda: Second-hand forms of play and shared spaces
- Grace, Felix, and Oli: Household spaces and games as leisure
- Home and configuration
- Conclusion

Chapter 7. ‘Time spent hanging out’: Temporal habits and communication
- Temporal communicative habits
- Time-managed friendships
- Exchange and reciprocity on Steam
- Communicative patterns
- Time across contexts
- Conclusion

Chapter 8. ‘It’s just about balance’: Excessive play and techno-literacy
- Perceptions of excessive play and videogame ‘balance’ in Australian media
- Patterns of practice
- Inter-generational usage, configurations, and techno-literacy
- Conclusion

Chapter 9. Conclusion: Findings and futures

Reference List

Appendix
List of Tables and Figures

Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 4.1: Demographics of Participant Households</td>
<td>75</td>
</tr>
<tr>
<td>Table 6.1: Participants and their households</td>
<td>135</td>
</tr>
<tr>
<td>Table 6.2: Household work/leisure breakdowns of digital technology usage</td>
<td>137</td>
</tr>
</tbody>
</table>

Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1: The default Steam platform landing page (Steam 2016a)</td>
<td>3</td>
</tr>
<tr>
<td>Figure 2.1: An early screenshot of Steam (Sayer 2016)</td>
<td>15</td>
</tr>
<tr>
<td>Figure 2.2: A screenshot of my own Steam homepage, showing games for sale and recommendations (Steam 2017a)</td>
<td>17</td>
</tr>
<tr>
<td>Figure 2.3: The Steam store page for Alien Isolation (Steam 2015)</td>
<td>20</td>
</tr>
<tr>
<td>Figure 2.4: My own Steam Library (Steam 2017c)</td>
<td>22</td>
</tr>
<tr>
<td>Figure 2.5: Concurrent Steam users graph (Steam, 2017d)</td>
<td>25</td>
</tr>
<tr>
<td>Figure 2.6: The top 25 most played games on Steam (2017d)</td>
<td>26</td>
</tr>
<tr>
<td>Figure 2.7: Comparison of unmodded and modded versions of Skyrim (Steam2017c)</td>
<td>28</td>
</tr>
<tr>
<td>Figure 2.8: Steam friends list and chat window (Steam 2016a)</td>
<td>31</td>
</tr>
<tr>
<td>Figure 2.9: NBN availability in Southern Melbourne, March 2015 (NBN co 2015)</td>
<td>42</td>
</tr>
<tr>
<td>Figure 2.10: NBN availability in Greater Melbourne, March 2018 (NBN co 2018)</td>
<td>43</td>
</tr>
<tr>
<td>Figure 4.1: An in-game screenshot of Rocket League (Psyonix 2015)</td>
<td>89</td>
</tr>
<tr>
<td>Figure 5.1: A participant’s home office and Steam access point</td>
<td>97</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5.2</td>
<td>The prompt to start Steam in ‘offline mode’ (Steam 2015)</td>
</tr>
<tr>
<td>5.3</td>
<td>The Steam downloads section (Steam 2016a)</td>
</tr>
<tr>
<td>5.4</td>
<td>In-game screenshot of Heroes of Might and Magic III (New World Computing 1999)</td>
</tr>
<tr>
<td>5.5</td>
<td>Comparison of physical (left) and digital (right) videogame collections</td>
</tr>
<tr>
<td>6.1</td>
<td>The home study of Owen and Jill</td>
</tr>
<tr>
<td>6.2</td>
<td>Francis’ original home setup</td>
</tr>
<tr>
<td>6.3</td>
<td>Francis’ share house setup</td>
</tr>
<tr>
<td>6.4</td>
<td>Francis’ second share house space</td>
</tr>
<tr>
<td>6.5</td>
<td>John’s ‘man cave’</td>
</tr>
<tr>
<td>6.6</td>
<td>A Steam gift card for $20 AUD</td>
</tr>
<tr>
<td>7.1</td>
<td>My Steam ‘level’ and a community ambassador badge (Steam 2016a)</td>
</tr>
<tr>
<td>7.2</td>
<td>Concurrent Steam users across a 48 hour period in 2016 (Steam 2016b)</td>
</tr>
<tr>
<td>7.3</td>
<td>Concurrent Steam users graph (Steam 2018b)</td>
</tr>
<tr>
<td>8.1</td>
<td>My own recent Steam account hours played in January 2018 (Steam 2018a)</td>
</tr>
<tr>
<td>8.2</td>
<td>A ‘meme’ satirising Steam sales (Know Your Meme 2017)</td>
</tr>
</tbody>
</table>
List of Frequently Used Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Meaning</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC</td>
<td>Australian Research Council</td>
<td>A Government body responsible for distributing research grants</td>
</tr>
<tr>
<td>CS</td>
<td>Counter Strike</td>
<td>A popular multiplayer game on Steam with several iterations</td>
</tr>
<tr>
<td>CS:GO</td>
<td>Counter Strike: Global Offensive</td>
<td>The most recent version of the Counter Strike series</td>
</tr>
<tr>
<td>DLC</td>
<td>Downloadable Content</td>
<td>Additional content for a videogame, often requiring purchase</td>
</tr>
<tr>
<td>FPS</td>
<td>First Person Shooter</td>
<td>A type of game in which players wield weapons (typically projectile weapons from a first person perspective)</td>
</tr>
<tr>
<td>GoBM</td>
<td>Games of Being Mobile</td>
<td>An Australia wide investigation into mobile gaming practices.</td>
</tr>
<tr>
<td>LAN</td>
<td>Local Area Network</td>
<td>A connection method between computers that does not require internet</td>
</tr>
<tr>
<td>NBN</td>
<td>National Broadband Network</td>
<td>The in progress upgrade to Australia’s internet network</td>
</tr>
<tr>
<td>PC</td>
<td>Personal Computer</td>
<td>A computer running Windows operating systems</td>
</tr>
<tr>
<td>RPG</td>
<td>Role Playing Game</td>
<td>A type of game in which players control a single character and make choices that influence their adventure</td>
</tr>
<tr>
<td>RTS</td>
<td>Real Time Strategy</td>
<td>A type of game in which players control an army and direct it across the battlefield simultaneous to other players</td>
</tr>
<tr>
<td>SST</td>
<td>Social Shaping of Technology</td>
<td>A theory developed by Judy Wajcman and Donald Mackenzie</td>
</tr>
<tr>
<td>WoW</td>
<td>World of Warcraft</td>
<td>An online RPG by publisher Blizzard</td>
</tr>
</tbody>
</table>
Abstract

This thesis aims to ethnographically explore how the digital distribution and videogame platform ‘Steam’ is shaping the domestic configurations of Melbourne (Australia) households. It seeks to analyse several forms of configuration—spatial, temporal and social—through the focal point of the Steam platform.

Steam is the largest global online platform that sells and runs games, and is increasingly impacting the types of games we buy and play. In particular, the research attends to the role the Australian National Broadband Network (NBN) takes in how Steam is being played in Melbourne domestic spaces. To understand Steam in Melbourne households this thesis requires an interdisciplinary approach. It does so by attending to the intersecting debates across digital ethnography, games, media and platform studies.

Through employing ethnographic methods to examine Melbourne households, this thesis seeks to frame Steam practices within a broader media and social ecology of domestic space. By generating insight into the roles and influences of Steam within Melbourne households, it contributes to academic discussions of the relationship between new media, its users and the domestic space of the household.
Section I—Settings
Chapter 1. Introduction

**Research context**

Alongside the rise of everyday new media usage, digital-based games (referred to hereafter as ‘videogames’ or simply ‘games’) have become a ubiquitous component of domestic lives (Hirsch & Silverstone 2003; Consalvo 2007; Boellstorff 2008; Flanagan 2009; Malaby 2009). With the rise of videogame sales, more affordable technology and increasingly accessible platforms, videogaming has become a common activity associated with domestic household practices (Hjorth & Chan 2009; Ito, Horst et al. 2009; Horst 2013). Frequently these acts of videogame play are done through personal computers (PCs)—on both desktop and laptop varieties (Hamill 2011; Harper 2011; Newman 2013).

The digital distribution platform ‘Steam’ plays an important role in the growing household presence of videogames and associated technology. The Steam platform software is the largest videogaming platform in the world, with over 100 million users and peak levels of concurrent members online now frequently passing 12 million (Steam 2016b, 2018b). A large variety of videogame genres and styles are available on Steam—from playing expansive role-playing videogames alone (RPGs) to multiplayer videogames with friends. Alongside this type of multiplicity, the Steam platform offers

*Figure 1.1: The default Steam platform landing page (Steam 2016a)*
in-game communication between groups, in-game trading, and perusal of other digital goods through its ‘Marketplace’ features.

While Steam is influencing changes to domestic spaces and videogame interactions worldwide, the Melbourne setting provides an interesting perspective through which to explore the domestic role of a digital distribution platform such as Steam. One of the main reasons Melbourne offers such an interesting perspective is the current technological tension and upheaval within Australia. Australia is experiencing this upheaval through phenomena such as the troubled rollout of the National Broadband Network (NBN) and the increased regional pricing on videogames and other digital goods—known colloquially as the ‘Australia tax’ (Ewing & Thomas 2012; Smith 2014). Within the city of Melbourne, these issues of access have resulted in a complex relationship between Melbourne household online capabilities and domestic configurations. This complex relationship is highlighted through Melbourne usage of the Steam platform and will be explored in detail throughout this thesis.

Despite the role Steam plays in influencing and negotiating the relationships between the household and videogame play, there has been little research done regarding this phenomenon. The Steam platform itself has also not been thoroughly explored from an academic perspective. Similarly, ethnographically-orientated research involving Australian domestic usage of videogames is scant. This PhD project aims to address this gap in the knowledge.

As part of the Australian Research Council (ARC) discovery Games of Being Mobile (GoBM), this thesis provides another perspective on how play is becoming integral to everyday media practices in and around the household. GoBM is the first Australia wide study to examine the uses of mobile gaming. GoBM analyses mobile game consumption, investigating how it is being shaped by social and technological practices through a three-year ethnographic enquiry into five major Australian cities. Where GoBM explores the mobile videogame practices around Australia, this thesis follows the thread of domestic video game practices through its analysis of Melbourne household Steam usage. To this extent, this thesis asks the research question: **how is the Steam gaming platform influencing the domestic configurations of Melbourne households?**
The thesis answers this research question through an interdisciplinary approach that coalesces digital ethnography, media studies, platform studies and games studies. Accordingly, this PhD project contributes to debates around the ways new media platforms—such as Steam—can impact the relationship between technology, user, and the domestic household. In order to explore this topic, an ethnographic framework and methodology was established and enacted through ethnographically orientated fieldwork into households in Melbourne, Australia. Situated academically within RMIT University’s Digital Ethnography Research Centre (DERC), this thesis uses innovative ethnographic methods to explore its research context. DERC is a research centre concerned with increasing understandings of how digital and mobile technologies are becoming increasingly ingrained in everyday life. To this extent, DERC engages with innovative ethnographic approaches that seek to employ trans-disciplinary research between fields such as anthropology, media and cultural studies, and games research.

This thesis is clearly positioned within DERC through its use of ethnographic methodology—particularly digital ethnography and its ability to explore the perceived ‘mundane’ aspects of quotidian life. Ethnography provides analytical tools through which to approach research into the dynamic interactions between Steam and domestic Melbourne household configurations in the context of the ongoing NBN rollout. How the shifting digital landscape interweaves through, and around, domestic life is a topic best examined through research combining in-situ fieldwork observations from both physical and digital domestic perspectives.

To this extent, fieldwork data was generated through the study of 18 Melbourne households over a three-year period. These participant households were visited repeatedly in order to better understand the role of Steam in domestic spaces and how such roles and usage practices may change over time. As well as this longitudinal approach, the Steam platform itself was a site of digital fieldwork. Fieldwork began in 2015 and ran for approximately two years between 2015 and 2017. Over the years of research, data was collected regularly during informal participant household meetings. Each household had three scheduled meetings, with the final round of fieldwork undertaken in the first quarter of 2017.
Melbourne was chosen over other cities in Australia as the field site of the thesis for three major reasons. The first of these reasons concerns Melbourne’s large population and subsequent variety of households, allowing a wide spectrum of domestic contexts to be explored. Secondly, Melbourne was chosen due to its engaged and burgeoning technology sector—both academic and industry-related—particularly around videogames (Victoria 2017). Thirdly, a major advantage Melbourne offers as a field site is that it serves as the national hub for the NBN, hosting both the main and backup national operations centre for the NBN Co (the Government Business Enterprise [GBE] responsible for delivering the NBN to Australia).

How new media technologies are imagined, played, and lived in Australian households has been a subject of enquiry since the turn of the millennium (Lally 2002; Goggin 2004; Green 2004). Contributing to this academic interest and base of knowledge is another key aim of this thesis. Across the Australian landscape, households are developing new relationships with new media and digital technology. Due to the continual flux of digital technology and infrastructure occurring in Melbourne, the city is well placed to provide significant new insight into Australian use of domestic digital technology. This thesis’ ethnographic-led enquiry into how the Steam platform is influencing domestic configurations of Melbourne households will also contribute to wider discussions concerning the complex relationships between new media platforms, users and the domestic household.

**Thesis structure**

This thesis consists of two main sections, the structural logic of which will be discussed here. The first section (Section I—Settings) covers the research methods and theoretical foundations, while the second section (Section II—Discussion) concerns analysis of the research findings. The remainder of this chapter outlines each section and the chapters contained within them.

**Section I—Settings**

Section I contains four chapters. These chapters outline the research design and methodological approach of the thesis. The first and current chapter has introduced the research context this thesis is located within and establishes the research question’s
emphasis on the need to discover Steam’s influence in Melbourne based domestic everyday households.

The second chapter of Section I is Chapter 2. Context. Chapter 2 builds upon the introductory chapter, providing a detailed outline and description of the field site for research. It describes both the physical space of the City of Melbourne, the domestic configurations within the city, and the digital space of the Steam platform. In outlining these sites Chapter 2 discusses the layout, demographics, and social understandings of both sites. Its main aim is to develop a ‘thick’ ethnographic picture of the sites relevant to this thesis. The ‘Context’ chapter also provides a history of the Steam platform and the practices available through it. Understanding the history of the platform contributes to later discussions around temporally changing Steam usage practices. For a similar reason, Chapter 2 provides an overview of the NBN’s recent history within Melbourne and wider Australia, to aid subsequent analysis of how and why the NBN is entangled with domestic Steam usage in Melbourne.

Section I’s third chapter is entitled Chapter 3. Literature review. It consists of a literature review of key relevant theories and research design. The review is separated into four main components; games studies, media studies, platform studies, and digital ethnography. Chapter 3 also reviews the key academic terms used throughout analysis including ‘assemblages of play’ (Taylor 2009), ‘double articulation’ (Hirsch & Silverstone 2003) and ‘excessive play’ (Karlsen 2016).

Following on from the literature review is Chapter 4. Methodology—the final chapter of Section I. Chapter 4 details the research design and ethnographic methods used during fieldwork. It reviews the main ethnographic tools employed during fieldwork including participant observation, play sessions, and participant interviews. In addition, it will outline the recruitment phase of research—the demographics recruited, the development of a code of ethics for the thesis, and the recruitment method. Following Chapter 4, Section II discusses the research findings of the thesis.
Section II—Discussion

Section II focuses on the analysis of data gathered during fieldwork to answer the research question regarding Steam’s role in the household. Within Section II there are four discussion chapters. Each chapter explores a different set of fieldwork data. These datasets have been grouped based on overarching themes of location, spatio-temporality, and excessive play. Each chapter explores the practices and configurations that emerge around discussions of these themes.

The overall focus of Section II is to contribute to contemporary debates concerning the tensions around domestic household usage of digital technology and distribution platforms such as Steam. Therefore, the chapters within Section II engage these debates by exploring domestic Steam usage in Melbourne. Such engagement contributes to academic understandings of everyday gaming routines and the domestication of digital media. The discussion chapters of Section II also offer unique insight into the impact the NBN is having upon Australian domestic videogame usage.

The first discussion chapter is Chapter 5. ‘I love to host’: Location and LAN parties. Within Chapter 5 different interpretations of ‘location’ in relation to Steam usage are considered. The use of the word ‘location’ refers both to the physical location of the City of Melbourne and the ‘location’ of the Steam platform as a ‘place’ navigated by participants. The major ethnographic focus of the chapter is ‘LAN party’ events held by several participants, partially in response to inadequate internet connections. In the contexts of this thesis, ‘LAN parties’ are occasions where Steam users play multiplayer game co-presently over ‘local area network’ (LAN) connections. Chapter 5 analyses these LAN parties to explore the influence of household location upon scenarios of Steam usage.

Chapter 5 also analyses the role of the NBN and internet connections within the Melbourne region, examining how internet availability alters the configurations of Steam usage engaged by inhabitants of Melbourne. These configurations are limited by factors such as long game download times, the stuttering nature of online gameplay over a slow connection (and resultant ‘lag’), and the complicated nature of ‘digital ownership’. A key focus of the Chapter is the complex relationships between the high bandwidth consumption of the Steam platform (and associated videogame practices)
and the limited internet speeds common among participants and the wider City of Melbourne. Chapter 5 highlights how alternative uses of Steam arise due to Melbourne’s internet connection issues and examines how the contexts and affordances of use are influenced by the location of play.

The second chapter of Section II is Chapter 6. ‘Some time to ourselves’: The home and spatiality. Chapter 6 analyses the relationships between domestic space and the Steam platform. The examination is framed around the influence of Steam upon the configuration of the home. It is important to separate the terms ‘space’ and ‘location’. Where Chapter 5 considers the Melbourne location in which Steam usage occurs, Chapter 6 investigates how participants imagine and configure their domestic spaces according to use. When participants are configuring the domestic space in which they use Steam, they consider factors such as computer placement, household constitution, and the related practices that occur within different areas of the home.

Chapter 6 also considers longitudinal changes to domestic use of Steam by focusing on how participants reconfigure their home space around changing contexts. In particular, the impact of major life events upon Steam usage motivates this chapter. Examples of these changes include moving home, completing education, or having children. To this extent, Chapter 6 provides detailed discussion of the demographic makeup of participant households, specifically appraising the variety of people and devices contained within these domestic spaces. This discussion serves to highlight how the digital and its perception influence household configuration in relation to Melbourne domestic Steam usage.

Following Chapter 6 is Chapter 7. ‘Time spent hanging out’: Temporal habits and communication. The main focus of this third discussion chapter is how perceptions of time inform domestic Steam usage and configuration. The broad theme of ‘time’ refers to several interpretations, and is discussed in detail. These interpretations include the ‘time’ spent playing, the ‘times’ of day that play occurs, and the ‘time’ invested into the management of a Steam account. Chapter 7 explores these interpretations to generate new insight around temporally orientated domestic Steam usage. To this extent, Chapter 7 engages with fieldwork examples of participants changing daily schedules around Steam usage. These examples are unpacked to
investigate how the Steam platform can influence domestic interpretations of time. These interpretations include examples of where Steam usage at a particular time created domestic tension between household members and the arrangements employed to relieve such tension.

Chapter 7 also analyses ‘time-managed friendships’—providing examples of Steam users investing time into the platform to create and consolidate online relationships. Here the internet connections of Melbourne and the NBN feature as an important element in domestic Steam usage within Melbourne homes.

The final discussion chapter of this thesis is Chapter 8. ‘It’s just about balance’: Excessive play and techno-literacy. Chapter 8 considers the interpretations of balanced and excessive play within Melbourne households. Through a discussion of how excessive play through the Steam platform is monitored, framed and adjusted by research participants, Chapter 8 contributes to the growing academic discussion of problematic play. Such discussion is particularly relevant to the Australian context, where excessive play and the potential to be ‘addicted’ to videogames is a common topic of discourse within mainstream media. It is crucial to note that Chapter 8 is not an attempt to academically define domestic Steam usage within Melbourne households as problematic or excessive behaviour. Such definitions are well beyond the scope of this thesis.

Chapter 8 also explores how intergenerational understandings of new media may influence domestic Steam usage within Melbourne households. Such analysis is achieved through a discussion of ‘techno-literacy’. Steam platform based techno-literacy within Melbourne households highlights the myriad ways in which Australian households engage with new media technology. Chapter 8’s exploration of intergenerational techno-literacy differences and interpretations of balanced play provides new knowledge of domestic Steam usage within Australia. The chapter also offers insight into the need for Australian Government youth policy changes to better unite mainstream media and government thinking towards domestic videogame usage practices.
The closing chapter of this thesis is Chapter 9. Conclusion: Findings and futures. Chapter 9 reviews the discussion chapters of Section II and suggests potential avenues for future research. This chapter consolidates these findings to highlight the influence of Steam on Melbourne domestic practices. In doing so, it summarises key insights revealed throughout the discussion chapters and therefore regarded as contributions to knowledge made through answering this thesis’ research question.

By exploring Melbourne-based domestic Steam usage, this thesis generates new insight into how the household configurations of things, its participants, new media technologies, and internet connections interact within the Australian context. Such assemblage insights are revealed through the answering of the research, which questions the influence of Steam gaming platform on the domestic configurations of Melbourne households. The structural outlining given above provides an overview of the steps this thesis takes to address this research investigation. The next chapter of this thesis begins the process of enquiry by ethnographically describing the highlighted field sites: the Steam platform and the City of Melbourne.
Chapter 2. Context

Setting the field

The Steam platform is a software client installed onto computers that allows for the digital purchasing and downloading of videogames and videogame content. Owned by Valve, Steam is by far the largest distribution method for PC games (Edwards 2013). The range of games on offer is vast—including expansive, high budget single player RPGs, small independent studio games (known colloquially as ‘indie games’), and online multiplayer games. From ‘casual’ to ‘hard-core’ gamers, social or competitive players, Steam has become an essential component to videogame access. Steam is responsible for making PC videogames more accessible, affordable, and interactive.

By opening up the world of games, Steam has increased the uptake of games into everyday routines in many Australian households. As PC videogames are becoming increasingly embedded in households and domestic configurations (Berker, Hartmann et al. 2005; Unger 2012), a significant portion of them are mediated through Steam. Household-Steamp-game integration is emerging in several ways, mirroring the findings of academic studies of play—that play and playfulness are becoming increasingly relevant to domestic interests (Raessens 2014). Within Australia the widespread use of the Steam platform is contributing to this relevance, forming part of the ongoing integration of videogames into household configurations.

This chapter serves two purposes. Firstly, it outlines how Steam functions as a service, platform and store. This includes the various facets of Steam: from Steam as a store and company, to Steam as a community and forum. Secondly, the chapter provides an overview of the city of Melbourne as the field site of my research, serving as the archetypal example of a modern Australian city. Specific factors at play need to be understood—most notably the ongoing disruption of the NBN rollout highlights how internet connections within the city are often unsuitable to the desired configurations of the modern Australian Steam user. Despite having inadequate internet for its own inhabitants, the State Government of Victoria argues that Melbourne is the ‘national centre’ for Australia’s internet futures (2017). By outlining the field sites to be examined, this Chapter establishes the ethnographic position of my thesis and
highlights potential contributions to the methodological approach of digital ethnography.

What is Steam?
This section begins by providing an overview of the history of Steam. Also relevant to this history is Steam’s parent company, Valve. The section outlines Steam’s platform design as a software component to be installed onto user’s computers. Various aspects of Steam are examined within this section—specifically by referring to the different ways these aspects can be used in Australia. Finally, this section concludes with a brief discussion of where Steam might be headed in Australia over the next five years.

History
Steam’s controlling parent company, Valve, was started in 1996 by former Microsoft employees Gabe Newell and Mike Harrington (Towns 2005). Valve was originally setup to be a game design company. In 1998, Valve published its first game, *Half Life* (Valve Corporation 1998). The game was remarkably successful both financially and critically—it still holds an average review score of 96 out of 100 on game reviewing aggregate ‘Metacritic’ (2017). Over the next six years Valve focused solely on *Half Life* (Valve Corporation 1998), developing two expansions to the game in 1999 and 2001.

One of Valve’s most significant contributions to gaming content creation occurred in the early 2000s when it released *Half Life*’s (1998) software development kit (SDK) for free. In response, users of *Half Life* (1998) and the SDK created a significant amount of content and modifications (commonly known as ‘mods’). In the process, Valve became established as a ‘user friendly’ company, earning it considerable respect among ‘hardcore’ gamers (Dunn 2013). Many user-made mods evolved to become new games released by Valve.

The most famous of these is *Counter Strike* (Valve Corporation 1998) (now known by its fans as ‘CS’). *CS* (Valve Corporation 2000) was originally a *Half Life* (1998) mod created by two users, Minh Lee and Jesse Cliffe in 1999. *CS* (2000) is a team based first person shooter game in which opposing teams play as either a group of ‘terrorists’ or as ‘counter terrorists’. As Valve recognised the popularity of the game it acted on this opportunity. Valve hired the two developers and released an official, standalone
version of CS (2000) in 2001 (Herring 2001). Since then Valve has expanded the game through several sequels, with the latest release being Counter Strike: Global Offensive (CS:GO) (Valve Corporation 2012).

In the new millennium, Valve went through several structural changes. One of the original founders, Harrington, departed the company in early 2000. In 2003, the company’s structural organisation changed with the renaming of Value LCC to Valve Corporation. Around this time Valve noticed its users were having trouble updating their online games, with many players often being unable to play for extended periods of time during update periods. Also, Valve sought to more closely monitor in-game cheating and piracy. In response, Valve moved into activities beyond game development including the unveiling of Steam in 2002, and its release a year later (Dunn 2013).

Initially Valve approached other technology companies (such as Microsoft) to build the Steam software. When these third parties refused, Valve designed the software in-house (Lee 2008). During the design and testing stages Valve noticed that a high percentage of their users had fast internet connections—relative to the early 2000s. The designers recognised that these rapid connections provided an opportunity to enable more direct linkage between players of games and the games themselves (Case 2002). With online videogaming increasing, Steam was launched in September 2003. The image below shows an early version of the Steam user interface (UI) (Figure 2.1) (Sayer 2016).

However, although Steam now has social and financial dominance in the gaming world, its early days were not particularly stable. Steam’s digital rights management (DRM) agreement was resisted by sectors of the PC gaming community. The community viewed the online requirements and authentication systems as a threat to the way people played games (Dunn 2013; Sayer 2016). At the time Steam only provided access to games produced by Valve (See Figure 2.1), a limitation that became controversial among the PC gaming community. The controversy arose because Valve restricted access to Half Life 2 (Valve Corporation 2004)—the much anticipated sequel to Half Life (Valve Corporation 1998)—to the Steam platform, even for copies purchased through a third party retailer. As a result, anyone who wanted to
play *Half Life 2* (Valve Corporation 2004) on a PC was required to have a Steam account.

The controversy, coupled with the unreliable installation, slow download times of early Steam games, and the myriad types of computers employed by users meant that *Half Life 2* (2004) was a frequent source of frustration amongst PC gamers, reviewers and Steam users (Herold 2004)—even though the game remains one of the most acclaimed PC games of all time (Metacritic 2017).

Steam began to overcome these issues and to stabilise in 2005. The platform’s UI and coding was updated, making the platform quicker and more stable. In 2005, Valve made its first deals with out-of-house publishing companies and began offering third party games (Dunn 2013). By 2006 over 100 games were available for purchase through Steam, some developed by third parties. Steam had begun to take shape as the digital distribution platform it is today (Sayer 2016). Over the next few years,
several key features helped to expand the scope of Steam. Alongside a greater number and variety of games these new features included ‘Steam Community’. The Steam Community feature allowed users to have friend lists, in-game communication and game-based community discussion groups through the Steam platform (Sayer 2016). By 2008 Steam was garnering significant traffic as both a socialised online server and a digital marketplace to a 20 million strong user base (Graft 2010; Sayer 2016).

From 2008 Steam has gone through several major updates. In 2010 the UI was again updated, alongside the additions of Macintosh and Linux compatible versions of the platform. These updates were part of a concerted effort to expand Steam into new sales areas. In a similar vein, the ‘Steam Workshop’—also launched in 2011—allowed ‘modders’ to directly integrate user generated content through Steam. This highlighted Valve’s awareness of the Steam communities’ creative—and economic—power (Dunn 2013; Sayer 2016).

Another feature Steam launched in the early 2010s was ‘Steam Guard’. This two-step authenticator was initially available through email and later also through mobile platforms such as smartphones. Steam Guard provided Steam users with greater account security and was developed in response to several cases of Steam based account fraud (Sayer 2016). The existence of Steam Guard also highlights the economic value of the digital distribution platform and the immense amount of economic capital moving between users and the Steam platform. With many Steam users now linking personal credit card information directly to Steam, Steam Guard is a widely used and highly recommended accessory for Steam users.

The most recent significant visual update to Steam was in 2014, with the ‘Discovery Update’. This update allowed users greater customisation of the videogame recommendations they received through the platform—in an attempt by Valve to predictively streamline the experience of finding a game to buy. As of mid 2017, there are over 14,000 games available through the Australian Steam service (Steam 2017c). The screenshot below (Figure 2.2) shows the current appearance of the Steam store page, which is the default landing page users see when first logging onto the platform. Comparing this screenshot to Figure 2.1, it is clear that the Steam store has gone through significant visual change since the platform’s initial launch. Figure 2.2
features several key pieces of information hinting towards potential future directions for the Steam platform. The first is the category of ‘Virtual Reality’ (VR)—seen under the ‘browse categories’ heading on the left.

VR through Steam is, at the time of writing, a relatively new category. However, there is a rapidly growing number of VR compatible games and VR compatible headsets available to users (Steam 2017c). The second category of future interest is listed under ‘Steam Controller’. The Steam Controller feature is part of Valve’s attempts to expand Steam’s market reach into console and living room based gameplay through the ‘Steam Machine’. The Steam Machine is a prebuilt gaming computer designed to directly run the Steam client, allowing users to play games through their living room televisions.

The Steam Controller is an attempt to allow users to play keyboard and mouse-based games such as Civilisation VI (Firaxis Games 2016) in a handheld, couch-based mode. Although the console and controller have not achieved significant market penetration, the Steam Machine and accompanying Valve designed controller remain a key avenue for Valve and Steam’s future expansion opportunities. The controller in particular could have a significant impact upon how Steam influences the physical interactions between the user and the game they are playing. Therefore these two
categories may become more central to later overviews of Steam’s history. However, as of 2018, the Steam Controller and Steam Machine are not widely used in Australia.

This overview provides insight into the history of the Steam platform. Understanding its past is important to this thesis’ bounding of the ‘field site’ examined during research. The history of the Steam platform remains important to later ethnographic analysis of how Melbourne-based Steam users’ engagement with the platform has changed over time. A table version of this timeline is included in the appendix. The next section of this chapter highlights how Steam is used and appropriated by users, further building an ethnographic description of the platform.

**Steam in practice—ethnographic perspectives**

Ethnographic examination of digital places is becoming an increasingly common area of interrogation (Taylor 2009; Pink, Horst et al. 2015). The changing notion of games, and their roles in the home, is a topic that requires an understanding of the types of nuances that digital ethnography does so well. Ethnography focuses on practices—understanding the motivations of use. Places of both leisure and work can be thoughtfully connected to the rise of digital spaces such as Steam. Game chat threads, trades, walkthroughs, and frequent sales push digital distribution platforms such as Steam beyond sites for gaming, impacting a user’s daily configurations even when not playing a videogame (Jöckel, Will et al. 2008). In addition, the growing economic impact of games indicates their worldly presence, with the digital gaming industry rapidly overtaking the film industry in economic impact (Edwards 2013; Eliashberg, Hennig-Thurau et al. 2016). Digital ethnography can provide nuanced insights into these phenomena.

Ethnographic methodology provides an excellent avenue to effectively analyse these phenomena through qualitative research. As this thesis aims to ethnographically examine the influence of Steam upon Melbourne household configurations, describing the site of research is an important first step. This section therefore provides a detailed appraisal into the forms and functions of the Steam platform. In this section, I focus upon the three main practices that take place on Steam—the practice of exchange, the practice of playing, and the practice of communication.
Buying and selling games on Steam

Even though Steam was not originally designed to be a point of sale for third party videogames, Steam now plays a major role in the distribution of personal computer gaming. Steam exhibits a dominance of the videogame marketplace; 92% of PC games are now sold digitally and 75% of those sales take place through the Steam platform’s digital distribution store (Edwards 2013; Chalk 2014). Although there are other factors affecting these percentages, one of the main reasons for such dominance is the increased ease of use and accessibility provided through the Steam platform and associated store. As Francis, a mid-twenties male participant living in outer Melbourne mentioned; ‘it’s way easier to buy games from my desk chair than going into the city or shopping centre’.

Francis’ view mirrors worldwide trends, with online purchase becoming the preferred method of shopping, both in Australia and around the world (Morris 2013; Morgan 2015). This trend is even clearer with digital goods, such as the videogames sold through Steam, or the media content purchased through other digital distributions stores such as iTunes, Spotify, and Netflix (Morgan 2015). One major reason for this trend is that there is no physical delivery method required for goods or services purchased. Instead content is accessed through digital means. In the case of Steam, games are installed directly onto users’ computers. Steam’s software also helps to streamline the download process by listing the running requirements and downloading, installing, and updating any other software or in-game files the game uses.

In order to purchase games and other content through Steam, users are required to have downloaded the ‘Steam Client’ software and set up a ‘Steam Account’. Both of these are free actions—the Steam Client can be downloaded from Steam’s website. To set up a new account with Steam, a user requires only an email address—though a payment method must be added later if a user decides to make a purchase. After completing these steps, a user can open the software and log in using the username and password chosen during set up. Once the application has loaded, and the user has logged in, the first point of contact with the Steam platform is its store page, known as the ‘Steam Store’. This page lists the games for sale on Steam based on a variety of
criteria. These include popular games, recent releases, and games that are similar to other games in a user’s library.

Once a user has selected a game for purchase, they are taken to that particular game’s ‘store page’. The screenshot below (Figure 2.3) is an example of this store page. It shows the store page for the 2014 horror adventure game *Alien: Isolation*. In Figure 2.3

![Figure 2.3: The Steam store page for Alien Isolation (Steam 2015)](image)

the Store page provides a wealth of information to potential purchasers. It has video clips and trailers for the game, links to reviews for the content—by both professional critics and by other players—any available downloadable content (DLC), and the required hardware specifications for the game.

A game’s store page also lists anyone on your Steam ‘friends list’ who owns the game, the languages the game is available in, and the ‘categories’ that the game can fit into
according to other Steam users. Most importantly, the store page lists the current price of the game and notes whether or not this particular product is on sale (as is the case in the above screenshot). By clicking the large green ‘add to cart’ button, a user can add the game to their current ‘cart’ similar to the purchasing practice of other online stores such as eBay or Amazon. This action stores the game in a separate section and allows users to proceed to the ‘checkout page’, to finalise the purchase of their current cart either for themselves or as a gift to a friend.

Once a user has decided to purchase a game, added it to their cart and moved to the checkout page, there are several payment options available. Games can be paid for through a linked credit card, PayPal, or through a user’s ‘Steam Wallet’. The ‘Wallet’ is a separate storage for funds that can be added to a user’s Steam account through a debit or credit card. Additionally, funds can also be added to a ‘wallet’ through vouchers purchasable in physical stores—in a manner similar to the iTunes store voucher cards.

Once funds are added to a Steam account they can only be used to make purchases through Steam—you cannot move funds from your Steam wallet to an external service. Users can select how they would like to pay for a game and divide the cost across their separate financial pools. For example, a Steam user might have $20 on their Steam Wallet from a voucher they received for their birthday and a linked credit card. Looking to purchase a $40 game, they could pay $20 with their Steam Wallet funds with the remaining cost put onto their credit card. Once purchased, games can be managed and downloaded through your ‘Library’—the repository for all of the users’ games. A screenshot of my personalised Steam Library can be seen below (Figure 2.4).

Figure 2.4 shows the basic layout of my Steam Library, as viewed through my MacBook Pro laptop. The list on the left is of the various games I own, sorted to show only games that are playable on Apple operating systems. Games greyed out are not currently installed on my laptop while those in bold white are ready to play. The game in blue is currently updating—downloading new content, bug fixes, or other useful data from Steam’s servers. The progress of this current download is shown across the bottom of the screen through the ‘downloading’ bar. The central part of the screen
focuses on my selected game. This section shows the amount of time spent playing the
game, other friends that own and play the game, and any particular goals I have
achieved in-game—known as ‘achievements’. By clicking the large blue ‘play’ button I
can launch the game and start a play session through Steam. On the right of the
screen are links to other content on Steam related to this game. This includes reviews,
guides, recent news for the game, and a link back to the store page I purchased it
through. The bottom right contains a link to my friends list, where I can view my list
of Steam friends, their information, including if they are online and what they are
currently playing. These friend lists are analysed in detail during Chapters 5 and 7.

![Figure 2.4: My own Steam Library (Steam 2017c)](image)

Occasionally, a game may be unsuitable to a particular user or their device. It might
not work on their computer due to technical limitations, it may not be what was
advertised, or a user simply does not like the game. In these cases, users can pursue a
refund for their purchase. Previously Valve had an official policy that there were no
refunds issued through Steam outside of those mandated by your country of purchase.
Despite this, the rumours among the Steam Community were that if you contacted
Steam support, you might be able to get a refund if you made an enquiry. I had no
experience with this channel of refunding, but several research participants verified
that this method had worked for them. However in 2015 Steam updated their refund
policy with regard to refunds for users with issues. According to their updated official policy, Valve now offers refunds for:

Nearly any purchase on Steam—for any reason. Maybe your PC doesn't meet the hardware requirements; maybe you bought a game by mistake; maybe you played the title for an hour and just didn't like it (Steam 2016e, p. 1).

The only two major requirements for these refunds are that the game was purchased inside the last two weeks and that the game has less than two hours of total playtime. However, even outside of these criteria the policy acknowledges that you can still make a refund request, recommending that users can ‘ask for a refund anyway and we’ll take a look’ (Steam 2016e, p. 1). Refunds are issued back to users through the format they paid in. For example, if you bought a game with funds on your Steam Wallet, then the money is refunded to your wallet, whereas if you pay directly through your debit card the money will be returned to the relevant bank account.

Another type of economic exchange on Steam is trading with other Steam users, done through the ‘Steam Market’. The Steam Market is separate from the Steam Store. The Store is for users to purchase games from the Steam digital distribution service and servers. The Market is for users to exchange goods from, and with, other users. Goods exchanged in the Market include in-game cosmetic goods—such as a new colour of gun for your CS:GO (Valve Corporation 2012) character—and meta-game items, such as Steam trading cards, unique emoticons, and profile backgrounds. Users can purchase items on the Steam Market using the same funds they do for games. They can also post and sell items through the Market itself, akin to other online marketplaces such as eBay or Etsy, but instead of selling physical goods, users exchange digital products.

The prices for these items can vary considerably depending on supply and demand for the type of content being sold. A user can buy a Binding of Isaac (McMillen & Himsl 2011) ‘trading card’—a set of pictures for a game that can be collected for rewards—to complete your collection for 20 cents, or a rare CS:GO (Valve Corporation 2012) gun skin for $400. Valve takes a 15% cut of all goods sold through the Steam Market,
with $400 being the maximum price listing permitted on Steam. However, uncommon items are often sold through third party websites for significant sums. Trading cards and the Steam Market are discussed in Chapter 7's analysis of balanced purchasing habits and Steam usage.

The final aspect of the economic exchanges of Steam is the Steam sales. These sales occur several times each year around major dates such as Christmas, summer holidays, or Halloween. During these times, many games are sold at heavily discounted prices, ranging from 10%–90% off. For Steam users, these sales have become a topic of frequent discussion. There are forums and ‘best value’ lists written up on websites such as reddit.com and ‘memes' and in-jokes have emerged around the inability of Steam users to resist the low prices being offered during these sales. Users often view Steam sales as a major reason why they own many more games than they have ever played. I myself have over 200 games on my Steam account, many of which I have never downloaded and played. 30 year old Margaret, one of my research participants, described how her typical Steam sale went:

I’ll buy, maybe 7 or so games I’d say? Often a few big ones I’ve been waiting for, like *Dark Souls III* or whatever, and then a bunch of little ones on sale for only a few dollars. And then sometimes I won’t even play them. I’ve got, let’s see, 190 games on Steam, and only 100 or so of them are even installed. Even then, I don’t think I’d play more than 10 or so of them regularly.

These sales are part of the reason why Steam is dominant in the videogaming industry and are further explored through the analysis of ‘space’ in Chapter 5. Steam sales are also relevant to Chapter 7’s exploration of ‘balanced usage’ and purchasing habits.

This section has provided a background to the various economic functions of Steam in order to facilitate more in-depth discussion in later chapters, particularly Chapters 5 and 7. The next section of this chapter outlines the major play practices on the Steam platform.

**Playing games on and through Steam**
With over 100 million active Steam users and peak concurrent player numbers now reaching over 13 million (Steam 2018b), Steam has a significant worldwide presence among videogame players. Everyday, people from dozens of countries play games in numerous ways—together, alone, co-operating and competing through the digital network of Steam. While playing a game, users can press the ‘shift’ and ‘tab’ keys of their keyboard simultaneously to bring up the ‘Steam Overlay’, which provides in-game access to the Steam platform. Such ease of access contributes to the popularity and high user numbers of the Steam platform. The graph below (Figure 2.5) helps to show this user count. It shows the numbers of players on Steam over a 48-hour period, taken on a 2017 Tuesday morning, Melbourne time (AEST). This graph is provided by Valve and an up-to-date version can be viewed at anytime online (Steam 2017d).

![Figure 2.5: Concurrent Steam users graph (Steam 2017d)](image)

The online requirements of a game are an important aspect of this platform. Although Steam is a digital distribution marketplace, it does have an ‘offline mode’. In this mode, users cannot access the Steam Store or the Steam Community, but they can still play games previously installed onto their computer. However, they cannot play online multiplayer in this mode—due to not having an internet connection. These statistics therefore do not include people currently using Steam in its offline mode, potentially skewing the concurrent player numbers data of Figure 2.5. Offline mode is discussed in more detail in Chapter 5’s exploration of domestic LAN parties.
When examining Figure 2.5, there is a correlation between the time of day and number of players concurrently online (Steam 2017d). The parabolic wave of user numbers seen above follows a clear pattern, rising and falling around the time of day, peaking at nearly thirteen and a half million users around 10:00pm Pacific Standard Time (PST). This rising and falling graph generally follows North America’s time zones, likely due to Steam’s largest market being North America. Similar usage graphs are discussed in Chapter 8 to aid analysis of the temporal influences of Steam within Melbourne households.

Statistics for the most played games on Steam at any one time are also available online through the same avenue as the concurrent player numbers—Steam’s ‘Games and Stats’ page (Steam, 2017d). The screenshot below (Figure 2.6) of this ‘Games and Stats’ page shows the top ten games being played globally at 10:30am on a Melbourne weekday.

![Top games by current player count](image)

*Figure 2.6: The top 25 most played games on Steam (Steam 2017d)*
Figure 2.6 provides several pieces of information. Firstly, it highlights the variety of games that are popular on Steam. Shooters, simulators and RPGs are all present on this list. In addition, there are multiplayer games—such as *DOTA 2* (Valve Corporation 2013)—and single player games such as *Fallout 4* (Bethesda Game Studios 2015). There are far higher numbers in games with multiplayer components. This could be due to several reasons—their popularity or the format of the game. For example, a game of *CS:GO* (Valve Corporation 2012) typically consists of 10 players, while *Sid Meier’s Civilisation V* (Firaxis Games 2010) can be played solo or with smaller numbers of players.

The variety of games available on Steam is an important part of Steam’s current marketing strategy. Additionally, variety is something that was frequently mentioned by my participants. Francis, in particular, discussed the myriad of games he uses Steam to play:

I use it for all sorts of things, and it changes. I might be playing a little indie platformer and see my friends are online, so then I’ll go and play *Counter-Strike* with them. Or I might not feel like playing CS, so I’ll go offline and keep playing my platformer. And then I also have RTSs, RPGs, point-and-click adventures; it’s all there. I’ve even modded Skyrim into pretty much a new game.

Francis’ experience with Steam serves as an example for the variety of ways games are played on Steam. Although he is a heavy user among participants—playing ‘at least’ 20 hours a week, most participants engaged in at least some of the gaming practices Francis mentions. One point worth highlighting further in the above quote is the mention of ‘modding’.

As mentioned in the previous history section, Steam has an integrated ‘Workshop’ where mod designers can upload modifications to games and users can download them. Steam then integrates them straight into the game itself, making the process of modding a game much more straightforward than it otherwise would be. Although not all games have this functionality, it is becoming increasingly prevalent in games sold through Steam. Highly moddable games, such as the RPG *The Elder Scrolls V:*
*Skyrim* (*Skyrim*) (Bethesda Game Studios 2011)—one of the most popular games for modding—have thousands of mods available through the Steam Workshop. For example, *Skyrim* (Bethesda Game Studios 2011) has over 6000 mods just for new weapons. These mods come in an incredible variety. The screenshot below (Figure 2.7) features an example of some of these mods in-game, where they are working to improve the visual fidelity and lighting in *Skyrim* (2011) (Steam 2017c). This comparison of the base game of *Skyrim* (2011) seen on the top of the image and a modded version (bottom), shows how the Steam Workshop and the mods accessed through it can be employed by Steam users to alter the games played through the platform.

*Figure 2.7: Comparison of unmodded and modded versions of Skyrim (Steam 2017c)*
It is interesting to note that Figure 2.7 shows a fairly tame version of modded *Skyrim* (2011)—there are far more absurdist mods such as replacing dragons with large flying trains or replacing every sound effect with a sitcom laugh sound byte. Such reshaping of a game ties into this thesis’ examination of videogame malleability and shifting scenarios of domestic, further discussed in Chapter 5’s analysis of participants adapting a videogame for particular players and their relational contexts.

Alongside these mods and the Steam Workshop the Steam Community can provide other input into how players interact with and play the games they own. Each game on Steam has a designated page for featuring community created content such as walkthroughs, guides, and community feedback. They cover strategies for defeating difficult bosses, how-to-find guides for in-game collectables, and general discussion about a game. Extending the example of *Skyrim* (Bethesda Game Studios 2011) seen above, there are over 600 guides on Steam explaining how to find secrets within the open world RPG, as well as another 600-plus devoted to helping players understand the gameplay mechanics of *Skyrim* (2011). These pages, known as ‘Community Hubs’ also provide an avenue of social contact between developer and gamer. It is to these pages that the patch notes—how a game has changed after it has been updated—are often posted by the developers of a game.

Patches are an important part of Steam’s distribution model as they allow developers to update a game with new content or to fix issues users may be having. Even games bought physically require frequent downloaded updates as developers improve them, working to keep their games polished and balanced. Within the Steam platform, users can choose how these downloads are installed; they can be pushed automatically when they arrive or they can be held off until a user chooses to update them. By linking the Steam mobile app with their account, users can also instigate downloads remotely, provided their computer is turned on and connected to the internet. This ease of updating is one of the crucial reasons Steam was developed and continues to be central to Steam today.

However, this functionality is not without its downsides. The ability to update games means that developers often do so very frequently. These frequent downloads can often be quite large—several gigabytes (GB) in size—and difficult to download on
intermittent or slow internet connections. Compounding this issue, a game cannot be played while it is installing or updating. This factor means that users may not be able to play a game, sometimes for hours at a time. This was a key issue for many participants and will be discussed in regard to the ‘location’ of Melbourne and the NBN rollout in Chapter 5.

This section has served to provide a background of knowledge and understanding of the gaming practices facilitated through Steam. This background is useful to later in-depth discussion around the scenarios of use participant’s employed within the specific context of their Melbourne households. It is also of use when comparing usage practices with or without the NBN. The final aspect of the Steam ‘site’ to be outlined in this chapter is the communicative habits that place on Steam.

**Communicating through Steam**

Steam offers several tools for users to employ when communicating with one another through the platform. Alongside the Community Hubs, game pages, guides and forums, one of the key communicative tools on Steam is a user’s ‘friends list’. A friends list appears as a small, separate window on a user’s desktop screen. The list shows a user whether their friends are on Steam at the time and if so, what they are doing—playing a game, browsing the catalogue, or looking to trade (See Figure 2.8 below for an example of a friends list window).

In the screenshot below, the small window on the right is the friends list. The list is scrollable. Friends currently playing a game show at the top in green with the game they are currently playing listed below their name. Friends who are online but not in-game are then shown in blue with the activity they are currently engaging in also featured. At the bottom are friends who are offline, their names greyed out. Figure 2.8, shows my own friends list. In Figure 2.8 I have three friends playing *DOTA 2* (Valve Corporation 2013) and a fourth playing *Rocket League* (Psyonix 2015). Friends who are online but not currently in-game are shown to be either ‘online’ or ‘away’. ‘Online’ status means that they have recently engaged with the Steam platform in some manner. ‘Away’ indicates that they have not recently interacted with the platform but their computer is still connected to the internet. Offline friends have an indicator below their names showing the last time they were online. Users can also
manually set their activity to several states, such as ‘appear offline’, ‘looking to’ do any of several activities, or ‘busy’. This format mirrors many other popular social media chat messenger services such as Skype chat or Facebook’s messaging component.

By clicking on a friend’s name in the list, a user can begin a conversation through the chat window, seen on the left in Figure 2.8. In this conversation a ‘friend’ and I are discussing a recently released game and the difficulty of playing on Melbourne internet connections. This chat window functions similarly to other online messaging services such as Facebook Messenger. You can chat to friends, post links, invite them to activities, and send emoticons. Many of the emoticons are unique to Steam’s chat service and available only to a user who has ‘earned’ them—for example, by completing a games’ trading card collection.
User’s can have individual conversations and group conversations. Group conversations in particular are useful for collecting a group of friends together to begin a play session. By clicking on an in-game friend’s icon in the friends list users are given several options to action. This importantly includes the opportunity to join the friend in-game if they are playing a multiplayer game. This function both connects friends socially and also saves time by eliminating the need for the joining player to perform time-consuming multiplayer setup activities.

‘Friendship’ on Steam is offered through a friend request—similar to other social media platforms such as Facebook—and can be accepted or declined by the receiver. To send a friend request a user navigates to their friends list and selects ‘add a friend’. This action opens a separate window where they can enter the name of the person they would like to befriend. Friendship requests can also be initiated by clicking on a player’s profile, either within the Steam Community hub or through the in-game Steam Overlay. When two users are friends, they appear on each other’s friends list, as seen above in Figure 2.8. When one of your Steam friends logs into Steam, a ‘pop up’ notification window appears indicating who came online and what they are doing. The default setting is for the ‘pop up’ to appear in the bottom right corner of your window, but users can customize the ‘pop up’. A similar ‘pop up’ appears if a friend begins playing the same game as you, further facilitating multiplayer interaction between users.

A user’s friends list, and the associated interactions, helps to give a user what technology scholar Elaine Raybourn (2012) terms as ‘presence’ in Steam. A user’s online ‘presence’ locates a user among those ‘around’ them on the network. The ‘presence’ shows the user where they are, what they are doing and who they are doing it with (Raybourn 2012). By using the friends list, users can instigate chat conversations, initiate trades, organise play sessions, and monitor the status of their friends. Some aspects of the friends list are about things other than enabling players to hang out and play together. Some of them are detrimental—for example, scammers attempting account fraud. The phenomenon of account ‘phishing’ will be considered as part of Chapter 7’s discussion of Steam account management.
For users of Steam, the ability to observe others on the platform though the friends list has a significant impact upon how they engage in play experiences. Several participants described how they use the friends list to engage in spontaneous play with their Steam friends. As a brief example, Barry is an international student in his mid-twenties who moved to Melbourne to attend university. He has a core group of friends that he attends university with. Alongside this offline friendship, Barry and his friends often play CS (Valve Corporation 2000) together through the Steam platform. Barry’s scenario highlights how Steam friendship can augment the copresent relationships of its users. Through the Steam platform, Barry is able to interact with his friends in an easier and more spontaneous manner than he would otherwise. The notifications system of the Steam platform allows friends to easily view the presence of those they have interacted with through the digital space of Steam. Alongside this function, the chat window facilitates easy communication between friends, highlighting the different ways communicative practices can emerge on Steam.

For users, having a large collection of friends on the Steam platform is often associated with being a good—or ‘hardcore’—gamer. This is partly due to having more people to play with. A large friends list can make it easier to coordinate multiplayer sessions of a cohesive group of gamers, rather than being randomly matched through in-game matchmaking. The extra option to increase the maximum friends list size—providing more slots to fill with friends—is also a ‘reward’ for levelling up one’s Steam profile through trading card collections. These collections are analysed in Chapter 7’s exploration of Steam sales.

Another way users can communicate through Steam is while they are in-game. Although a game may be run through Steam a third party may have developed it. The developer chooses the communication methods offered in their game. Some games offer text-based chat where users can type messages to other players. Through text chat users can ‘whisper’ a typed message directly to another player—a text line invisible to everyone else.

Another form of communication is by ‘shouting’ to everyone they are playing with, whereby the text line is visible to everyone currently playing in the session. Some games also offer voice chat options that allow users with a microphone to speak to
other players in-game, using their actual voice as part of the play experience. When playing games without voice chat functionality, many users employ third party software such as Skype or Mumble in order to talk to their friends while playing games on Steam. These include scenarios of playing games together using external voice chat software to facilitate team cohesion. Voice chat services are also used during single-player games—for both game-related and unrelated conversations.

Additionally, in-game communication can involve communicative tools that form a gameplay mechanic. These include a variety of actions, such as quick chat commands in CS (Valve Corporation 2000). These allow players to press certain keys to make their in-game avatar issue a command such as ‘attack B’ or ‘go, go, go’. There are also certain-games that have gestural forms of communication that can be used in-game between players. An example of these gestures is seen in Dark Souls (From Software 2011). With no in-game chat available, the only way players can communicate with others in-game is through in-game gestures such as waving or bowing. These unorthodox methods of communication facilitate a certain type of gameplay. Although these communicative tools are not designed or dictated by Steam itself, they are done through the interface of Steam and a user’s computer, influencing how a game is played.

In-game, the communication tools of Steam are reshaping how players game. Text, voice and avatars allow players more immediate interaction with each other. The communicative practices that emerge through Steam usage form part of Chapter 5’s examination of LAN party communication practices and Chapter 6’s discussion of tension generated around domestic noise levels.

These various communication methods combine to form the communicative practices of the Steam platform. The most commonly used form of communication—clearly linked to Steam—is the chat windows and friends list built into the Steam software. However, the other forms of communication outlined above remain an important part of user interaction on the platform. Chapter 7 explores how the communication practices developed on Steam can transfer into the everyday lives and homes of users, analysing the temporally based communication issues that can occur when using the Steam platform from within Melbourne homes.
The (potential) futures of Steam

Currently Valve is pushing several new Steam associated technology—Big Picture mode, Steam Link, Steam Machines, and Steam VR. Big Picture mode is designed to make it easier to use a controller to navigate Steam. Many games can be played with a controller, indeed some designers highly recommended controller usage. After many users found it frustrating to constantly switch back and forth between differing input devices, Steam developed Big Picture mode.

Throughout fieldwork I did not encounter a participant Steam user who regularly uses Big Picture mode, though it is likely to become more popular as Steam Link and controllers become more widely available. These devices enable users to stream and play games via their television, using a specially designed controller and ‘mini-console’, rather than a keyboard, mouse and computer. This is part of an effort by Valve to expand into the console market. This hardware initiative also includes Steam machines—dedicated devices to play Steam through console, PC hybrids, and Steam VR.

VR is marketed as offering a higher level of ‘immersion’ and could instigate drastic change in videogaming (Steam 2017f). By producing the Steam VR through such an already strong platform, Valve and Steam are well poised to be at the forefront of this potential medium shift. However, throughout my research I encountered no participant using any of these newer Steam technologies. This shows the difficulties Valve has in expanding these ideas into profit making features. As of late-2017, virtual reality is only beginning to gain noticeable traction, evidenced through increased sales and media coverage (Orland 2017; Steam 2017f). To this extent, these new Steam technologies do not feature heavily throughout the discussion chapters of Section II.

This overview has detailed what the Steam platform is and how it is used. The section provides useful context for Section II’s analysis of fieldwork findings. The second step in establishing the field site of this thesis is to outline the geographic location through which participants engage with the Steam platform; the City of Melbourne, Australia.
Melbourne, internet access, and the NBN
Throughout fieldwork, issues of Australian internet access were a topic of frequent discussion among participants. Household members often expressed frustration at the slow speeds and instability of internet within the Melbourne area. Therefore this section will provide a description of the Melbourne geographical area and the reasons behind its problematic internet connectivity. This is done to aid Section II’s analysis of the relationships between domestic accessibility, Melbourne household gaming, and wider internet practices.

This section covers three main areas. Firstly, an initial overview of the city of Melbourne, its geographical location, and demographics are detailed to facilitate later analysis of the region’s relationship with domestic Steam usage. The second covered is the background, rollout, and effectiveness of the NBN. Finally the third area concerns the data consumption of Melbourne households and subsequent domestic negotiations around data limitations of household internet plans. Although focused mainly on Steam’s relationship to internet access in Melbourne, this section also engages with interview data discussing other digital services such as Netflix, BitTorrent, and Spotify. These software platforms can all be compared and contrasted to Steam and its use in Melbourne, further highlighting the affordances that occur through Melbourne and Australian internet connectivity and accessibility.

The City of Melbourne
A city of over four and a half million, Melbourne sits along the banks of the Yarra River, nestled on the plain around the shore of Port Phillip Bay (ABS 2016). The capital city of the state of Victoria, Melbourne is currently the fastest growing city in Australia and Australia’s second most populous city (behind Sydney) (ABS 2017). Melbourne is well known for its trams, fanatical love of Australian Rules Football (AFL), and unpredictable weather patterns.

The city is divided into five major geographic areas, loosely split by the Yarra River. There is the Central Business District (CBD) itself, ‘North’ of the river, ‘South’ of the river, the Eastern suburbs and the Western suburbs. Regarding socioeconomic boundaries the ‘South’ (locally known as ‘Southside’) is typically the more upper class areas, with affluent suburbs such as Toorak and Malvern boasting large mansions and
leafy groves. The ‘Northside’, in comparison, is more associated with artists, immigrant communities, and university students. The Eastern suburbs are stereotypically associated with more traditional and conservative households, while the West is known for its working class and diaspora communities. Of course none of these are strict boundaries, but rather general ‘portraits’ of the city ‘Melbournians’ (the colloquial term for inhabitants of the city) hold in their heads (The University of Melbourne 2008).

Alongside the NBN, there are two unique Melbourne factors contributing to how Steam users engage with the platform through their household locations. These are Melbourne’s housing situation and the makeup of some of the cities’ key demographics. Before the NBN is reviewed in detail, these two components deserve brief discussion in relation to domestic Melbourne usage of the Steam platform.

Melbourne, like much of inner city Australia, is currently experiencing something of a housing crisis (Belot 2016). Particularly for its younger residents, renting in Melbourne is a difficult and expensive process—and buying a home is beyond the capabilities for many socioeconomic brackets (Belot 2016). Melbourne ranks as having the sixth most ‘unaffordable’ city housing in the world (Butler 2017). For many of the research participants of this project, these rising renting costs and housing affordability had a significant impact upon where they were able to live.

For example, some participants currently attending university were unable to live ‘out of home’ (away from their parents) due to earning insufficient income to rent a house. Other groups, such as young families, were required to rent or buy in suburbs further out from the city centre where prices were ‘more affordable’. In turn, this geographical stratification around socioeconomic lines impacted how participants were able to access the internet. Family homes and student participants who lived at home often had ample access to internet. Those owning homes often also prioritised having faster internet speeds. In contrast, those who lived in share houses or rented in outer suburbs often experienced sub-par internet conditions. These conditions were due to a variety of factors including; old wiring in Melbourne homes, landlords being unreceptive to the idea of upgrading the home’s internet capabilities, or simply living in an area with consistently inadequate internet coverage.
An example of how location-based internet access impacts domestic Steam usage forms part of Chapter 6’s analysis of a participant whose domestic location changed several times over the course of fieldwork. For those trying to access the Steam platform, a rapid internet connection and stable bandwidth is important—slow connection increases download times, in-game latency, and even dropouts. Therefore the housing ‘crisis’ in Melbourne—and other Australian cities such as Sydney—is severely impacting how members of the public access Steam (and other internet associated technologies) within their homes.

The second Melbourne based issue influencing internet access and Steam usage is the key demographics of Melbourne. This rapidly growing city has had a 450,000 person increase over the five year period from 2011–2016 (ABS 2017). While this statistic is important for noting Melbourne’s expansion in both population numbers and geographical space, there is a more critical statistic contained within this rising population; since roughly the 1990s Melbourne has generally been the most popular Australian destination for international migrants (O’Leary 2003). This includes several types of migrants—those seeking asylum from conflict such as Sudanese refugees, permanent migrants from other countries such as the United Kingdom, and those temporarily migrating to Australia for a period of their lives, such as university students.

Nearly a third of Australia’s international students population choose Melbourne as their location to study. These international members of the Melbourne community often interact with the internet in different ways to those born within the country. These differences are discussed within Chapter 7 in relation to contact and play with Steam users outside Australia. These unique interactions are an important part of the fabric of Melbourne internet and Steam usage. Therefore, Melbourne’s international community demographics are a crucial component of the cities’ varied domestic Steam engagements.

Although there are certainly other characteristics that could be defined as uniquely Melbourne, the two discussed above are directly relevant to Steam usage practices and their impact upon the configurations of Melbourne households. Over the course
of the fieldwork, I have tried to include as many forms of the ‘Melbourne household’ as possible within the temporal and geographical limitations of my thesis. This includes families and households from all over the Greater Melbourne Area, including various socioeconomic brackets, backgrounds, and geographical locales.

However, it is important to note that my research does not cover the full range of Australian internet access and practices. Such a range would be well beyond the scope of this thesis. This project is focused solely upon the city of Melbourne, within the state of Victoria. Furthermore, my research does not cover the full range of internet practices across the state of Victoria. It is important that this study includes migrant families or families with young children, however it does not include participants in geographically remote households such as rural farming properties beyond the fringe of Melbourne. This is due to my research focusing on Melbourne-based households. I have interviewed ‘outer’ suburban Melbourne households, but not those that could be defined as rural. Also, beyond the scope of this research are other Victorian metropolises such as the regional city centres of Geelong, Bendigo, or Ballarat.

Therefore, it is important to note that this thesis does not attempt to map out the entire spectrum of Australian internet practices. To this extent I have encountered and explored scenarios of use not specifically related to Steam usage, but they are not the central focus of this thesis. The focus of analysis will be squarely aimed towards the Steam platform and its use in the Melbourne household. To further expand the notion of the Melbourne household, the next section of this chapter provides a history and overview of the NBN within the city of Melbourne.

The NBN and Australian internet usage

The NBN is the ongoing and much needed update to Australia’s internet network. Australian internet services—particularly Melbourne’s internet connections—continue to be inadequate after the stymied rollout of the NBN. Hit by several setbacks and changes such as the 2013 Federal election, the lack of trained fibre splicers, and a problematic rollout schedule, the NBN had a slow start—available only to a small percentage of Australia and Melbourne when I began fieldwork in 2015 (Grubb 2013; Kohler 2013). Although the NBN is becoming more widely available as the rollout continues, as of 2018 it is nowhere near complete.
For example, the NBN Co has a ‘three year plan’ that aims to have eight million Australians connected to the NBN by 2020—which is still significantly less than 50% of the nation (NBN Co 2015). Within Melbourne, availability of the NBN is still widely limited to data capped plans, such as 500GB or 1TB a month. In comparison, other internet services—such as ADSL—are available in cheaper ‘unlimited’ data allowance packages. Although ‘uncapped’ NBN packages are becoming more widely available they remain expensive when compared to non-NBN services. This issue has caused Melbourne to become a city with disparate levels of internet connectivity—internet access varies significantly depending on household location. Household media usage can further throttle the speed and ease of access for domestic internet.

The idea of the NBN was first announced in the lead up to the 2007 Australian federal election. It was put forward by the Australian Labor Party—then in opposition—and was estimated to cost around $15 billion dollars (AUD). It was proposed as a wholesale service aiming to reach 98% of Australian households by 2021 through a ‘fibre-to-the-premises’ approach (FTTP). The aim was to replace the ageing copper cables in Australian households with high speed fibre cabling. After an initial call for proposals, the government hit a significant roadblock in the form of the 2009 Global Financial Crisis (GFC). The GFC left no bidders capable of meeting the government’s requirements for the NBN. The initial call was eventually withdrawn in April 2009. The project was reconfigured to move ahead on its own and the NBN Co was established. The initial capital expenditure of the project was re-estimated at $37.4 billion (AUD) (NBN Co 2012).

Around this time the first changes to the composition of the NBN were made, where the government announced it would deliver the service through a ‘combination’ of FTTP, satellites, and fixed wireless capability. The state of Tasmania was chosen as the initial test site and the first customers of the NBN were officially connected mid-2010. However in the aftermath of the 2010 election, the Labor government—now governing with a minority—moved the priority targets of the NBN to regional and rural areas. Further test sites were released in 2011 and involved the action of household members. Alongside the necessary fibre cabling, residents were required to purchase a specific conduit to access the NBN within their household. Furthermore,
after low uptake numbers in the first test sites the NBN switched to an ‘opt-out’ service. This switch was an attempt to raise NBN adoption numbers. It meant that the prerequisite NBN cabling was delivered to users automatically unless household members explicitly opted-out of the NBN.

The low adoption numbers and significant costs prompted political attacks from the Liberal party opposition—Australia’s main conservative party. Beginning in 2012 criticism was frequently directed towards the high estimated cost and expanding timelines for NBN service implementation. The Liberal opposition proposed an alternative ‘Multi-Technology Mixed’ approach, dubbed ‘MTM’ (Quigley 2015). This sparked significant political and media debate around the NBN, with the future of the rollout becoming one of the main issues of the upcoming federal election (Kohler 2013). The Liberal party, in a coalition with the conservative National Party, won the 2013 election and moved quickly to change the NBN Co’s plans. Many members of the NBN Co’s board were asked to resign and significant changes to the composition of the network were made. These included the probable downgrading of the rollout from FTTP to ‘alternative technologies’. Later in 2013, it was discovered that insufficient training had been given to some members of the NBN rollout team, partially due to the lack of qualified cable splicers in Australia. This lead to some of the infrastructure work needing to be re-done (Kohler 2013).

Compounding these issues, the new conservative government’s MTM approach had its own major problems. It was proposed with the aim of providing overall savings when compared to the FTTP approach and also promised an earlier completion date. However, the overall speed of the MTM was below the FTTP approach (and was deemed by some analysts to be obsolete on installation) and the ‘quicker’ completion date was criticised for being insignificantly quicker (Quigley 2015). By late 2014, the NBN was in a state labelled as ‘abysmal’ by some media outlets (Wilken, Kennedy et al. 2015). Due to expanding costs, political quagmires—including Australia’s now infamous five prime ministers in five years—and significant delays, the NBN was now in an unfortunate position. In mid-2016 the NBN had approximately 1.1 million users connected (Coyne 2016). With less than five years left to the original completion date of the rollout, the NBN is currently available in around 20% of Australian households (NBN Co 2017)—indicating the project is irredeemably behind schedule.
The NBN and Steam

Caught up in the middle of ongoing NBN issues are the households of Melbourne and the Steam users living in them. In the context of the NBN the medium of Steam becomes a point of significant tension. The NBN remains unavailable in much of metropolitan Melbourne. As an example of this, Figure 2.9 (below) shows the limited NBN availability in the Southern Melbourne area around the time fieldwork for this thesis began.

![Figure 2.9: NBN availability in Southern Melbourne, March 2015 (NBN Co 2015)](image)

Within Figure 2.9, purple areas indicate that the NBN is currently available and orange areas indicate that the NBN is ‘likely’ to be available within the next three years. The orange areas vastly outweigh the purple and there is also a significant amount of geographical space with no immediate timeline for NBN arrival.

Figure 2.10 (below) offers a more recent picture of NBN availability in the greater Melbourne region. Taken in March 2018, it shows the progress of the rollout since Figure 2.9. Figure 2.10 has been taken from the updated rollout map provided by the NBN Co (2018), where purple denotes NBN ready areas and brown denotes areas scheduled to be NBN ready within the next three years. Figure 2.10 also offers a wider
scale than Figure 2.9. While Figure 2.10 indicates that a greater percentage of the Melbourne region has become NBN ready since 2015, significant portions of the Greater Melbourne area still does not have access to the NBN—including areas where no timeline to connection has been announced.

The limited data of the NBN is severely detrimental for many of this thesis’ research participants. This is because for Steam users, such a low data cap is insufficient to properly engage with their gaming lifestyle. When used alongside other data intensive services such as Netflix, Spotify, or online console gaming, Steam users can quickly reach their data limits on restricted internet plans.

Despite the criticism the NBN receives, the connection speeds it offers are noticeably better than other connections. For example, David (aged 57 at first meeting) and Lisa (aged 55 at first meeting), a semi-retired married couple who lived in Melbourne’s inner suburbs with the NBN estimated during an interview that they could download a full-length movie from iTunes in ‘about 20 minutes’. In comparison, Nina (aged 28 at first meeting) estimated her non-NBN connection in outer Melbourne would take
‘at least an hour’ to download a file of similar size. However, although the issue of a slow connection seems to be mitigated by the NBN, it does not help with the other major problem for participants—connection dropouts.

A connection dropout occurs when no internet signal is available. A working web page will stop functioning, an online game will stutter, and videos will buffer for extended periods of time. Connection dropouts are a source of much frustration for Melbourne gamers and Steam users. All of my participants described, to various degrees, experiences with dropouts. From mild annoyances such as Melanie (a 53 year old lawyer) who had to restart the router to get Netflix working, to a major ‘rage quitting’ outburst when 25 year old Francis’ connection dropped out at the climactic moment of a tense online battle, dropouts are something my participants dealt with on a daily basis.

According to documents leaked from the NBN’s installation company, NBN users can expect up to five dropouts a day on a ‘stable’ connection (Tsang 2016). According to these documents, dropout rates and how NBN Co interprets them are somewhat different to how participants experienced them. The NBN Co defines up to five dropouts a day being classified as ‘risky’, with ‘risky’ being further defined as an ‘acceptable’ usage level (Tsang 2016). The document refers to these issues as ‘resyncs’ but this classification of a ‘resync’ is functionally equivalent to what users call ‘dropouts’—highlighting a disconnect between policy and public interpretation. While none of the NBN using households in this study had in excess of five dropouts a day, the households felt that their NBN connection dropped out just as much as their previous internet connections. More importantly, they felt that five dropouts a day was an unacceptable level—as again a stark contrast to NBN Co’s policy.

Despite these frustrating connection issues, Australians continue to consume large amounts of internet content. Focusing on Steam usage, Australia contributes approximately 1.7% of Steam’s global traffic, yet does so at a vastly reduced speed to Steam’s global average downloads (Steam 2016d). The average Australian internet connection speed to Steam when I began fieldwork in 2015 was 7.6 megabytes (MB) per second (MB/s), compared to the United States’ 23.1 MB/s, England’s 19.1 MB/s, or even New Zealand’s 12.4 MB/s (Steam 2016d). While these speeds have increased
over the course of my fieldwork (Australia now has an average download of 15MB/s),
other countries have increased alongside Australia—for example New Zealand’s speed
remains nearly double Australia’s with an average download speed of 28.2 MB/s\(^1\)
(Steam 2018c). It is through this slower connection that participants engage with
Steam. For many of my participants these slow speeds were described during
interviews as ‘extra frustrating’ given the urban location and size of the city of
Melbourne.

Particularly for my international participants, the ineffective rollout of the NBN was a
stark contrast to the effective and fast internet speeds of their origin countries. Many
participants described the NBN as something of a public joke—portraying Australia
as stalling into a more technologically mediated world. Thus even where the NBN is
available, it is not always used by Melbournians. Even when it is used, it is seen as far
inferior to the connection speeds of much of the modern world and far below what
has been promised to Melbourne—and Australia—since 2007.

This completes the overview of my ethnographic ‘field site’. What is absent from this
chapter is the specific accounts of participant homes—these specific cases form part of
the analysis of Section II’s discussion chapters, and are examined when relevant.
Discussion of the NBN continues in Chapter 5’s analysis of how several households
changed their gaming and internet usage around the connectivity factors discussed
above. This analysis refers to participants from Melbourne areas both with and
without NBN access. The chapter concerning notions of time (Chapter 7) also
discusses configurations of personal time and the frustrations experienced through the
slow internet speeds of Melbourne and the limited availability of the NBN.

This chapter has briefly outlined the history and makeup of Steam, the city of
Melbourne and Australia’s relationship to—and recent history with—the internet and
the NBN. Chapter 2 forms part of Section I’s efforts to establish the ethnographic and
academic grounding of this thesis. The outline provided by this Chapter serves to
establish the field site relevant to this thesis, explored to investigate how the Steam

\(^1\) Other interesting country statistics include Thailand, which has a similar but slightly smaller traffic percentage
(1.2%) than Australia, with a faster download rate (20.6MB/s) and world internet speed leader South Korea’s
rapid 94.3 MB/s download rate for their 2.6% of Steam’s global traffic (Steam 2018c).
platform influences the domestic configurations of Melbourne homes. The next chapter continues Section I’s establishing intent. Accordingly, Chapter 3 reviews the main areas of literature used throughout this thesis’s analysis of Steam’s impact upon Melbourne household configurations.
Chapter 3. Literature review

Building from Chapter 2’s detailing of Steam within the context of the field site, this chapter outlines the key literature deployed throughout the thesis. From the outset it is important to recognise that this thesis is not ‘ethnography’ in the classical sense as it did not take the form of a long-term in situ period of research. Rather, I have employed ethnographic methods in my research as an academic mode of enquiry informed by ethnographic methodology and techniques—an ethnographic mode of enquiry. Here ethnography as a series of methods and a lens for understanding practice is crucial—especially when situating practice within contexts that weave in and out of the digital (Pink et al. 2016).

This chapter outlines the literature crucial to this thesis and its ethnographic mode of enquiry. This review draws from several key areas of study: digital ethnography, media studies, platform studies, and games studies. As an interdisciplinary thesis it seeks to bring original contributions to these fields through analysis of the phenomenon of Steam in Melbourne households. By combining digital ethnographic and media studies methods to a topic clearly centred in game studies and platform studies, this thesis provides thick description of, and nuanced understandings into, Steam practices within the context of everyday Melbourne households.

Each of these four areas are briefly reviewed to provide context to the field of research, serving as a clear articulation of how the research of this thesis is situated across these academic areas. The first area of literature this chapter examines concerns the digital ethnography writings that inform the research design of this thesis. Also of relevance to this first area of literature are theories relating to assemblages of play (Taylor 2009). Assemblages of play theory is discussed alongside digital ethnography literature as it forms one of the key analytical approaches to research as well as a key perspective during fieldwork.

The second area this chapter reviews is media studies. Exploring media studies literature through the Australian context, the second section of this chapter pays particular attention to academic interpretations of ‘double articulation’ (Hirsch and Silverstone 2003). Within this review, double articulation is aligned with media studies
as the two areas of research employed in analysis of Steam as a piece of interfacing technology within the household.

In a similar vein, the platform studies approach of Ian Bogost and Nick Montfort (2007) is the third area of literature this chapter reviews. Although platform studies could be understood as a more narrowed body of theory than the other areas discussed in this literature review, it is useful when analysing the form and infrastructure of the Steam platform.

The final body of literature Chapter 3 reviews is games studies works concerning networked play and theories of videogame addiction or ‘excessive play’ (Nielsen 2017). Discussing excessive play and games studies alongside each other, the section offers a nuanced interpretation of excessive and problematic play in relation to videogame content. The terms ‘assemblages of play’, ‘double articulation’, and ‘excessive play’ are key theories to analysis within this thesis. This chapter explores these terms as they are of significant relevance to Section II’s discussion chapters.

It is important to note that this Chapter’s review of relevant literature serves to outline the main interdisciplinary areas relevant to the discussion of this thesis. Accordingly, the chapters contained in Section II draw from the works Chapter 3 outlines. However the discussion chapters also engage with academic work more specific to each chapter’s topic in order to better elucidate the findings of this thesis.

**Digital ethnography**

In her handbook on internet-based social research *Virtual Methods*, digital ethnographer Christine Hine remarks that ‘the coming of the internet has posed a significant challenge [to] our understanding of research methods’ (2005, p. 1). The methodological issues Hine discusses in *Virtual Methods* (and its earlier edition, *Virtual Ethnography*) are highly relevant to my own research into the Steam gaming platform (2000, 2005). The relevance is due to the fact that conducting research on, and in, an environment with a digital base can create a whole host of problems that are avoided or alleviated in the context of more traditional research sites (Hine 2000). These include issues around participant retention and the ethical concerns of gathering digital data and informed consent. Other issues and factors concerning online
research are simply not present in face-to-face ethnographic work such as ‘authenticating’ yourself to online groups or conducting text based interviews.

This section of the literature review discusses works from academic areas of digital ethnography and anthropology that are relevant to this thesis. The discussion in this section is confined to analytical approaches, as research design for this thesis is discussed in further detail in the methodology chapter. There have been several decades of useful digital ethnography from accomplished scholars such as Tom Boellstorff, T.L. Taylor, Bonnie Nardi, and Celia Pearce. This section outlines how I employ the theories from this body of academic knowledge within my thesis. Accordingly it discusses work that analyses digital practice and writings that engage with the everyday lived experiences of digital technology users.

In Coming of Age in Second Life, Boellstorff undertook an exclusively digital ethnography (2008). There was no engagement with participants in any offline context for the research purposes. Similarly, much of Hine’s methodological advice concerns gathering data through the digital medium. Much digital ethnography has focused around the space of what Boellstorff referred to in his textual analysis as ‘the virtual’ (Boellstorff 2008). In conducting work solely through a digital medium, these works chose to forgo the physical offline realm. This was a conscious methodological decision, informing the types of data gathered during fieldwork. However, this thesis interrogates where the digital and physical intersect in the everyday domestic experiences of my participants. Therefore, data gathered through a solely digital approach would be detrimental towards answering this thesis’ research question.

Other researchers such as Nina Wakeford (2003) and Karen Ruhleder (2000) have examined the benefits of meeting the offline identities of your online participants. I identify with these approaches due to their engagement with the people behind the device. However, here again my own focus has been different. For example, Wakeford’s work concerns ethnography in internet cafes (2003). Although Wakeford engages with the intersections between the digital and the everyday, she does so from a different physical space to my own focus on the domestic. The internet cafe can be understood as a ‘semi-private space’ (Hampton & Gupta 2008), while my own research concerns the private space of the domestic household.
Barry Wellman and Caroline Haythornthwaite’s edited collection *The Internet in Everyday Life* (2008) provides another angle of ethnographic interest in domestic usage of new media technology—specifically, the section entitled ‘The internet at school, work and home’. In *Internet in Everyday Life*, there are several cases of domestic engagement with the internet, where there are discussions around topics such as adult home learning, online shopping, and other domestic digital phenomena. However, the section ignores domestic engagement with videogame practices and their digital distribution. It is this gap that this thesis aims to fill. This thesis is contributing to this discourse of domestic engagement, building academic knowledge around digital ethnography and specifically, its role in understanding domestic engagement with videogaming technologies such as the Steam platform.

As discussed earlier, this thesis’ approach to analysis is heavily informed by the ethnographic methods of earlier research into gaming identities, practices, and communities. Important examples of this include the writings of pioneering digital scholars such as Howard Rheingold, Boellstorff and Nardi (1993; 2008; 2010). A key example of this engagement with, and adaptation of, earlier research is found in Boellstorff’s recognition of the ‘world’ of the game on its own grounds. This interpretation has been a key tenet of my own perspective on game worlds throughout the fieldwork of this thesis.

In my research, initially I perceived each game on Steam as a separate world, but then began to interpret Steam as one bounded world made up of many parts. By recognising Steam as its own ‘place’, this thesis is better able to investigate how the platform overlaps into the household, blurring the public and private realms. This blending of worlds—of game and communication, of marketplace and social space—is a crucial part of how I have come to understand Steam as a hybrid digital place. Again, this is terminology I am adapting from other areas of scholarship. Adriana de Souza e Silva employs ‘hybrid’ in reference to mobile technologies’ ability to allow users to engage with the internet from any location (de Souza e Silva 2006). I frame Steam as a hybrid in that it is capable of allowing it’s users to engage with different game worlds and digital spaces from the one base point, an inversion of de Souza e Silva’s hybrid notion used in mobile media practice.
Similar research into these points of intersection include Heather Horst’s examination of new media technologies everyday roles in Silicon Valley households (Horst 2012) or, as a more extreme example, Gabriella Coleman’s work into the rise of the hacker group Anonymous and its emergence in the global political discourse (Coleman 2014). Helen Thornam’s *Ethnographies of the Videogame* also overlaps with my own work in both methods and ethos (2016). Her book explores the sociological issues around new media, examining how we interpret and mediate videogames (Thornam 2016).

Similar to mine own fieldwork, Thornam employed ethnographic techniques to explore how videogame technologies interweave into everyday life (2016). All of these works analyse how digital phenomena (be it group, site, or device) can reciprocally influence everyday spheres of life. I engage with this writing in order to correlate my understanding of Steam as a ‘site’ within the space of the household.

However it has been necessary to balance my interpretation of ‘sites’ of influence against the more personal aspects of ethnography. These ‘personal’ aspects refer to the position of the participant, and are discussed in methodological detail throughout academic scholarship. Examples include Nardi’s recognition of the player behind the screen and the contexts of their space (2010). My fieldwork focused heavily on the people ‘behind the screen’, but also the people *through* the screen. Rheingold’s early research helps bridge the gap, understanding communities and players as a group, regardless of physical ‘location’ (1993).

Digital ethnography as an area of research attempts to hone in on the ephemeral points of intersection. Accordingly, the central focus point for this thesis is not the in-game avatar or the person sitting in front of the computer monitor but rather the hybridised collation of both, influenced equally by the site of Steam and the private space of the home. A key text arguing a similar theory is the collaborative work of Helen Kennedy and Jon Dovey (2006). Their 2006 book *Games Cultures: Computer Games As New Media* (2006) interrogates the dialectic between the platform, distribution and function of the game and the resultant way a player negotiates the game. The enmeshed and logical reasoning of Dovey and Kennedy has been central to this thesis’ examination of domestic configurations. In particular, the recognition of interacting dialectics is crucial to exploring the relationships between Steam as a digital
distribution platform (i.e., a site for economic transactions and game play activities) and domestic households. To this extent, Kennedy and Dovey’s work is crucial to Chapter 6’s exploration of the spatial and emotional place of the home.

Definitions of ‘play’ comprised another area where ethnographic and anthropological literature is highly relevant to this study. My broad definition of play derives from Thomas Malaby’s *Anthropology and Play*, in which play is described as a disposition (as opposed to an activity) ‘characterised by a readiness to improvise’ (2009, p. 206). Such a definition is useful in my examination of domestic Steam usage in Melbourne as it augments notions of play outside of games. Examples of such augmenting include Chapter 7’s discussion of a user collecting games on their Steam account or the adaptive LAN practices Chapter 5 considers.

These definitions and theories of play form an area where anthropological literature has been essential to this thesis. As a subset of anthropology’s main method ethnography, digital ethnography borrows heavily from the anthropological discipline. Participant observation has long been a technique for anthropologists and participant observation of play practices is an effective way of conducting it (Spradley 2016). Malaby, argues for a reimagining of games as a cultural form (2009). Malaby’s research recognises the significance of play in everyday experiences. He advocates a model for discussing play that portrays the everyday world as irreducibly contingent—it cannot be examined without also examining the context and environment in which it occurs.

By taking such a view in my own analysis of fieldwork, I hone in on how playful experience can become characterised by context based improvisation—that is, the ways in which participants adapted their Steam based play habits around their daily lives and vice versa. Malaby’s perspective on play has significant ramifications for the notions of how play is constituted (2009). In *Anthropology and Play*, he discusses how games are being built into the fabric of companies, citing his own work on *Linden Lab* and *Second Life* (Linden Lab 2013) as an example (2009). In a key example Malaby discussed how *Linden Lab* employees used a chess match simulation to algorithmically rank the priority of various company tasks (2009). Malaby’s material entanglements of gamification are seen in the way games and game-like experiences are woven through
Steam into the Melbourne households in which fieldwork was conducted. These material entanglements are particularly relevant to Chapter 6’s examination of how domestic spatial configurations are shaped by the Steam platform and related hardware.

Similarly, defining play as an attitude better addresses this thesis’ focus on shifting domestic configurations. These adaptable and changing configurations have been interpreted by academic authors as part of the ‘messy’ experience of play (Steinkuehler 2006; Malaby 2009). Such messiness highlights an adaptive and changing pattern typified through the improvisational attitude of play stressed by Malaby. Situating Malaby’s ‘play as disposition alongside’ Taylor (2009) and Constance Steinkhuler’s (2006) respective assemblage/mangle theories enables a deeper understanding of the various components relevant to domestic Steam usage.

‘Assemblage of play’ is a concept coined by Taylor (2009). It is an attempt to recognise that the ‘what’ of play is never simply the game being played (2009). Instead, the ‘what’ of play is understood as ‘assemblage’ (Taylor 2009). For Taylor, an assemblage is the coming together of various components—such as player, device and game—to form the act of play (2009). Steinkuehler is another advocate of a similar theory, arguing that the relationship between game and player is an act of merging, which she defines as the ‘mangle of play’ (2006). Steinkuehler contends that the games people play are not always the games that were designed. Instead, the game being played is the result of a back and forth interaction between the groups (2006). The players’ mangling of play experiences often directs game choice and was an important topic of consideration throughout my fieldwork analysis. Throughout their writings both Steinkuehler and Taylor recognise that the act of play incorporates factors beyond the game currently being played (2006; 2009).

Rather, the act of play also refers to the tools used and contexts in which play takes place. Taylor’s term of ‘assemblage’ is used in relation to play, unpacking how acts of play are a complex interaction between technological artefacts, sociality and game experiences (Taylor 2009). Large sections of current ethnographic research into games choose to focus upon in-game experiences rather than how games enter, and exist in, and through the home. This emergent area is under-theorised and studied (2009). To
this extent, this thesis attends to Taylor’s call for research into how acts of play are incorporated into the home through new media technology.

Both Steinkuehler and Taylor interpret acts of play through the interactions between groups. When engaging with understandings of play throughout this thesis, this interpretation of people and things is the primary lens through which I discuss play. Steinkuehler’s ‘mangle of play’ (2005; 2006) terminology is indebted to Andrew Pickering’s *Mangle of Practice* (1993). Pickering argues that scientific knowledge is ‘mangled’ together by multiple and shifting agencies of technology, nature, concepts, humans, and social factors (1993). Hybrid notions of play form a key area of interrogation for much of this thesis, hence the outline of Taylor and Steinkuehler’s theories here.

Within ‘The Assemblage of Play’, Taylor explores the relationships between different components that make up the act of play (2009). Her exploration of how mods to the game can reconfigure and change *World of Warcraft (WoW)* (Blizzard Entertainment 2005) provides a useful framework for exploring similar phenomena on Steam. Taylor argues that such modifications to a game can be examined to help researchers understand the ‘extensive range of actors, concepts, practices and relations that make up the play moment’ (2009, p. 332). She extends this idea further, arguing that a focus upon these moments helps us to understand the interrelations between these various actors and worlds (2009). Taylor places great emphasis upon the points of intersection in how experiences are interpreted into the self. Such a focus can be usefully applied to this thesis’ examination of domestic configurations whereby Steam-based play can be understood as a form of assemblage. By focusing on the users, the processes, and their nuanced interrelations, new phenomena emerge. Or, as Taylor puts it, such an approach ‘allows us to get into the nooks where fascinating work occurs’ (2009, p. 332). In order to sufficiently analyse the various phenomena occurring around domestic use of Steam, it is essential to understand how the player, the software of Steam, and the hardware of the computer system come together in the act of play.

Interestingly, similar assemblage-like play has been noted in physical contexts. In ethnographic work into physical play, comparable notions are explored through the use of space. These include examples such as how the neighbourhoods of children or
the contexts of gambling among adults, can change how, why and when a game is played. In turn, the type of play that results can have repercussions into the everyday lives of the players (Tandy 1999; Sallaz 2008). Although such work is not central to this thesis, the recognition of physical everyday lives is important as it offers value to the ethnographic analysis of domestic spatial configurations in Chapter 6. As this thesis situates exploration within the domestic, understanding the physical contexts in which videogame play takes place adds value to analysis.

A key component of an assemblage is that the contingent parts can be stored separately or networked as a recombination of parts. From such storage, they can easily be changed, edited, or deleted. These shifting interactions are also seen in Steinkuehler’s mangle of play (2006). Such an approach asserts that games are at least partially malleable. This occurs in both a physical context (such as through the input used—a controller or keyboard) but also in the digital coding of the game (mods can be installed or used, settings can be changed). Secondly, Steinkuehler argues that games can change in more nuanced ways. As she argues:

The ways in which a game gets played out on the ground level are not easily determined a priori by the game design, rules, EULAs, or whatnot. They shift and evolve, often in unpredictable directions, seemingly holding still only when the “mangle” of designers’ intentions (instantiated in the game’s rules), players’ goals and agency (instantiated in shared, emergent practices), and broader economic, legal, and cultural issues reach a (temporary) point of stabilisation (2006, p. 211).

Critical to the above quote is Steinkuehler’s recognition of a player’s agency and goals when playing. By understanding the player as a module capable of being independent and networked simultaneously, Steinkuehler pinpoints the blurred intersection of worlds the player exists in. Such understanding has been shown across videogame theory, but also has been explored in digital ethnography. Such existence emphasises the ability of ethnography to encompass a wide variety of phenomena. In this case, ethnographic work into vastly different forms and understandings of play allows us to see the critical interactions between play, games and personal experiences across the physical, the digital, and their everyday domestic intersections. Such interactions are
central to this thesis’ attempts to ethnographically explore how the Steam platform is influencing the domestic configurations of Melbourne households.

The following section moves from ethnographic literature central to this thesis and towards another area of academia employed in analysis—platform studies. This move highlights the interdisciplinary nature of my research through its attention to several bodies of literature. In particular, platform studies as an approach offered significant value to the framing and research design of this thesis.

**Platform studies**

An examination of the Steam platform participant households engage with is key to this thesis’ approach to fieldwork. Although I am not solely focused on the constitution of the Steam platform, Bogost and Montfort’s arguing towards a strong concentration on the platform itself is a useful approach with regard to research design (Bogost & Montfort 2009). Platform studies is concerned with investigating the underlying computer systems supporting creative work, hence its relevance to the research design of this thesis.

Platform studies focuses on the relationships between the hardware and software of the computer system (Bogost & Montfort 2009). In an age where digital games are increasingly played through a separate software system such as Steam, The PlayStation Network (PSN), Xbox Live, and Battle.net, the value of engaging with platforms studies tenets becomes obvious. It allows a far more detailed analysis of the conceptual considerations informing what is being performed in the act of play. The various approaches of platform studies often concern five different levels or ‘layers’ of analysis (2009). Although my own research efforts mainly concern later ‘layers’, an understanding of this field-specific process informs how I integrate platform studies principles into my research. The platform studies’ layers can be broken down as follows.

Starting with the lowermost level, the platform itself is the hardware of a system. This is a physical entity—the chips and processors inside technology, the motherboard of a PC. Depending on what these components are made up of relates to the system’s various capabilities. Ascending up the layers of analysis moves next to ‘code’. This
code is the software running on a system, such as the operating system, Steam’s software system, or the background workings of a videogame. This software ability to run is dependent on the hardware of a system, hence its placement above it. Following from code, we then approach the ‘form and function’ level. This level usually refers to the game itself—what is being played, how it takes form and how it functions. According to digital media scholar Mark Sample, this is the most common level of focus for scholarly games studies work (2011).

Interface comprises the fourth layer of platform studies analysis. It is the point at which the player interacts with the system through the devices mentioned earlier—the keyboard, the mouse, controller or joystick. This level also aligns another field to this thesis—interface studies. This key point of Human Computer Interaction (HCI) includes comparative studies from areas other than videogames such as visual studies, film theory, and art history (Bogost & Montfort 2007). This concept is crucial to understanding several interfaces relevant to Steam, particularly the player to Steam interface and the Steam to game interface—the ‘Steam Overlay’ as previously discussed in Chapter 2. Interface studies and HCI is an important consideration in Chapter 7’s analysis of Steam account management from within Melbourne homes.

The fifth and final level of consideration for platform studies analysis is ‘reception and operation’. It is in this layer that an anthropological perspective emerges. This level of analysis is the one most heavily engaged by my own research framework. Exploring how games are imagined, played, understood, and responded to, this level involves interaction with the players of games themselves. The form and function level of analysis also parallels early research into online communities. Important examples of such similar analysis are found in works such as Rheingold’s exploration of game based Multi-User-Dungeons in The Virtual Community (1993), Julian Dibbell’s self-reflexive work into LambdaMOO (1993; 1999) or Simona Isabella’s ethnographic work on RPGs (2007). These works are emblematic of the form of analysis employed throughout Section II in that they contain ethnographic content while still addressing the interface, form, and function the HCI is taking place through.
Surrounding these levels of platform studies is the space of ‘culture and context’—the broader societal influence on analysis. All of the layers are influenced by these contexts, highlighting the cultural and historical placing of a platform. In the case of this thesis, these contexts are seen in Steam’s emerging dominance as a digital distribution platform. These five levels highlight the main tenets of platform studies and embed it in its cultural and historical contexts.

It should be noted here that platform studies alone does not provide a sound grounding for this thesis and nor is my adherence to platform studies ‘traditional’. Platform studies is more concerned with the ‘far away’ parts of the platform, whereas in a software system such as Steam the platform is consciously and socially linked, and often even part of, the game being played (Bogost & Montfort 2009). An example of this is the use of Steam integrated servers and hack monitoring, known as Valve Anti-Cheat (VAC). VAC ensures that players are playing games on Steam legitimately and bans those that are not. Rather than concentrate analysis on the inner workings of VAC (the ‘code’ layer of platform studies) I am far more concerned with unpacking how VAC is received by Steam users and how such reception is manifested within the domestic space of the Melbourne household. To this extent, Platform studies can be seen as a more useful approach to methodology and research design, rather than a literary basis for analysis.

However, by combining the work of distribution method focused authors such as Christopher Moore and Julian Kücklich (2005; 2009) with platform studies goals of ‘connecting the fundamentals of new media work to the cultures in which they were produced’ (Bogost & Montfort 2009, p. 1) this thesis develops a more complete picture of Steam as a platform. This was crucial during design and fieldwork in framing Steam as both platform and household interface, remaining vital for Section II’s analysis chapters. Such framing of the Steam platform provides insight into the interaction between the games people are playing and the other everyday media and technology that permeate their personal lives, enabling this thesis in answering its research question.
The next section of this literature review builds from discussion of platform studies influence in the resign design and methodological approach to fieldwork to review the media studies literature relevant to the analytical approach of this thesis.

**Media studies**

This section of the literature review highlights key theorists and ideas from the media studies discipline that are relevant to this thesis. This section pays particular attention to the intersection between online and offline interactions, a common thread of analysis within media studies literature. It focuses its review of media studies through the Australian perspective and research concerned with the rise of ‘new media’ such as domestic computer technologies. This focus highlights the positioning of Steam as a new media computer technology with domestic Melbourne homes. This section provides a background of knowledge to the area of media studies discourse to which this thesis aims to contribute.

In her 2002 work *At Home With Computers*, Elaine Lally analyses the domestication of computers in Australia, discussing how from around the mid 1990s home computers became a common household item (2002). However she notes that among the Australian populace there was significant rejection of these items as leisure objects—instead they were seen as a technology used ‘only for work’ (Lally 2002, p. 61). Gerard Goggin echoes this idea in his chapter within *Virtual Nation* (2004), examining the development of the internet in Australian contexts. In both of these texts the early resistance to new media technologies within Australia is considered, particularly as a form of leisure. Within this body of literature the most frequently argued reason for this resistance is the ‘risks, dangers, controls… and disadvantages’ people saw in new media (Green et al. 2004, p. 2). While these risks were not felt exclusively within Australia, they were certainly an important area of attention to media scholars and remain relevant throughout media studies scholarship today.

New media literature around the early 2000s frequently highlighted user’s concerns around how new media technologies might disrupt or change their life—costing them their leisure time (Goggin 2004; Luke 1999). Insights such as this are heavily
influenced by ‘domestication theory’—an approach that focuses on how technology is shaped by domestic environments. A key text in domestication theory is Consuming Technologies: Media and information in domestic spaces (Hirsch & Silverstone 2003). Central to this book is an emphasis upon the nuanced relationships that take place in—and help to define—the domestic in the modern world (Hirsch & Silverstone 2003). This focus is relevant to this thesis’ examination of domestic spatial configurations and how these configurations influence the relationships between technology and user.

A domestication approach towards the interpretation of new media has two key terms: appropriation and conversion. Appropriation refers to the process required to bring a certain piece of technology into the domestic environment of the household, such as designing a computer to fit within certain spatial dimensions. Alongside this process, conversion is the reshaping of domestic values and norms (collectively known as ‘meanings’) through such technology (Hirsch & Silverstone 2003; Berker, Hartmann et al. 2005). Continuing the example of the household computer, conversion refers to the way the members of a household react to the entrance of the domestic computer into their homes—such as displaying resistance to a technologies’ reconfiguration of the home (Green 2004). Also involved in this process of conversion is the transfer of these reshaped meanings back into the external ‘outside’ world (Hirsch & Silverstone 2003).

In regard to videogames and videogaming technologies such as Steam, media studies examinations often centre on domestication theory approaches to research. James Newman offers an interesting position. He argues that games as leisure have remained culturally inferior in modern social ecologies due to their public perception as a ‘children’s medium’ (Newman 2005, p. 2013). Following this, the dominant discourse of videogame discussion within media studies frequently revolves around how this idea is understood across society (Newman 2005). While there is certainly some credence to these arguments, they do not properly analyse the stigma that can be attached to using new media technologies for leisure. Despite its acceptance into the household in recent decades and its movement away from perception as a ‘new’ media and towards ubiquitous use, computer-based leisure activities are still often perceived as detrimental to social experience. This perception and how Steam influences its
construction is central to Chapter 8’s interrogation of balanced Steam usage within Melbourne households.

A key component of much theory examining domestic integration of new media technologies is ‘double articulation’. Double articulation refers to the ability of new media technology to link the public and private spheres of life within the domestic environment—and the meanings ascribed onto the technology in the process (Hirsch & Silverstone 2003). Ideas of double articulation are central when exploring the Steam platform. This is due to the fact that one of the main functions of the Steam platform is to link the public sphere of networked videogame sales to the domestic environment of the home. The dominant discourse among media studies scholars engaging with domestication theory and double articulation argues that many new media technologies exhibit some form of ‘double articulation’ and generation of meaning within domestic homes (Miller & Slater 2000; Horst 2012; Horst & Miller 2013).

This negotiation and generation of ‘meaning’ is orchestrated both within the devices and through device usage (Lister 2009). The first negotiation focuses on the device in its material contexts—in terms of how Steam is accessed through the household computer, and the room of main usage. The second articulation concerns the patterns of usage—the role and rhythms of the new media technology in everyday life (Berker, Hartmann et al. 2005). In the case of my fieldwork, this second articulation includes patterns such as who uses the computer at what times, what games are downloaded and played, as well as the communicative practices that take place when engaging with the Steam platform. Essentially, this second articulation refers to how Steam is interpreted within the contexts of the domestic environment.

To this extent, several scholars such as Berker note that it is how users of a new media technology interpret the role of the technology that drives double articulation (Hirsch & Silverstone 2003; 2005; Park, Jankowski et al. 2011). Although some writers claim that new media technologies are the primary household objects capable of this double articulation (Berker, Hartmann et al. 2005), others such as Lally assert that although double articulation is an important part of new media technologies, it is not a phenomenon unique to them (Lally 2002; Hirsch & Silverstone 2003). For example, Lally argues that objects such as filing cabinets can have a dynamic and dual role
within the home (Lally 2002). While the recognition of this is variety is an important part of understanding the nuanced space of the home, within the context of this thesis double articulation analysis is limited to the new media technology of the computer and Steam platform. This analytical focus is employed in order to best unpack the ways in which the Steam platform provides access to the public spheres of videogame purchasing and usage within a domestic environment.

By the mid-2010s, new media technology and videogames had largely been appropriated into the household (Berker, Hartmann et al. 2005). Accordingly, media studies literature shifted to focus on the reshaping capacity of new media technologies’ double articulation. This focus is a key component to the findings and ethnographic data around domestic spatial reconfigurations Chapter 6 analyses. Empirically based studies of domestic environments provide examples of similar findings in other areas of media studies, particularly those examining household computers and videogame access within domestic environs. Such examinations are found in work that unites domestication approaches with ethnographic methods. A useful example of this is Horst’s ‘New Media Technologies in Everyday Life’ (2012). The data from this research comes from Horst’s ethnographic exploration of the role of computer technologies in Silicon Valley homes in San Francisco. Horst explores how these technologies are brought into the home and adapted in differing ways across households (2012).

Within the Australian context a common area of research in the media studies discipline concerns the ways in which new media technologies in Australian homes can reshape behaviours, spaces and locations (Lally 2002; Hollows 2008). This area of media studies builds on scholarship examining the entry of radio and television into the home (Flynn 2003; Hirsch & Silverstone 2003). It argues that the physical placement of new media devices within the home impacts on how the space is navigated (Hollows 2008; Green 2010; Horst 2012). Practical examples of this reshaping are seen in the evolution of dedicated media spaces such as computer desks, console hubs, and wireless router requirements. These technologies and the spaces they inhabit are shifting the organisation and cadence of everyday family life (Green 2004; Horst 2012). These ‘cadences’ can be further unpacked by domestication theory. By examining the rhythms of domestic spaces and understanding them as an
experience influenced by technology, domestication theory argues that technology is also influenced by these patterns—evidence of a reciprocal meaning creation relationship between the two factors.

Other research examines how technologies’ integration into Australian homes has influenced the overlap of work and domestic space (Green 2004; Green 2010). Responding to emails, writing reports, or conducting research are all made significantly easier through the place of new media in the home (Goggin 2004). Again this phenomenon is not unique to the Australian context. However it is important to note due to the ongoing internet issues of the NBN. The implications of these issues upon Australian domestic usage of new media technology form important nodes of analysis in Section II, particularly Chapter 5’s exploration of domestic LAN parties and Chapter 6’s discussion of spatial reconfigurations.

The work of science and technology scholars (STS) Judy Wajcman and Donald Mackenzie into the social shaping of technology (SST) is another area of media studies literature relevant to this thesis’ discussion chapters (1986). SST places important emphasis on how social contexts influence technological development (Donald & Wajcman 1986). Parallels can be drawn between this contextual influence approach to analysis and domestication theories’ double articulation. Both analytical approaches argue that there are critical interactions taking place between domestic devices, users, and the social contexts surrounding them (MacKenzie & Wajcman 1986; Hirsch & Silverstone 2003). Wajcman expands upon these ideas in her work concerning the temporal saving potential of domestic devices (2002; 2004). This work further reinforces Wajcman’s assertion that ‘technology is a socio-technical product, patterned by the conditions of its creation and use’ (2002, p. 347).

In the context of this thesis, SST is employed in an interdisciplinary manner. Both SST and double articulation are interdisciplinary from the outset, a fact elaborated upon by Raymond Williams, who argues that they can be united under their mutual critiques of traditional conceptions of technology (1996). When thinking about Steam usage within Melbourne households, this thesis employs SST theory to contextualise an ongoing process—arguing that the social contexts of a domestic environment are
continually reshaped through the double articulation of new media devices. Another area of Wajcman’s work this thesis engages are her writings on ‘time scarcity’ (Wajcman 2008). In particular, this thesis explores how these theories manifest in the Australian context (Bittman, Brown & Wajcman 2009). Time scarcity refers to the time constraints placed upon an individual’s access to new media technology. Discussions of time scarcity are particularly relevant to Chapter 7’s analysis of the interactions between online and offline temporal practices.

Media studies scholars frequently draw attention to the interaction between online and offline practices. Kennedy argues for an approach to research concerning digital experiences that recognises the relationship between offline and online (2003). Her approach considers both contexts, forming and highlighting the link between the various aspects of the self that make up the individual through a method she defines as ‘technobiography’ (Kennedy 2003). The terminology originated in the Cyborg Lives: Women’s Technobiographies collected edition (Henwood, Kennedy et al. 2001), with the singular ‘technobiography’ being used for the method and the plural for the stories the method elucidates.

For Kennedy, a technobiographical approach is most useful for information and computer technology (ICT) studies (2003). A technobiography is conducted through an analysis of autobiographical histories of a person’s relationship to technology and the way the autobiographical self is revealed through this relationship. Kennedy provides the example of an analysis of personal homepages for the ‘Her@’ project as an example of technobiography (Kennedy 2003). In my own research, I engaged with a technobiographical approach by examining Steam users’ profile pages and game libraries, exploring what they chose to display or hide, and the reasons they offered for doing so. I also asked participants to detail their personal videogaming histories to me during initial interviews in order to map their technobiographical histories with the medium.

Some of the concepts Kennedy associates with technobiography are problematic, such as her discussions of anonymity and her discussion of digital elites being rather dated. However there is still value to be gained out of her early methods and ideas. Her work builds out of other writers concerned with the online/offline dialectic, such as Tim
Jordan’s *Cyberpower* and Hine’s tenets for digital ethnography (1999; 2008). These more ethnographic approaches highlight how the position of the user has an impact upon how new media technologies are interpreted within the wider context of the user’s everyday life.

Important here is the push and pull between online and off, digital and physical, platform and person. Kennedy’s stressing of a recognition of both is an early example of the recognition of the reciprocal impacts between online and offline selves (2003). Such simultaneous recognition of multi-faceted selfhood is crucial to my own understanding of Steam and the domestic environment influencing the everyday lives of my participants. Therefore Kennedy’s stated aim of technobiography to hold online lives in ‘dialectical tension with life offline’ has been a useful principle to adopt within my own research design and analysis (2003, p. 136). By adopting and adapting Kennedy’s framework, this thesis is better able to analyse the social relations blurring around and through domestic Steam usage. In particular, Kennedy’s engagement with questions of tension and intersection is of value to this thesis. By asking participants to reflectively examine their own histories with technology, this thesis attends to how usage is framed by participants. This analysis is particularly useful to Chapter 8’s engagement with concepts of ‘balanced’ Steam usage and inter-generational techno-literacy.

This section has reviewed media studies’ literature relevant to this research into the Steam platform’s impact with Melbourne homes. The main area of media studies literature this thesis draws from is domestication theory. Within this section of the literature review particular emphasis is placed on the importance of double articulation analysis. Also of importance to this thesis’ engagement with media studies analysis is the interaction between online and offline practices as explored by Kennedy’s technobiography approach. The final area of literature this chapter reviews is games studies. Games studies scholarship is particularly relevant to the manner in which users engage with the Steam platform within their homes and their reasons for doing so. To this extent, the following subsection reviews games studies literature on ‘networked play’ and ‘excessive play’.

**Games studies**
This literature section reviews works from the games studies literature and scholars that attend to the phenomenon of networked play such as Tahirih Cockshut (2012) and Melanie Swalwell (2003). It links these works to a review of theories and public perceptions of ‘excessive play’—terminology borrowed from Faltin Karlsen’s A world of excesses: Online games and excessive playing (2016). The purpose of reviewing these areas of games studies literature is two-fold. Firstly, the platform configuration of Steam has several distinct similarities to the socially networked play spaces of videogames and videogame platforms such as WoW (Blizzard Entertainment 2005), Xbox Live, internet cafes and other ‘communities of play’ (Pearce, Boellstorff et al. 2011). By reviewing works examining these networks and spaces similar to Steam, this thesis is better able to highlight where Steam might instigate new scenarios of use as a cultural phenomenon creating gaming encounters.

Secondly, games studies literature provides useful insight into several areas of enquiry the discussion chapters of Section II explore. The practice of LAN play, as discussed by authors such as Swalwell (2013) and Judith Ackermann (2012), is specifically relevant to Chapter 5’s investigation of domestic LAN parties within Melbourne. Similarly, ideas of excessive play (Karlsen 2016) are central to Chapter 8’s analysis of perceived problematic play practices on Steam. Games studies approaches to these areas offers deeper insight into how activities typically associated with leisure and social interaction can manifest in domestic spaces. Therefore a review of games studies research into LAN gaming and theories of ‘excessive play’ is crucial to these chapters’ contentions and the broader examination of Melbourne domestic Steam usage.

Communities of play and networked games are terms that carry significant literary weight and potential for controversy. Mary Flanagan argues in Critical Play that play in particular is a ‘notoriously difficult term to define… a culturally and socially specific idea’ (2009, p. 4). Definitions of play have been interpreted by some videogame scholars as ‘vernacular’ (Jayemanne & McCrea 2014), while others have defined play through ‘social contexts’ that are frequently incorporated into everyday life (Consalvo 2007; Apperley 2010; Hjorth & Richardson 2014). These definitions lend themselves to ongoing discussions of videogame play. Academics have suggested that play (particularly videogame based) is increasingly frequent—Fromme and Unger describe the development of the videogame medium as ‘breathtaking’ (2012, p. 2).
This growth in videogame play is in part achieved through the easier access technology such as the Steam platform provides. The overlapping of the Steam platform and its digital space with the domestic environment can be viewed through the perspective of an individual player as ‘a complex interplay of actual and virtual worlds as perceived through a dually embodied player’ (Keogh 2018, p. 86). This interplay can occur in physical spaces such as internet cafes, as Thomas Apperley notes (2010), or in less bounded spaces such as Cockshut’s WoW (Blizzard Entertainment 2005) team based ‘raiding’ groups (2012). Many of these scholars note the significant time investment put into navigating such interplay—forming ‘guilds’, coordinated everyday schedules and ensuring compatible, up-to-date versions of a videogame are available (Jansz 2005; Taylor & Witkowski 2010).

While these time investments, interplays, and communities of play are more visible in the large scale LAN events explored by scholars such Emma Witkowski, Brett Hutchins, Marcus Carter and Taylor (Taylor & Witkowski 2010; Witkowski, Hutchins & Carter 2013), they are also visible in smaller scale scenarios such as the domestic LAN parties Chapter 5 explores. In a similar manner, the role of Steam in the domestic space can be usefully analysed by the ‘games as inhabited spaces’ argument of Bernadette Flynn (2004). In her work, Flynn explores how space and navigation is used in videogame design, both in videogame worlds and physical contexts (2004; 2008). Flynn’s inhabited space argument suggests that ‘gameplay is a form of spatial practice that is grounded in the ‘player's lived-in bodily experience and subjective viewpoint’ (2004, p. 52). To this extent, the act of videogame play is reconfigured through the physical context of play.

Furthermore, Flynn discusses digital configurations of space and place in relation to the ‘digital hearth’—the digitally orientated focal point of the home (Flynn 2003). Other games studies scholars have focused on spatial configurations within game worlds—for example, Georgia Leigh McGregor contends that in large game worlds such as WoW (Blizzard Entertainment 2005) or Destiny (Bungie 2014), the design of space and architecture has an impact upon how players interpret and use the game’s spaces (2006). Dovey and Kennedy highlight a similar phenomenon in their investigation into the impact interfaces can have upon how a videogame is navigated.
(2006). Steam’s place as a platform sits between these two areas of games studies literature. Its role as a domestically accessed technology causes it to alter space in a manner similar to Flynn’s inhabited physical contexts (2003).

At the same time however, Steam’s UI and in-game overlay echoes Dovey and Kennedy’s recognition that the visual interface design links text and experience in videogame play (2006). Steam’s hybrid position as both a community of play and a site for reconfigurations similar to Flynn’s games as inhabited space argument is what makes the platform worth examining—hence the need to build upon the aforementioned literature. In particular, the role of Steam in the domestic configurations and everyday lived experiences of Melbourne households is central to Chapters 6 and 7. These two chapters use the ethnographic research conducted during fieldwork to contribute to the academic understandings of inhabited videogame spaces, networks, and platforms discussed in this section.

In the aforementioned games studies literature there is consistent recognition of the reconfiguring capacity of play collectives and communities—both in relation to the space of play and the reasons for it. For scholars, this shaping capacity is a fascinating part of everyday life. Within mainstream media however, there has been significant moral panic that interpret videogames as damaging to those that use them (Jenkins 2006; Nielsen 2017). One of the main contentions in this area is a perceived potential for videogames to be ‘addictive’. Academic pushback to the idea of addictive videogame usage (and excessive play) from within the games studies body of literature is important to Chapter 8’s discussion of negative perceptions of Steam based play and issues of balanced new media usage within Melbourne households.

Throughout their dissertation on group gameplay in *World of Warcraft* (Blizzard Entertainment 2005), Cockshut argues that group gaming (‘raiding’ in the context of Cockshut’s ethnographic work) provides important insight into the machinations and impacts of online game environments and digital platforms (2012). Swalwell similarly argues for the importance of networked play in her examination of ‘lanning’ (2003). Both authors assert that moments of gameplay with others form an embodied engagement of computer gameplay, a wide spectrum of experiences Swalwell classifies as ‘gaming encounters’ (2003). Often entangled in public perception of these gaming encounters
are ideas of overuse, addiction and anti-social behaviour (Swalwell 2003; Nielsen 2017).

Rune Nielsen and Arne Poulsen discuss the evolution of ‘computer game addiction’ interpretations in their article Troubling Perspectives on Computer Game Addiction (2015). They argue that while concerns around videogame addiction have existed throughout the history of videogames, they have gained recent momentum (Nielsen & Poulsen 2015). Other scholars have noted similar increases in the global interest of excessive play and videogame addiction (Griffiths 2015; Karlsen 2016) This argument is strengthened by recent events, in particular the decision of the World Health Organisation (WHO) to include ‘gaming disorder’—game usage behaviour that takes unhealthy precedent over other life interests—in the 11th International Classification of Diseases (ICD) (2018).

Other instances of the increased public momentum around videogame addiction include the classification of ‘Internet Gaming Disorder’ as a ‘condition for further study’ in the most recent Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (Petry & O’Brien 2013). While this manual does not classify it as an ‘official disorder’, it does flag ‘Internet Gaming Disorder’ as an area the American Psychiatric Association (APA) is encouraging further research into for the purpose of possible inclusion in later editions of the DSM (Sarkis 2014). To this extent, the negative potential of excessive play is an ongoing public policy issue. This policy issue was a significant topic of discussion among participants during this thesis’ fieldwork. Participants frequently discussed how they defined their usage as balanced or ‘healthy’ alongside these medical diagnoses and public perception of videogames.

However, these inclusions in global disease lists and calls for disorder research largely ignore the perspectives and findings of games studies. In particular, the qualitative data gleaned from games studies research exploring player experiences offers significant pushback to the quantitative findings of psychological prevalence studies (Nielsen 2015). Games researchers such as Nick Yee complicate these quantitative findings through an engagement with the social worlds of online games, likening claims of addictions to online videogame worlds as addiction to countries such as the United States (2006). Karlsen interprets these aspects of social play (and particularly
social obligations) as a significant driver for excessive play periods (2011, 2016). These ‘excessive play’ periods are classified by Karlsen into ‘life phases’, distinct from addictions such as substance abuse in that gamers levels of engagement fluctuate across a lifetime around other demands (Karlsen 2016).

Games studies’ approach to videogame addiction and excessive play from a qualitative perspective is largely similar to the manner in which this thesis approaches domestic usage of the Steam platform. Rather than approach excessive play from a quantitative perspective that is liable to be reductionist and exclude personal perspectives, my in-depth local ethnographic methods engage with the lived experiences of the individual, similar to Karlsen’s engagement with specific players (2016). Domestic engagement with the Steam platform as a social conduit and networked group activity also complicates interpretations of excessive play as isolating, similar to Nielsen and Veli-Matti Karhulahti’s recognition of the ways in which competitive gaming complicates distinctions between ‘problematic play’ and ‘competitive play’ (2017).

This literature provides an overview of the ways in which games studies scholars engage with networked communities of play and notions of excessive play. These areas of study are central to Section II’s discussion of domestic LAN parties (Chapter 5) and personal models of balanced videogame usage (Chapter 8). To this extent, it is to this body of literature that these two chapters contribute new knowledge. This contribution is made through their examination of how domestic usage of the Steam platform in Melbourne informs how players engage with communities of play and their personal classification criteria of Steam and videogame usage.

This thesis contributes original findings at the intersection of media studies, games studies, platform studies, and digital ethnography. Accordingly, this chapter has reviewed these bodies of literature and how they are employed in Section II of this thesis. This thesis’ ethnographic mode of enquiry provides new insights into methodological approaches to digital ethnography examining domestic spaces, as discussed in the first section of this chapter.
The second section of this chapter examined platform studies, attending to how platform studies theories are used throughout this thesis. While a platform studies approach was of greater use in the research design process, its tenets remain relevant to Chapter 7’s discussion of Steam account management.

Similarly, the third section of this chapter engaged with media studies literature. It outlined how media studies theory is of use in Section II’s analysis of research findings. Through an analysis of Australian domestic engagement with new media technology and double articulation, this thesis builds academic understandings of Australian domestic usage of videogame technologies. This thesis’ engagement with domestic configurations and double articulations explores new nuances in terminology and function, aiding academic interest in media studies.

The final section of this chapter discussed games studies literature relevant to this thesis. This discussion links networked games literature and the spatial reconfiguring capacities of videogames. The third section of this chapter also engaged with excessive play literature. This literature is crucial to Chapter 8’s exploration into participant perceptions of ‘balanced play’ and contributes to discourse around the potential reworking of domestic videogame play practices. Following this review of literature, the next chapter reviews the methods employed during fieldwork research. This review includes a discussion of the recruitment as well as an outline of the various ethnographic methods used during data collection.
Chapter 4. Methodology

This chapter explores the specific ethnographic methods deployed in the fieldwork of Steam households in Melbourne, Australia. As noted in the previous chapter, the methods and research design borrow from an interdisciplinary tool kit that draws from digital ethnography, media, platform, and game studies. Also important to the methodology of this thesis is the parent project GoBM, an ARC project. The GoBM project influenced the research design of this thesis in several ways. One of the key ways GoBM informed this research design was in the chosen ethnographic methods used in the field.

In this chapter I discuss these methods—including demographic breakdowns of the participants and techniques used to recruit them for participation. The components adapted from GoBM: ethics standards, recruitment, ethnographic techniques and ethnographic framings of play are each discussed in detail. The first section of this chapter outlines the recruitment procedure and the navigation of ethical boundaries around participant identity (both online and offline).

The second section reviews the specific ethnographic techniques in fieldwork to collect data. The dominant research techniques used centre around household interviews, play sessions, and participant observation. This second section of this chapter also discusses the effectiveness of these techniques across the course of this research project. In this regard, the section explains why and how I use both face-to-face and computer mediated communication (CMC) interviews and interactions with participants.

The intent of this engagement with ethnographic methods is to achieve as ‘thick’ a description as possible during the course of this research, with the aim of revealing how practice, space and place can change over time as well as exploring people’s lives in context (Boyle 1994; Geertz 1973). The ability to explore these changes and track the ‘processes and innovations’ that occur through cultural change is one of the key advantages of ethnography (Clifford & Marcus 1986, p. 2-3). Such exploration is the primary reason why ethnographic methodology is very useful to this thesis. Most
importantly, I employ ethnographic methods to engage with people using Steam in and around their households over time. This is done in order to facilitate a ‘fuller understanding of the social relations’ concerning digital contexts, in line with other digitally minded ethnographic approaches (Henwood et al. 2001, p. 121).

A third section further unpacks how the fieldwork conducted within the participant households informs analytical approaches to play in Section II. This chapter component outlines the ways in which GoBM informed the research design of this thesis. As I concentrate my analysis upon configurations of the digital within everyday household practices, it is crucial that research be conducted in participants’ homes wherever possible. It is in this environment that Steam’s role in the home and domestic play practices are best understood and elucidated. To this extent, the final section of this chapter explores how the thesis situates play through a variety of framing questions: What is being played? Who is playing? Where is play taking place?

**Recruitment and demographics**

Although the GoBM project already had ethics approval when I began my candidature, the fieldwork of my thesis project required its own ethics clearance before research with human participants could be conducted. Therefore prior to any fieldwork I applied for and received ethics approval from the Design and Social Context College Human Ethics Advisory Network (CHEAN) of RMIT University, under the reference number of: 0000019338-04/15 (see appendix for a copy of the ethics approval notice).

Once this approval had been received, I began recruitment. I recruited 18 households from across Melbourne. I conducted research with a variety of groups, from single person to family households. These households were recruited through close and extended social networks, online forums, and the Steam platform itself. Aiming to conduct at least three meetings in each household, my main focus during fieldwork concerned how Steam users interacted with the Steam platform from within their households. The table below (Table 4.1) provides a breakdown of the demographics of participants. Importantly, this table does not show a column for ethnicity. This is due to the complex way in which my participants identified with various ethnic
backgrounds and religions. To this extent, such categorisation is not present in the table.

Instead, ethnicity is acknowledged on a participant-by-participant basis during Section II. In these cases the participant and I agreed that such information is relevant to the discussion. In a similar manner, specific names are not given for the households. Rather they are instead listed in a numerical order. This is done to de-identify participants. In Section II’s discussion and analysis, household groups and individual participants have pseudonyms to allow for easier anecdotal evidence and analysis.

The initial participant recruitment phase began by posting a brief plain language statement (PLS) and call for interest to various social media platform accounts such as Facebook. I also reached out to several Melbourne ‘based’ digital communities such as the ‘subreddit’ of ‘r/Melbourne’ (a forum within the website reddit.com), messaging likely candidates and referrals with a PLS. I also used my existing connections on Steam, asking users—such as those on my ‘friends’ list—if they would be interested in participating in the research. Recruitment was made across various demographics such as age, geographical location, and household constitution. In addition, I recruited select participants from within personal Melbourne social circles in order to aid in the ‘snowballing’ of research participants. However I strove to limit the number of participants I knew personally prior to research. An excess of personal acquaintances may have limited the scope of practices observed during fieldwork and subsequently lowered the quality of data available for analysis.

Throughout the recruitment phase, I looked to recruit households, doing so through what I have termed a ‘key participant’. A ‘key participant’ was the initial member of a household I had contact with. As I recruited them, I gathered several key data points and added the data to a table (a completed version of this table is seen in Table 4.1 below). For many households, I spoke to several members and sometimes the ‘key participant’ was not a Steam user. In these cases the key participant referred me to a member of their household who was—such as a parent who introduced me to their Steam using child. Once a participant had shown interest in taking part in the research, they were formally invited to participate through a personal message and
consent form (see appendix). These forms were provided for each participant to ensure informed consent for each individual who participated in the research.

In cases where a particular member of a household expressed a desire not to take part in research, steps were in place to ensure they could remain absent from recorded fieldwork. In these instances meetings were conducted while the individual was not home or was moved to a separate location. Although this was not ideal for the purposes of fieldwork, such accommodations are an important part of social research involving groups of individuals with different desires to participate.

Table 4.1: Demographics of Participant Households

<table>
<thead>
<tr>
<th>Household</th>
<th>General Location</th>
<th>Number of Members (Adult)</th>
<th>Number of Children (&lt;18)</th>
<th>Number of Steam Users</th>
<th>Computers (Desktop)</th>
<th>Computers (Laptop)</th>
<th>Other Gaming Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>North</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>North</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>North</td>
<td>2*</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>North</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>East</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>East</td>
<td>2*</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>East</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>East</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>South</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>South</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>South</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>West</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>West</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>West</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>Central</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>Central</td>
<td>3*</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>Central</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

*Denotes a child over 18 years old still living in the family home.
In a similar manner, participants were free to withdraw from participation at any time, and for any reason. Fortunately, I had no instances of participant withdrawal during data collection.

As I was looking to engage with a variety of age demographics, a separate PLS was written for potential participants who were minors. This was done to ensure clear communication and maintain informed consent across my participants. In the case of minors, parents were also provided with a PLS and required to sign a consent form. I also had several participants for whom English was a second language. In these cases the PLS were particularly useful in ensuring clarity and informed participant consent.

Table 4.1 (above) highlights the key demographic breakdowns of my participant households. It offers an overview of the range of lifestyles investigated during fieldwork. This table also lists the range of devices used in participant households. This data is present in Table 4.1 as although the overall focus of this thesis is the usage of Steam within Melbourne households, the table informs the topic through recognition of the myriad digital technologies present within the modern household.

The research design of this thesis reflects the overarching Games of Being Mobile project, using ethnographic methods, play sessions, and participant observation to focus on how devices and new media technology can change the organisation of the home, work and everyday life (Hjorth 2014). These ethnographic methods are the focus of the second section of this chapter.

**Data collection methods**

Once a participant and their household agreed to be part of the fieldwork, there were several key phases of data collection. Fieldwork consisted of three key engagements; an initial meeting, a follow up meeting roughly six months later, and a final meeting six months after that. These six monthly intervals were rough guides with meetings occurring at anytime near these windows that suited participants. Initial recruitment was done in the second half of 2015, with all initial meetings recorded by January 2016. By the middle of July 2016 I had conducted all initial and follow up meetings, with final meetings scheduled to begin in January 2017. The final round of meetings
was conducted over the first half of 2017, with all meetings and fieldwork completed by the second half of 2017.

Although I call each entry into a household a ‘meeting’ they often took a far more relaxed form than the typical definition of the term. Initially, I interviewed participants in a conversational manner. However fieldwork also consisted of play sessions and general participant observation. This included cases where I watched participants play games on Steam or participated in household interactions such as ‘family dinners’. In several cases I conducted informal interviews outside the home, such as in a cafe or a participant’s office. However there was an attempt to avoid this style of interview wherever possible as it hindered my ability to record primary observations in participant households.

Each interview was scheduled around the participants’ daily schedules. Most meetings occurred during afternoon or evening. The following sub sections detail the three key methodological techniques used during fieldwork; informal interview, play sessions, and participant observation. Although I discuss each in its own section, in practice they often overlapped and entangled together when conducting fieldwork.

**Interviews**

Post recruitment phase, the next step in the research was to conduct an initial meeting with the participant household. This meeting began with an informal and semi-conversational structured interview. During this interview the ‘key participant’ was always present. If they were not a Steam user, then there was always at least one Steam user present. Research began with the aim of conducting all interviews within participants’ households and all initial interviews were conducted in this manner. However due to participant availability, not all subsequent engagements met this goal.

Each initial interview asked the same broad questions. These included general questions around the household’s history with gaming and digital devices, and exploring their experiences and habits across the timeline of the household. For some households such as family homes, this was an extensive history, for others such as recently formed share houses, there was far less discussion in this area.
After these initial questions, the interview moved into a more conversational space, centred around topics based on participatory response. These topics included a variety of data including; such as the times of day they use Steam, their feelings concerning digital based services, and the state of Melbourne internet services. These conversations were often quite broad and ranged across a variety of topics not immediately related to Steam. Although these discussions did not initially appear relevant to the research question of this thesis, over time this ancillary data became a useful tool in highlighting the entangled nature of domestic configurations. A key example of this development was tangential dialogue during household interviews around the impact digital gaming have on the future of wider society. This topic was not initially a proposed area of enquiry. However, after first interviews it became clear that problematic usage was an important consideration for many Melbourne households. Subsequent interviews attempted to glean more data on topic. This data is now central to Chapter 8, which discusses ‘balanced usage’ of videogames and Steam usage within Melbourne homes.

Although most interviews were conducted in person, several also occurred via CMC. These were always ancillary interviews, completed in addition to the three scheduled in-person meetings. These CMC interactions often transpired informally through the Steam platform’s inbuilt messaging service. These interactions involved discussion with participants about the game they were playing, who they were playing with, and where they were located whilst in play. Although these engagements were small in scope, they provided insight into the temporal habits of participants and the communicative mediation of the Steam platform. Therefore, the use of CMC as an interviewing tool bears further discussion as a methodological tool in digital ethnography.

Interviewing across a digital platform such as Steam is a very different experience to talking face-to-face. The medium of text creates a slower form of communication. This is a factor I became acutely aware of during my interviews through the Steam platform chat interface. Joëlle Kivits discusses the importance of maintaining personal contact across large time gaps in the fieldwork (2005). In these cases, Kivits stresses the importance of continued contact (2005). This ongoing contact through Steam proved to be useful during fieldwork, where there was a six-month gap between face-to-face
participant interviews. The brief re-connections made over Steam allowed me to consolidate rapport with participants, therefore allowing deeper engagement during subsequent face-to-face meetings. In addition, by maintaining contact digitally with participants I was able to limit ‘recapping’ during follow-up meetings. This allowed follow up meetings to move quickly into more useful areas of research, generating greater amounts of data.

In practical terms, the Steam platform’s software and interface include an inbuilt chat system that was used for text-based conversational interviews. As well as this, in-game conversation was occasionally used, in both text and audio forms. Throughout my research in-game text communication channels were used during the allocated play sessions. In-game audio conversations were less common, as most play sessions were conducted in-situ. However, there were cases where remote play sessions were conducted and these audio channels were used. These included in-game audio channels as well as third party audio services such as Skype. Audio interviews were also conducted out of game across digital methods through similar audio services, again through the use of software such as Mumble and Skype.

I also attempted to capture my computer screen activity using the screen capture software FRAPS. This was done in an attempt to show the machinations of the Steam service, both in-game and around the wider Steam Community. Participants were also invited to use screen capture software—at their discretion—to maintain anonymity, in line with the ethics stressed elsewhere in digital ethnography literature (Boellstorff, Nardi et al. 2012). However, these ancillary recording methods were often problematic, with FRAPS inhibiting research by hampering computer functionality. For this reason, no FRAPS footage was of use during data analysis. Due to these limitations, screenshots served as the main visual aid to data analysis throughout this thesis.

Despite the drawbacks experienced using CMC, there were advantages to its use throughout fieldwork. In terms of interviewing, CMC had one distinct advantage—there was no need for external recording, or later transcribing. CMC interviews I conducted were all saved automatically and captured easily through the software used. Similarly, in-game chat conversations can be easily recorded with screenshots. Thus I
needed no special recording technique for later transcription, a stark contrast to my face-to-face interviews. This auto-recording of data was especially useful in situations where communication was conducted digitally and proximally simultaneously. In these scenarios, my desire to ‘interview’ participants became a secondary focus, with research methods primarily comprising participant observation and social interactions.

For fieldwork interviews conducted in-person, follow-up interviews took quite a different form to the initial interviews. These ‘follow-ups’ were used to discuss how devices and practices might have changed over time, revisiting the household's domestic Steam practices. During these sessions I often also attempted to conduct ‘play sessions’ with participants, as by this secondary stage I had usually built up rapport with participants. These follow-up interviews were often shorter than initial interviews and increasingly blurred the boundaries between interview, conversation and participant observation. Again I attribute this entangling of methods to the development of social relationships with many of my participants, as well as my own increasing comfort within their households.

Due to the temporal scale of my fieldwork (being conducted from 2015–2017), several changes occurred around the configuration of Steam and the configurations of my participant households. For this reason, I found the follow-up fieldwork sessions to be of great value to data collection. A large portion of this thesis’ contribution to the academic body of knowledge comes from data obtained during follow-up interviews. These interviews are also a key component to the grounding of this thesis in ethnographic methods. Other methodological techniques, such as surveys or straw polls might conduct research in a greater number of households, but these methods only engage with each household once and in a cursory manner. Had such an approach been enacted during fieldwork, I would have been unable to analyse the changes to Melbourne household Steam usage over a longer time frame. Such an omission would have provided inadequate amounts of ongoing qualitative data to answer the research question of this thesis.

**Play sessions**
The ‘play sessions’ conducted during research form the second critical component of the practical fieldwork for this thesis. These play sessions were mostly conducted during follow-up meetings, as they required particular knowledge of a participant’s gaming interests. These interests were established during initial interviews during participants outlining their technobiographical history regarding videogames and the Steam platform. Once a participant (or participants) had decided on a game to play, these sessions involved playing said game—either with the participants or while they coached me through the game.

By engaging with participants both in-game and in-home, these play sessions generated useful data around how digital games and domestic spaces intersect and simultaneously influence each other. Such reciprocal influence was best observed during play sessions as participants often forgot about my position as researcher. Instead I became a teammate or pupil. As a result of these play sessions I have taken part in a multitude of games, from playing CS:GO (Valve Corporation 2012) with a competitively ranked team, to being taught how to play Orcs Must Die: 2 (Robot Entertainment 2012) by a high school student. I completed ‘play-with’ play sessions in the households of 13 participants and was coached through a game by a participant in another three. Due to the variety of configurations where these play sessions took place, these sessions have been of incredible benefit to the analysis of Section II. Throughout my follow up meetings—both the second and third round of fieldwork collection—play sessions also played a key role in building rapport with participants by breaking down the distinction between researcher and participant.

The play sessions also provided useful insight into the specific scenarios of use that emerge through interactions with Steam in the Melbourne household. Capable of being done in real time through multiplayer games or through the recording of coached single player games, the play sessions helped to generate ethnographic data around how users of Steam experience their households when connected to the Steam platform and the games it facilitates.

Examples of these scenarios of play sessions use include taking part in a LAN event at a participant household. By taking part in this event, I was able to experience first-hand how the Steam platform is used to facilitate local multiplayer activities. In
playing games and using Steam with participants, I gained important, participant-driven data into the hybrid private/public game playing space Steam can form within the household. As well as this, the play sessions provided a deeper understanding of the games my participants were passionate about. To this extent, I have relied mostly upon my own notes and post play discussions for play session related data. In later discussion chapters, I will refer to these play sessions both anecdotally and through screenshots of domestic spaces. However, I avoid using photos featuring people in order to maintain participant anonymity.

Another important insight developed through play sessions concerns their capacity to address the space ‘in between’ the physical household and the Steam platform. An examination of this intersection is particularly useful when attempting to attend to the changing contexts that can occur during digital ethnography (Boellstorff, Nardi et al. 2012).

It is for these reasons that attempting to record the play sessions with capture devices proved ineffective at capturing the scenarios of use taking place. The act of play through a digital device and accompanying software, in a specific location—such as the household living room computer and accompanying Steam platform—is a multifaceted and multifunctional experience. This complex and nuanced experience cannot easily be rendered into video footage or screenshots. These recording methods do not properly capture the communication between player, game, and domestic space. Furthermore these recordings failure to call attention to the surrounding configurations of the household, such as the housemate watching Netflix in the living room or the homework being neglected on the kitchen table. When conducting a play session, I was able to better view how participants take these domestic factors into consideration and the resultant impacts upon their domestic configurations.

While the play session portion of my fieldwork certainly helped to explore domestic configurations, play sessions alone would collect insufficient data to answer my research question. This is due to the way that the varied ethnographical tools overlapped during fieldwork—often I would be playing and interviewing at the same time, hence analysis of these forms of data takes place congruently. In follow up
meetings, this overlapping of data collection was specifically pursued as a research paradigm, as it appeared to make the reflection process easier for participants.

**Participant observation**

As well as the interviews and play sessions of my research, I also conducted several sessions of ‘participant observation’ during my household meetings. Although the play sessions can be viewed as a form of participant observation, I made a conscious effort to extend the act of participant observation further into the households I entered.

The central and arguably most famous tenet of ethnography, participant observation refers to the act of using observation while engaging with a group in the field in order to develop a ‘thick description’ of that group’s experience (Geertz 1973, p. 5; Amit 2000). A ‘thick description’ can be best understood as an attempt to explain human behaviour not in isolation, but within its surrounding context. The ultimate goal of thick description is to render the behaviour being described as meaningful to any outside observers, regardless of their prior knowledge of the behaviour. Throughout the anthropological tradition, participant observation has been a keystone of ethnography.

However my use of participant observation during fieldwork was somewhat unorthodox when compared to traditional ethnography. Rather than being present in a specific group for an extended period of time, I instead moved in and out of my field site on a regular basis. Such movement between sites is becoming a more common fieldwork approach, particularly within digital ethnography (Hine 2008; Boellstorff, Nardi et al. 2012). An example of this entering and moving through domestic field sites is seen in Horst’s work on domestic new media routines in Silicon Valley, where fieldwork was conducted in specific homes across a geographical region (2012). Horst interviewed households in a manner I have emulated in my own research, moving through homes without long term stays in one specific household (2013). Such an approach allows for a greater variety of scenarios to be observed while limiting the inconvenience to participants.

Despite this deviation from long form ethnography and participant observation, what I conducted certainly relied heavily upon the techniques employed in an ethnographic
method. Though the transitional nature of my observations was perhaps not a ‘traditional’ ethnography, my presence within participant households often became one of an active observer. These ‘observational’ aspects to my research were largely documented through field-notes, rather than the transcripts of interviews. Although I devoted time to simply watching participants in their homes, they were often initially made uncomfortable by my silent presence and note taking. Such awkwardness made for inauthentic and shallow data. Therefore I had to take care to move beyond the position of an intruding researcher.

One of the most effective ways I managed to navigate through this problem of awkwardness was to have one member of the household give me a tour of their home while the rest of the household went about their normal routines. In this manner I was able to partially observe the general habits, rhythms and patterns of the households I was entering. As an example; a parent showed me around the house while a child played videogames on Steam. Ostensibly, I asked for a tour of the house and its layout, taking field notes on data such as the number of bedrooms, internet connection, and living spaces. However when we toured the child’s room I also recorded notes on how the child was using Steam—whether they responded to my presence or questions, the game they were playing, the layout of their room, where the computer was located, and if they were wearing a headset or not. These household tours also helped to build knowledge around how participants’ organise separate spaces within their home and the roles Steam may play in these domestic configurations. Household tours are another example of how an ethnographic approach to examination of the mundane can uncover colourful evidence of everyday experiences.

Participant observation also involved several instances of being invited to a family or household event. These included taking part in a ‘no-screens event’ family dinner, a board game night in a large share house, and a small domestic LAN party. These invitations provided opportunities to both participate and watch the household in action, conducting valuable participant observation despite the fact that the event in question was often not directly linked to Steam usage within the household.
Such invitations are another example of unexpected instances of participant observation—they were certainly nothing I had planned for beforehand. Often they would occur after an interview or play session, where one member of the household would invite me to stay for the evening meal, a drink, or other such social occasion. Although I was initially wary of such events—for fear they would be time consuming and not yield any useful data—these invitations ended up serving as a prime example of why I conducted participant observation beyond the play sessions. These dinners were acts seemingly separate from Steam, but they greatly illuminated where Steam intersects the everyday life within my participant households. On these occasions it was difficult to take extensive field notes without appearing rude to my hosts. So instead I took brief notes and then wrote up diary-like entries as soon as possible after the event had concluded.

During these events, a variety of Steam related discussion occurred. Children might ask their parents if they could use the computer after dinner, share houses might discuss upcoming Steam sales, or a couple might quickly eat dinner in order to get back to their game of *Civilisation VI* (Firaxis Games 2016). However it was equally useful when Steam was not discussed at all. These occasions revealed that Steam was a facet of an individual household member’s life that they kept separate from the other members. Seeing Steam take a back seat—particularly after it had been highlighted through the interview process or play sessions—became an important starting point for later discussion around household interpretations of Steam and ‘balanced’ videogame usage. These dinners and other social events worked best as a research tool when I was ‘ignored’. By this, I do not mean conscious avoidance of engagement, but rather the conversation that occurred after we had discussed my research, when I wasn’t directing the conversation. Again this is evidence of how engaging with mundane aspects of everyday life when conducting ethnographic-led research can produce useful data.

These three ethnographic tools—interviews, play sessions, and participant observation—were the cornerstones of my fieldwork methodology. Accordingly, these tools amplified the generation of useable data around how Steam usage is firmly situated in everyday home routines around Melbourne. The ethnographic methods and temporal scale of my fieldwork was central to such revelations. Through repeat
interviews I was able to recognise and track changing patterns and trends. Certainly, if I had more time I would have wanted to expand this temporal aspect. It would be useful to conduct further interviews and interrogate how Steam and household usage might change over the next few years—particularly as the NBN continues to rollout across Melbourne and wider Australia.

Yet even without longer-term analysis, the amount of data this research has yielded is extensive and adequate to support my thesis and answer my research question. Data collection occurred for at least three meetings per household across 18 households, providing an extensive set of qualitative data. Alongside that are the ancillary play sessions and forms of participant observation. The ethnographic data collection methods used provided insight into a diverse range of domestic configurations. By eliciting responses from participants beyond more clinical forms of data such as surveys, my research has been built on previous experiences in the field, helping to firmly locate it as an academic work employing ethnographic methods (Amit 2000).

Contextualising play
The final section of this chapter details the intricacies of my methodological approach with regards to framing and observing play practices through the Steam platform. This framing is an important part of how I collected data, particularly in my field notes. Within these notes I frequently considered household configurations involving Steam usage and videogame play by asking the three questions that now form the subheadings of this section; what is being played, who is playing and where is play taking place? While this does not exclusively concern play practices on Steam, they were the major form of engagement with the Steam platform for many participants. In addition, play practices form a central part of how Steam is influencing the domestic configurations of Melbourne households.

These questions and their subsequent framing of play are a key link between the theories discussed in the literature review of Chapter 3 and the data collection methods within this chapter. To this extent, this section examines how these questions informed my engagement with themes of practice, space, and place in order to respond to this thesis’ research question. Also contained within this section is a brief
discussion of limitations in my research design and approach. Crucially, this section analyses my attempts to adapt to such limitations during fieldwork.

Anthropologists, and those conducting ethnographic work, are being forced to reassess the successes and failures of online-based methodological research, solving new problems as they appear in this area of research. Fieldwork for this thesis contained both digital study directly in and through the Steam platform, and the face-to-face ethnographic methods discussed in the previous section. In order to tailor research design specific to this project, and to deal with related problems of enquiry, I developed related protocols by researching the methods and techniques of other digital ethnographers so as to better emulate successful ethnographic methods and techniques for research with a digital component.

The design of this thesis was also informed by its parent project—the aforementioned ARC project GoBM. As a sub-project operating in conjunction with GoBM, the research design of this thesis was developed using aspects of this established framework. To this extent this thesis employs a similar design, with similar ethnographic requirements, research methods and ethical concerns. However, while the two areas of research do overlap, they are not identical. Rather, the broad practices of ethnographic methods are similar, while the field sites and analytical frameworks differ.

The central tenet of GoBM’s research design has been the use of ‘a range of innovative ethnographic methods to explore the specific modalities and contexts of game practices’ (Hjorth 2014, p. 1). Likewise, the fieldwork component of this thesis was undertaken in the attempt of fulfilling a similar task—using ethnographic data to explore the practices of Steam within the contexts of Melbourne households. In this regard, this thesis’s fieldwork component engaged similar methods of research: through interviews, play sessions and participant observation discussed previously. In particular, the use of extensive play sessions with participants has been a key innovation this thesis has adapted from GoBM’s research design. Both digital and physical components were seamlessly combined, allowing for digital observation of play practices within the in-situ physical location of the Melbourne household.
Subsequently, this thesis’ engagement with play practices reflects the efforts of the GoBM project to interrogate three main themes: practice, space, and place. The first theme concerns the types and genres of videogames played through Steam—what is played? The second theme, ‘space’ comprises the Steam platform and the way users engage with it—who plays. In this way, ‘space’ refers to the site of Steam and how the space influences the position of the player within their household. The third theme revolves around the situational contexts of the domestic sphere—where play takes place. This thematic research design methodology was adapted from GoBM as it allows clarity of examination towards the interrelated understandings of play within this thesis’ field site.

Crucially, by analysing these three aspects of play within the contexts of Steam usage, I can identify how these aspects are complexly interdependent. This recognition has been useful in identifying the impact of the Steam platform on broader socio-cultural, technological, and economic dynamics within the household. Furthermore, the grouping of field notes and initial findings into these themes helped to answer the research question by enabling recognition of patterns of play practice across various households. The following subsections detail the areas of thematic research design adapted from GoBM, detailing how play practices were understood during data collection.

**What is being played?**

‘What is being played?’ was a key question often asked during participant observation sessions. This question concerned the games being played by participants and importantly, participant histories with videogames and potential future uses. In turn, what is being played impacts the configurations and context of the household the activity is taking place in. This impact is found in the relationship between game and player, an act of merging that Steinkuehler defined as the ‘mangle of play’ (2006). As mentioned during the literature review, Steinkuehler, and other authors such as Taylor, recognise that the ‘what’ of play is never simply the game being played (2006; 2009).

For example, Figure 4.1 (below) depicts *Rocket League* (Psyonix 2015), a game in which you control rocket powered cars playing soccer, or as the game refers to it, ‘soccar’.
When played in single player training mode, players practice moving their car around a stadium, unimpeded by other players. Players can also train against AI opponents. This form of play is different to someone playing online against human controlled cars through Steam’s servers. There are different scenarios involved; the AI of the computer-controlled cars is far more predictable than the reactive human player and while offline mode can be freely paused, online mode cannot.

As well as these considerations, online mode introduces new game elements such as in-game chat. *Rocket League* (Psyonix 2015) also offers local split screen multiplayer, allowing two players to play together on a single monitor. Therefore despite the fact that both single player and multiplayer play acts can be described as playing *Rocket League* (2015), when examining a participant playing *Rocket League* (2015), the question of ‘what is being played?’ differs dependent on the configuration of the game being played.

By observing people physically playing games, the researcher is able to get a much richer insight into the players’ actions, movements and presence (Steinkuehler 2006). The objects and devices used in play are entangled in this question of what is being played, as each component can change the form play is taking. By highlighting the tools used to engage with these notions of gameplay and becoming entangled with context, my fieldwork was better poised to show how the digital and the physical ‘interweave through each other’ (Boellstorff 2008, p. 200). Such interweaving was best observed during play sessions and their subsequent ‘diary entry’ style notes.
Various play sessions facilitated discussion between participant and researcher around the different ways one can ‘play’ on Steam. This discussion often also incorporated how ‘what is being played’ can influence the domestic configuration of participant households. Often this play-influenced configuration would remain in place after a participant had finished playing on Steam. Other researchers have noted a similar phenomenon, where the act of playing a game can have repercussions on everyday life after the player has finished playing the game (Newman 2013). This can affect contexts through, and around their scenarios of use, particularly within the domestic home (Dovey & Kennedy 2006; Jöckel, Will et al. 2008).

Also of importance in observing acts of play are the screens participants use, their immersion in the game—measured self-reflexively through post-play discussion with participants—also recorded in field notes by documenting participant ability to answer research questions while playing. The final crucial component of ‘what’ is being played is the Steam platform itself. For my examinations into this component of fieldwork, I attempted to create a framework combining digital ethnographic notions of play with the platform studies of Bogost and Montfort discussed in the literature review (2007; 2009). This framework has proven useful when considering how the games being played are influenced by the constraints of the Steam platform and other technology—such as the state of the NBN around Melbourne or the type of computer used by a participant. These themes are relevant to Chapter 5’s exploration of domestic LAN parties and Chapter 7’s consideration of temporally mediated play practices on Steam.

The question of ‘what is being played’ and its associated links to ethnography were especially useful in repeat interviews, where comparisons to earlier Steam habits and play practices could be made. These comparisons revealed how the types of games people play change over time and how this changing use is linked to their domestic configurations. As mentioned previously, this longitudinal data is a key point of analysis for much of the discussion chapters. The next thematic question developed from GoBM’s approach to play is ‘who is playing?’.

Who is playing?
The ‘who’ of my ethnographic research is another important question and forms the second major perspective on play practices for this thesis. Throughout fieldwork, I engaged with several different interpretations of ‘who’ when exploring play practices. One of the main interpretations of ‘who’ is the online persona of my participants—a persona and character which, on Steam, can ‘change’ quite easily. Users can change names, profiles, and characters at any time. In doing so, users renegotiate their sense of self within the digital site of Steam.

At the same time, a player at home can simultaneously be a daughter, friend, sister, teammate, opponent, or a variety of other contextual roles. In order to understand this fluctuating ‘who’ during fieldwork I attempted to recognise participants across the moments of play, tracking the changes they make as steps in their identity negotiation. This tracking was achieved through noting the games being played and how such play influenced participant interaction with other members of the household. For example a mother playing the relaxing exploration game *Proteus* (Key & Kanaga 2013) while her baby sleeps can be the same person screaming at her husband in a competitive *CS* (Valve Corporation 2000) game.

A crucial component to my interrogation of ‘who’ has been the roles my participants play, in-game, on Steam, and in their domestic environments. In this regard, I have drawn from the work of aforementioned STS scholars Wajcman and MacKenzie, discussed in the literature review of this chapter’s previous section. By deploying their theories in my analysis I am aiming to strengthen my exploration of how the technology of Steam is shaped by the social users of its technology. Such social shaping can be usefully addressed through Wajcman’s theoretical work and through the application of SST theory. This examination is primarily found in Chapter 6’s analysis of domestic spatial emplacements and socially navigated histories of device usage. However this consideration is also relevant to Chapter 7’s discussion of how Steam practices are renegotiated through the social contexts of the home at different times of day.

During data collection, participants were invited to dictate the ‘who’ of the moment, letting them talk and conduct themselves as they wish. This was most evident during play sessions, where participants would often take the lead in team games, coaching
me through the game. When considering the ‘who’ of each player, I often discussed with them how they would like to be referred to in the final thesis. Some of the most interesting insights emerged at the end of a play session when we were discussing ‘who’ someone was (had been) during that session, with players frequently keen to stress that they had been playing a role in-game. These discussions provide insight into how multiplayer games can blur the roles people play within domestic spaces. Here the work of Kennedy and her ‘technobiography’ terminology and methodology discussed in the literature review chapter was central to how I framed my field notes and data collection.

Further unpacking how questions of ‘who is playing’ informed data collection, fieldwork was often framed around discussions of families configuring their spaces through Steam mediated behaviours. Writers such as Dave Randall have explored how games and game playing can create new social groups and domestic rhythms within the home (Salen & Zimmerman 2006; Shaffer 2006; McGonigal 2011; Randall 2011) and there has been significant debate around the role of games and new media in negotiating identity (Turkle 1995; Pulos 2013). The work of these authors provide insight into how games and new media can be formative to individual lives, domestic contexts, and wider communities. For this reason, the ‘who’ has become a complex methodological consideration. By more deeply engaging with the social aspect of ‘who’, these authors have moved to address what ‘the continuities and discontinuities of game playing might be in the light of the social arrangements of domestic life’ (Randall 2011, p. 111). These questions of domestic arrangement invite thinking about how personal identity is shaped through its relations to domestic technology. These theories of domestic rhythms and social interaction were a frequent consideration during fieldwork, particularly when conducting participant observation. The findings gleaned through such considerations are central to Chapter 5’s examination of the organisational work involved in domestic LAN parties, as well as Chapter 7’s exploration of how external social relationships are consolidated through domestic Steam usage. The final key question when contextualising play within fieldwork research concerns where acts of play are taking place.

**Where is play taking place?**
The final methodological consideration of my research framework is the ‘where’ of play. Again here the intersections between differing spheres of influence are the key focus. By uniting the ‘where’ of Steam with the ‘where’ of the household during fieldwork I better positioned my research in ethnographic methodology. Through recognition of Steam as a place when interviewing participants, data collection focused on how the place of Steam overlaps into the place of the domestic home.

The ‘where’ of Steam again recalls ethnographic works that have explored a digital site as its own place, complete with its own rules, traditions and history (Boellstorff 2008; Lindemann 2005). How I negotiated Steam’s boundaries and overlaps during fieldwork had significant impact upon the type of insights it has revealed. By using digital and physical research methods towards data collection, a more complete picture of where play is occurring can be developed. How this thesis engaged with ‘where’ play is taking place heavily informed the ethics and design of this project. In order to collect data that accurately reflected the site of play, fieldwork frequently combined physical and digital places. By visiting people’s homes and the everyday spaces in which they use Steam and play games, a clearer picture of the relationships between user and game can emerge. Repeat interviews bolstered these findings and provided insight into how play practices can change over time, further revealing how Steam is enmeshed into everyday life. This was a particularly important focus as I had significant prior experience with the Steam platform. Therefore when conducting fieldwork it was crucial to note that this was my participant’s framing of where play is taking place—and this ‘where’ may be distinctly different to my own understanding of the Steam platform.

‘Where is play taking place?’ became of increasing interest during the play sessions. By engaging in play sessions with my participants, I became a participant in their play. Indeed, it became our play. An element of self-reflexivity inevitably becomes part of this question. An ethnographic method is the best approach to recognise and discuss these dimensions to consider a potential limitation to this thesis—my personal history with the Steam platform. Before beginning research, I was an active member of Steam, logging onto the platform at least once a day and often much more than that. My home desktop was set up to automatically connect to Steam. I had an active friends list. So when I began this project, I felt as though I was conducting
ethnographic research ‘at home’. To this extent, I found the work of Noel Dyck (2000, 2012) very useful in recognising and adapting this autobiographical position.

Although Dyck’s (2000, 2012) work looks at his role and later research in children’s sports groups, I found clear links between his approach and mine, particularly in his balancing of personal and academic interests, recognising where I am situated in relation to my field site. It is not an easy task to ‘turn off the anthropological eye’ (Dyck 2000, p. 44). Yet when dealing with personal history it is important to know what is ‘off the record’ (Dyck 2000, p. 41). Thus I did not use certain stories or examples I felt were too personal, or that were discussed with me as a ‘friend’, rather than as a researcher. In cases where these examples were used, I was careful to make clear to the individual how they would be used. In this way, my place as a ‘native’ Steam user was a constant and important factor in my research.

Furthermore when a participant provided me with a ‘tour’ of the Steam platform I made sure to remain silent. I took notes as though this was the first time I had seen the Steam platform and did not correct participants on the terminology or history of Steam. Although participants were always aware that I did have some prior knowledge of Steam, by engaging in this manner I was able to best ensure the ‘where’ of Steam being recorded in field notes was true to how the participant understood the platform.

Methodologically, my thesis has its values and it limitations. While I have attempted to fully engage with play practices through the questions outlined above, I have only been able to do so within the bounds of my research question and the temporal limitations available to me. Ethnographic research is about more than simple recounting of events. This thesis’ ‘thick description’ of Steam’s position within the Melbourne household was aided significantly through exploration of the play practices it facilitates. The ‘thicker’ background follow-up interviews and play sessions allowed for more in-depth qualitative data to be recorded. Wherever possible during fieldwork I strove to let participants dictate the games being played and the locations play took place. These factors allowed fieldwork to capture the most authentic data possible given my prior knowledge and use of the Steam platform.
This chapter has outlined the methodological approach of this thesis. It has done so both in a practical manner by explaining the processes of data collection and in a contextual manner by outlining how this thesis used the parent project GoBM to inform its research design and approach to observing play practices. By illuminating the methods of interviews, play sessions, and participant observation this chapter has provided context to the analysis of data in Section II. In addition the discussion of how play practices were framed during fieldwork offers context to how they are addressed during analysis.

This concludes Section I of the thesis. The chapters within Section I have served to outline the key academic contexts relevant to this thesis’ exploration of domestic Steam usage within Melbourne: the field site, the literature, and the methods. Accordingly the following chapters comprise Section II of the thesis. Section II consists of four discussion chapters and a concluding chapter. These chapters attend to this thesis’ interdisciplinary contribution at the cross section of digital ethnography, media, games, and platform studies. Section II achieves this contribution through an ethnographically framed analysis of the ways in which the Steam platform is influencing the domestic configurations of Melbourne households.
Section II—Discussion
Chapter 5. ‘I love to host’: Location and LAN parties

This chapter builds from Section I’s overview of the context, research design and methodological approach of the thesis by beginning analysis of the fieldwork conducted. Discussion within the chapter centres on how the location of the city of Melbourne informs domestic Steam usage practices. This discussion focuses on two key themes; the relationship between access to Steam over Melbourne internet connections and the circumventing of this issue through the organisation of ‘LAN parties’. These local connections can be made in various ways, from ethernet cables to WiFi or Bluetooth. In the context of the families/households fieldwork was conducted in ‘LAN parties’ are videogaming events held in a private domestic space.

Jansz and Martens’ (2005) analysis of the social contexts of videogames, frequently references the negative portrayal of LAN parties in the media and wider social discourse. Such a portrayal revolves around the perceived ‘anti-social’ nature of
videogame players who the media fears are untrained in face-to-face contact (Swalwell 2003). LAN parties challenge these assumptions (Swalwell 2003). The co-present nature of the LAN party serves as an excellent counter-argument to this portrayal as it provides extensive evidence of face-to-face interaction between videogame players (Swalwell 2003; Jansz 2005). To this extent, LAN parties provide an opportunity to explore the domestic entanglements between Steam and the household from an unorthodox perspective. Such exploration is achieved through ethnographically grounded research into LAN parties. The data generated by this research contributes to the debates around the perceptions and growth of LAN parties, highlighting the value of exploring them in an ‘increasingly networked age’ (Taylor & Witkowski 2010, p. 195). These perceptions are also of relevance to Chapter 8’s discussion of ‘excessive play’ practices in Melbourne households.

The material and data for this chapter draws upon interviews and participation in three key groups who engaged in LAN party events, as well as ancillary examples from others participants who had used LAN connections for other purposes (such as sharing content from a school or workplace). Some participants had attended only one or two LAN parties while others regularly hosted or attended events. I also spoke to various group sizes, from a large LAN party that consisted of ten players across two teams to another that included three players who all played against each other.

In order to explore the LAN party practices I experienced and engaged with during fieldwork, it is first necessary to outline what parts of Steam are involved in this phenomenon. Such outlining is important as it helps to unpack why and how these events are occurring through the Steam platform. Despite being more widely understood as a digital distribution service and game store, Steam also plays hosts to a variety of online servers that facilitate online multiplayer gameplay practices. However Steam’s facilitation service is by no means perfect and LAN parties often involve the use of other services (both hardware and software)—depending on the size of the videogames and the number of people present for the LAN party.

Following a review of LAN parties in gaming literature and the Steam platform’s entanglements in the phenomenon, the chapter turns to three key participant
examples and several points of ancillary fieldwork data to explore LAN party practices using Steam within Melbourne households.

**LAN parties in the gaming literature**
LAN parties have a strong history in computer based videogaming (Ackermann 2012). In the late 80’s and 90’s, these events were the main access to multiplayer gaming for many players (Jansz 2005). Without sufficient internet connections, or even no internet connection, LAN parties were the one of the only opportunities to play at home with others. The other alternative—playing over a single console—often limited players to very small portions of an already small screen, as well as a different selection of videogames.

In my own childhood, I remember attending many birthday parties where we would play *Age of Empires II* (Ensemble Studios 1999) or *Diablo II* (Blizzard North 2000) together late into the night; each person huddled around a separate screen. In more recent times widespread internet access has seen a decline in the necessity for a LAN party to engage in multiplayer videogaming (Kuchera 2015). However, several factors such as the low speeds of Australian internet connections, or the limited data of the NBN, many research participants acknowledged a return to this older style of multiplayer videogaming. As well as the practical case for holding a LAN party, the events can be immensely fun, potentially offering experiences unavailable through online multiplayer through the co-presence and communicative practices of the LAN party.

The LAN parties explored during fieldwork are a similar phenomenon to what Judith Ackermann describes as ‘LAN Happenings’ (2012). However throughout fieldwork, no participant referred to them as such. Instead they were universally recognised as ‘LAN parties’. Ackermann also refers to them as LAN parties in her field notes, indicating that it seemed to be the participants’ turn of phrase (2012). Ackermann interchanges the terms and not much is gained through the ‘happening’ classification. For sake of continuity I employ participant’s terminology of the ‘LAN party’, rather than Ackermann’s ‘LAN happening’ throughout analysis. Ackermann notes in her introduction that ‘LAN parties are not very well represented in scientific research’ and calls for increased ethnographic research into the area (2012, p. 465). Such
ethnographic research is the key focus of this chapter and Ackermann’s work offers significant value to this thesis and my own research. In particular, Ackermann’s focus on the logistical work required for these LAN parties is of particular importance; LAN parties often involve moving several desktop computers to different houses, reconfiguring network settings, port forwarding, alongside other technical and physical manoeuvres.

LAN party occasions can be broadly broken down into three main categories; the LAN party, the private LAN, and the LAN event (Vogelgesang 2003). According to such categorisations, the private LAN is a smaller, often in-home event, the LAN party is a medium scale event up to 100 or so players, and the LAN event is a formally organised occasion, often with sponsors, prize money, and publicity (Vogelgesang 2003; Jansz 2005; Ackermann 2012). Taylor and Witkowski expand this definition through their recognition of the variety of acts that can fall under the banner of LAN parties; ‘from file sharing and demos to game playing and other activities’ (2010, p. 195). The two main examples this chapter explores fall within academic categorisations of private LANs—small groups playing together within a private domestic space. Moreover, most of the ethnographic data this chapter analyses concerns the playing of videogames at LAN events, however there are some examples of file sharing and other social activities.2

**Steam and its Servers**

In Section I of this thesis, Chapter 2 described the constitution, layout, and infrastructure of Steam. Yet what Steam ‘is’ in relation to LAN parties is somewhat different to the online platform discussed in Chapter 2. Where Steam as a digital distribution platform offers game sales, downloads, mod management, and other services, as a companion technology to LAN parties its roles—and impacts—are shifted.

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2 The research participants, who referred to any and all acts of LAN videogaming as ‘LAN parties’, did not employ the academic categorisations and definitions described above. Using the broader ‘LAN party’ terminology for all events is necessary for this research, rather than the academic sub-classifications, as I believe it better helps to build an accurate picture of the practices engaged by participants.
One of the crucial aspects to this altered role is how Steam is accessed in offline mode, allowing users to access their accounts and games without an internet connection. When a user attempts to start Steam and a connection cannot be established, a prompt appears to start the software in its offline mode. An example of this is seen in the image above (Figure 5.2). This offline mode allows Steam users to access and play their games while offline. Offline mode was often used by participants when little or no internet connection was available, as well as frequently being the mode used during LAN parties.

However Steam’s offline mode does require the game to already be installed onto the hard drive of the computer for a user to play it. Similarly, online multiplayer games cannot be played while in offline mode. These requirements can limit the range of games available to Steam users in offline mode. In particular, this requirement can create issues during LAN parties. These issues arise out of a game’s software files not being updated when Steam is used in offline mode. This means that users can potentially be playing different ‘versions’ of a game, such as version 1.01 or version 1.02. These different versions are unlikely to be compatible—making it impossible to play different versions of a game with other Steam users during a LAN party.
To this extent, even in ‘offline’ LAN parties internet connections can play a crucial role as they can impact the preparation of the event. This ‘preparation’ is seen in Steam’s ability to keep games updated or modified. This is one of the key ways in which the Steam platform and Melbourne internet access can influence the practice of multiplayer LAN parties. In particular, while Steam’s offline mode has little impact upon single player videogame practices, the affordances generated through the software come to the fore during LAN parties.

The next section of this chapter focuses on examples of Steam-influenced LAN parties that participants discussed with me during fieldwork. This includes traditional LAN parties played over a local area connection, but also includes instances of participants meeting up and playing a videogame together over standard internet connections. Furthermore, it draws from ancillary data generated during my participant observation in a LAN party. This chapter explores a variety of LAN parties, including cases where participant players played together through a single computer and screen. Although some of these forms of play are not strictly a ‘LAN’ in a technical sense, my participants still referred to them as such. Even when playing over a single computer, the act of playing together ‘locally’ (co-located) was still widely referred to as a LAN party. This broad focus and recognition of what the player labels a ‘LAN party’ helps to provide context to the themes of location this chapter is exploring. These themes concern adaptive practices in response to Australian internet connections, spatial reconfigurations, and co-present social play.

**Barry: File sizes and lengthy downloads**

Due to the large file size of many of today’s videogames, downloading all the files required to play a particular game can take a significant amount of time over slow, or even standard, Australian internet connections. Barry (aged 24 during initial meeting), a keen first person shooter (FPS) and RPG player, stated that he experienced download times in excess of 30 hours. Typically these long download times are for very large, graphically demanding games such as *Wolfenstein: The Old Blood* (Machine Games 2015) or *The Witcher 3: Wild Hunt* (CD Projekt Red 2015). As mentioned above, these download times are partially due to the large file size of the games. *Wolfenstein* (Machine Games 2015), for example, is around 40GB to download through the Steam platform—a massive size compared to the first game in the series, 1981’s
Castle Wolfenstein (Muse Software 1981). On a modern computer, this early 80s game could be downloaded for a total file size of 69KB. The problem of file size is further exacerbated by the slow speeds and frequent dropouts of Australian internet connections in Melbourne homes.

![Steam downloads section](image)

*Figure 5.3: The Steam downloads section (Steam 2016a)*

Once a game has been downloaded onto the hard drive of a Steam user, the game can then be played through the Steam platform by opening the software, navigating to the ‘library’ section and selecting the game to play. How this play occurs changes depending on the game of choice. Some offer only single player experiences while others require Internet connections for multiplayer use. In addition, modern games often have ‘updates’ through which content is changed or fixed. These updates require further files to be downloaded. These newer files are also downloaded through the Steam platform, under a separate ‘downloads’ section. An example of this section is seen in the figure above (Figure 5.3).

Figure 5.3 shows the download status of two games through Steam—Smite (Hi-Rez S studios 2014) and Faeria (Abrakam 2017). Smite (Hi-Rez S studios 2014) has just begun a large download of 6.3GB. To the right of the game’s icon an estimate download time is given. Steam is estimating that at the current download speed of 1 MB/s Smite (Hi-Rez S studios 2014) update will take roughly 1 hour 23 minutes to install. Faeria (Abrakam 2017) has recently finished downloading and installing a small update, so is listed as completed and ‘ready to play’.
The estimate of the *Smite* (Hi-Rez S studios 2014) download time is based entirely on the download speed of the moment—which was highly unlikely to remain at the (rather fast) speed of 1 MB/s. This screenshot was taken off my own Steam account when I logged into Steam over an NBN connection in the inner Melbourne suburb of Fitzroy. The speed shown is much faster than the average speeds of the participant households. These uneven download speeds between various geographical regions of Melbourne—and even across a single home’s connection—contribute to the issues around Steam downloads within participant homes.

These issues of download requirements and Internet problems also have further ramifications upon Australian and Melbournian Steam usage. One of the largest problems participants detailed during fieldwork was when they had attempted to play videogames online through a sub-par internet connection. In these situations problems arose because a slow connection can lead to choppy gameplay as connections fail to properly communicate with the videogame’s servers. For participants, this process was difficult and frustrating.

Participants frequently referred to this issue as ‘lag’, which is defined in the context of online videogame play as a momentary loss of synchronisation (Boukerche, Shirmohammadi et al. 2006). When lag occurs, users experience a delay between a player’s input and their in-game action. As a result of this delay bullets don’t go where they should or a player may fall off a cliff that they wouldn't have without the lag. These are only examples; there are many other undesired occurrences. For some participants, the lag on their in-home internet connections was so disruptive to their play experience that they simply avoided it and instead chose to play single player games. This choice was primarily made because single player games can often be played without a constant connection to the internet, thereby avoiding any potential instance of connection-related lag.

For example, Barry spent days trying to get a decent internet connection set up in his home in Melbourne’s north. Barry was looking to play *CS:GO* (Valve Corporation 2012). He tried many different setups and even bought a new router with the hope of stabilising his connection. But it was all to no avail, with his internet remaining slow.
and unstable. Deflated, Barry decided to buy and play a single player game. He purchased the single player game *Wolfenstein: The Old Blood* (Machine Games 2015) to play over his week off.

Other participants have attempted to organise LAN parties with the hope of playing multiplayer games without the lag they frequently experienced over Australian internet connections. Some players also sought to recapture a sense of the nostalgia of gaming with those around them from their childhood—akin to my own description of fond childhood memories of late night LAN parties. Other players whose childhood did not include LAN parties sought to connect with their cultural understandings of LAN parties and LAN gaming. This sense of nostalgia can be understood as an attempt to turn a specific location into a site for intimate communication with others—the use of LAN parties and their reshaping capacities to turn the home into a social site and event.

The next two sections of this chapter outline describe two in-depth examples of LAN parties; the nostalgic *CS* (Valve Corporation 2000) tournaments Albert organised and the all-night real-time-strategy (RTS) games Casey hosted in her small apartment. These case studies highlight the very different forms LAN parties can take and provide insight into why Steam users are turning (and returning) to this form of videogame play. They link the phenomenon of LAN parties to this chapter’s exploration of location and the impact LAN parties can have upon sites. Following these examples the chapter analyses these findings in their academic contexts, examining how the technology of Steam influenced these domestic social gatherings around Melbourne.

**Albert: Nostalgia, CS, and fluid play**

Albert (age 21 when fieldwork began) has watched and played *CS* (Valve Corporation 2000) since he was in primary school. *CS* (Valve Corporation 2000), one of Steam’s flagship games, started off as a mod of the Valve game *Half-Life*, and Albert used to watch his older brothers play both *Half-Life* and *CS* (Valve Corporation 2000). As he grew older, Albert was eventually allowed to play with them. *CS* (Valve Corporation 2000) involves two teams—‘terrorists’ and ‘counter-terrorists’—attempting to defeat each other either through elimination or other specific win conditions, such as rescuing hostages or detonating a bomb. Games are played across several ‘rounds’,
with each player only having one life per round. Players fight using guns, grenades, and other ‘tactical’ gear. Damage taken from weapons is unusual in CS (Valve Corporation 2000). Unlike many videogames, where player characters can absorb a large amount of enemy fire, damage taken in CS (Valve Corporation 2000) is scaled very high—to the point of being ‘realistic’. In CS (Valve Corporation 2000) a single well-placed bullet is enough to kill an opposing player, eliminating them from the ‘round’. Featuring maps across a variety of environments, from urban offices to ancient ruins, CS (Valve Corporation 2000) is fast, frantic and tense.

Over the years, CS (Valve Corporation 2000) and Albert have had a long and interwoven relationship. In high school, Albert’s weekends were often filled with CS (Valve Corporation 2000), first through a version known as ‘1.6’ and then later the graphically updated version referred to as ‘Source’. Albert played both versions of the game on the shared computer in the family study. After his brothers moved out, a visit by them usually involved a ‘CS session’. According to Albert’s parents, these sessions consisted of the three boys staying up ‘far too late’ playing CS (Valve Corporation 2000). On these occasions Albert played on the family computer and his brothers on their laptops. Sometimes several of Albert’s friends joined in on these sessions—the groups played as two teams of four facing off in-game over a LAN connection. As CS (Valve Corporation 2000) changed, Albert’s interactions with the game changed too. In 2012, the year in which Albert started university, CS (Valve Corporation 2000) released a standalone version, updated both graphically and mechanically, known as CS:GO (Valve Corporation 2012). Living in college at University, Albert and his friends took advantage of the college’s inter and intra net connections to play the game at any spare moment. They frequently set up arrays of 20 laptops in the college basement over a weekend.

However, when Albert moved out of college and into a small share house with his best friend, he found it increasingly difficult to play CS (Valve Corporation 2000). Lacking a stable internet connection, he couldn’t reliably play online as the lag he experienced severely hampered his ability to play and react in-game. The change of living location

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3 This was the term Albert used to describe playing CS for an extended period of time (either online or during a LAN party).
also meant that he only had his housemate to play with locally. For Albert this was not nearly enough people for an engaging match. The frequent game updates Steam pushed his computer to download further exacerbated the problems. His struggling internet connection and ageing laptop combined to force him to the point where he ‘did not have much fun’ playing CS:GO (Valve Corporation 2012).

Albert and his housemate missed their favourite game. They had an idea; they would recreate the all-night gaming sessions they remembered from their teens. They invited Albert’s brothers (both now in their 30’s and one with a young child) and half a dozen of their college friends and fellow CS (Valve Corporation 2000) players around for a LAN party. Their home was small, so their decision to host a LAN party required domestic reconfiguration to accommodate the event. One team of five was set up in the living room, squeezed around a small dining room table. The other team was based in Albert’s room, hunkered around his desk. Several people brought desktop computers and played seated on the floor; their monitors, keyboards, and computer mouse squeezed onto flimsily constructed coffee tables.

The group decided that the game of choice would be the ‘original’ CS (Valve Corporation 2000)—as his brothers did not own CS:GO (Valve Corporation 2012). However this decision caused another issue as many of Albert’s college friends didn’t own the original CS (Valve Corporation 2000). He initially considered using a ‘cracked’ version of CS (Valve Corporation 2000)—a pirated version previously used by Albert whilst growing up. However, due to the digital rights management (DRM) Steam uses, they wouldn’t be able to play together with illicit copies.

Their solution to this problem was to legally purchase the rights to the game through Steam, but instead of downloading it over the internet from a server, they copied the files from their friend’s computers via USB. This method saved hours of download time over Albert’s very slow internet connection. Finally, all the networked computers had the chosen version of CS (Valve Corporation 2000) installed and were ready to go. The LAN capabilities of CS (2000), Steam and modern computers meant that they wouldn’t have to worry about lag. As Albert excitedly explained to me when he recounted the event, ‘I hadn’t played a match where I wasn’t at least half a second behind in months, I was worried I’d be rusty and get destroyed!’
They separated into two teams—Albert, his housemate, brothers and another friend against five of his college friends. They all agreed unanimously on the map; de_dust—a signature of the series and a map featured in every version of CS (2000). This cross-version map meant that his brothers, who hadn’t played CSGO (Valve Corporation 2012) and his college friends, who hadn’t played earlier versions, would be on an equal playing field. Finally, after nearly two and a half hours of set up, troubleshooting and discussion, they entered the game world and began their lag-less LAN party. They played for a total of 6 hours, from 8:30pm until 2:30 in the morning. Over time, they changed modes, swapped teams and recaptured the sense of ‘party play’ that Albert missed.

The night was deemed a great success by all involved and plans were tentatively made for another. However Albert informed me during our final meeting they had been unable to set up another night on the same scale, due to the fact that the other players, in particular Albert’s older brothers, had full schedules of their own. For Albert, this served as excellent evidence for the pros and cons of LAN parties versus online gaming:

Online gaming, no one needs to be there. You can jump on and play with whoever. And LAN parties, although they’re more fun when you can get them going … They take a whole lot more time—and a lot of logistics.

The form Albert’s LAN party took sits in stark contrast to the experiences of the third individual in this chapter, Casey.

**Casey: Account sharing and the ‘single computer party’**

Casey, a late twenties South Melbourne resident had a similar problem to Albert; her internet connection was not strong enough to support online multiplayer games. Casey and two of her work colleagues had all expressed an interest in the Heroes of Might and Magic (New World Computing 1995) series of games. This game series involves turn-based moves where players control the titular ‘heroes’. These hero characters take a semi role-playing game element. They can grow levels, learn spells, and collect items to enhance their abilities. Alongside this, the heroes run a town
where they can also raise armies, recruiting a variety of monsters, wizards, and warriors to their cause. Played on a large map, players can move a set distance each turn, capturing resources and battling other armies consisting of both non-playable character (NPC) enemies and opposing players. A screenshot of *Heroes of Might and Magic III* (New World Computing 1999) is seen below in Figure 5.4.

Figure 5.4: In-game screenshot of *Heroes of Might and Magic III* (New World Computing 1999)

Casey had fond memories of playing one of the titles (there are various editions, remakes and expansions for the game) with her father when she was little. Her early memories are of sitting on his lap, watching as he played *Heroes of Might and Magic III* (1999). Her later memories recall occasions where she played this game with her father, both co-operatively and competitively. When Casey and I discussed the screenshot above, she described to me the powerful sense of nostalgia it invoked for her:

I can almost hear the music you know. I spent so much time looking at screens like this. Even before I could read, and Dad would have to explain what did what to me, ha-ha.

However, as she grew up, Casey’s interest in *Heroes* (New World Computing 1999) waned, as did her interest in RTS games in general. While videogames remained a passion, her gaming interests moved towards *Minecraft* (Mojang 2011) and the *Pokémon*
(Game Freak 1996) franchise—neither of which are sold through Steam. During our initial meeting, Casey explained to me that she had only recently begun using Steam to play Starbound (Chucklefish 2016), a science fiction themed exploration and building game. One day, after she turned on her home desktop computer and logged in to Steam to play Starbound (Chucklefish 2016), Casey noticed a high definition (HD) version of Heroes III (New World Computing 1999) on sale as part of the Steam summer sale event. Steam sales occur several times throughout the year and feature heavily discounted games, often reducing gaming titles to a fraction of their normal cost (Chapter 8 discusses Steam Sales in greater detail). Casey quickly messaged the two friends she had recently discussed Heroes (1999) with through her Steam friends list and the three agreed to buy the game and play together over the internet.

However when they tried to play over the internet, they ran into several issues. First and foremost, Casey’s internet could not establish a stable connection. This resulted in a stuttering and jagged game. The game itself also had multiplayer connection issues. Compounding these technological issues, and trying to organise a time when all three were casually free at home proved to be a frustrating task—particularly due to the large time investment (sometimes several hours) required for a game of Heroes (New World Computing 1999).

Their solution had several parallels to Albert’s. Both involved a physical meet up at the one location (in this case, Casey’s apartment). Both worked around unstable internet connections by using an alternative mode of play. However, while Albert’s solution was the multi-computer CS (Valve Corporation 2000) LAN party, Casey and her friends focused their LAN party around a single computer. They achieved this through a mode of Heroes (New World Computing 1999) called ‘hot seat’. In hot seat, one player takes their turn while the other two wait. Once the player has finished their turn, they move off the device and pass their turn to the next player, who then takes their own turn, and so on.

They configured Casey’s living room so that one player sat at the dining table, using Casey’s desktop—moved into the living room for the occasion—to take their turn, while the other two sat on the couch below the table. A movie was put on the television to give those waiting for their turn something to watch—though according
to Casey it was never seriously followed. Casey stated that this was the best formation as it meant all three players could maintain consistent conversation without running the risk of ‘screen cheating’. Screen cheating occurs when someone watches another player’s turn and gains an unfair advantage out of the knowledge gleaned.

Casey felt that the night was a resounding success—the three played *Heroes* (New World Computing 1999) for hours and have since organised another few events, even recruiting a fourth player. They also made several tweaks to their formula to improve the experience. These changes included a rule that player whose turn it is must wear headphones—so the others can discuss strategy without the person playing overhearing it—and instead of the non-players watching a movie, they watch music video clips, so that people did not miss anything while taking their turn.

During subsequent interviews with Casey, she explained that the LAN party had become a semi-regular event among these friends. Although there was no set schedule, they generally met every month or so for an evening of videogames. She also mentioned how they had branched out from *Heroes* (1999) into other games such as *Age of Empires II* (Ensemble Studios 1999) or the *Civilisation* (Firaxis 2010) series, however Casey said that *Heroes* (New World Computing 1999) remained her favourite. They also started a Facebook group to help organise the nights. This Facebook group also served as a hub for general videogame discussion, with the four members sharing content and ideas for new games to try.

Returning to Casey’s initial LAN party, there was some unusual fallout from the session. Casey’s two friends now had copies of a game they had no interest in playing alone. They had all bought separate copies of *Heroes* (1999) with the intent to play over the internet, but now their play revolved around the hot seat mode on Casey’s computer and Steam account. Due to the nature of how they used Steam, both were very unlikely to play *Heroes* (1999) outside of the context of Casey’s LAN parties, with neither Casey nor her friends expressing much interest in playing the game solo. So they decided to see if Steam would give them a refund for their purchase.

Steam’s relationship with refunds has changed over time, as outlined in Chapter 2. The current criteria for a refund is that the user has purchased the game in the last
fortnight and has less than two hours total in-game playtime. While they had very little playtime in the game, by the time they were looking to refund it Casey’s friends had owned the game for over three weeks. Despite this time gap between purchase and refund request, both of Casey’s friends managed to get refunds for the game. They used a portion of their refund to pay Casey for her copy, so that the three friends now effectively shared ownership of the game. Together they have now accumulated over 30 hours of playtime in *Heroes* (New World Computing 1999).

When I met with Casey for the second time she explained to me that when their new fourth member joined the group they offered to contribute money to this shared ‘ownership’. However Casey and her friends decided that such financial contribution was not necessary—they were simply happy to have another friend to play with. Since then, their new ‘member’ has bought other games capable of being played in hot seat mode, such as *Sid Meier’s Civilization V* (Firaxis Games 2010). According to Casey these purchases were made to ‘balance out’ the costs of the LAN parties between all members. The events themselves continued to be held at Casey’s house. I asked Casey if this was a burden for her and she explained:

I love to host; it’s really nice getting to meet up in my private space, rather than a bar or whatever. And if I host, then I don’t have to worry about going home, I’m already there!

The notion of the social meet-up in a domestic space is an important consideration when analysing a LAN party, as it impacts the methods by which newer members enter the established location and setup of the event. The examples above highlight the different ways people have played games together through Steam, working around the limited capabilities of Australian and, more specifically, Melbourne internet. Three key aspects of these examples appear ripe for further analysis.

Firstly all three examples indicate a wide variety of play styles and practices that exist through Steam—from multiplayer videogames across connected devices to turn sharing on a single computer. Also evident are emergent patterns of sharing and notions of digital ownership through the Steam service. Finally, the limitations Melbourne internet availability places upon a user’s engagement with Steam are
brought to the fore through participant frustrations with domestic internet connections. The following section of this chapter analyses these three key themes to aid in this thesis’ exploration of how the Steam platform is influencing the domestic configurations of Melbourne households.

**Play styles**
The first theme—play styles and practices within locations—is heavily present in all examples. The encounters are characterised by the coming together of individuals to a private, or domestic physical space to play a digital video game (Unger 2012). Alongside this physical meet up, the parties themselves required a significant amount of contextual set up, social organisation and preparation time. Wajcman and Mackenzie’s SST theory provides a useful starting point for insight into these practices (1986). Their work and edited volumes argue that social scientists have invested too much attention towards the effects of technology on society—at the expense of examining how this technology is shaped by society (MacKenzie & Wajcman 1986; Williams & Edge 1996). They argue that the technology used in everyday life is continually being shaped through the spheres of influence it moves through.

Under the social shaping of technology theory, several factors influence the design and implementation of technology. These factors include broad topics such as political, organisational, cultural, and economic (Williams & Edge 1996). While these factors certainly played an important role in the development of Steam through the rise of socially motivated developments such as ‘friends lists’ and in-game communication mechanics, they are also visible in the above examples on a more ongoing basis.

In Albert’s case this ongoing shaping is seen in how he reconfigured his house into two main areas—one for each team. This manoeuvre not only reconfigured his domestic space for play, but also involved the adaptation of the parties’ technology to its new requirements and environment. This adaptation included ensuring each member of the LAN party had the correct version of CS (Valve Corporation 2000) installed and the correct LAN settings enabled on their computer. Although Casey’s event required less technological set up as the games were played through a single computer, the space of her home was also rearranged in order to better facilitate game play and social interaction. These examples distort SST theory by highlighting the relationality
between technology and the social. These cases show how the LAN party relies heavily upon the ‘social context’ under which the games are played (Jansz 2005). Within these cases of reshaping spaces and technology there is interesting evidence of a reciprocal relationship between a locations’ configuration and the usage practice of technology related to gameplay.

Therefore SST alone is not enough to unpack these LAN parties. Applying a domestication theory lens to these examples, this practice is a clear case of ‘conversion’ (Hirsch & Silverstone 2003; Berker, Hartmann et al. 2005). As discussed in the literature review, these conversions involve reshaping meaning through technology. This attention to reshaping is crucial to the LAN party cases in this chapter. The reason these conditions are so crucial is because they sit at the heart of both Albert and Casey’s LAN parties. In both cases the ‘conditions’ of the event reshaped the use of the technology alongside the physical space of the domestic home—adding a new pattern and rhythm to the devices’ usage. Elsewhere in my fieldwork, further examples of similar reshaping were observed.

Joshua (aged 27 when fieldwork began) and Alex (aged 28 at start of fieldwork) lived together as a couple in inner city Melbourne. They wanted to play Borderlands 2 (Gearbox Software 2012) together over Steam. Normally they played games over their shared Xbox One. Joshua, the main Steam user of the household, had seen Borderlands 2 (2012) for sale on Steam and decided to buy it so that they could play together. Their normal computer configuration was that Joshua’s desktop computer stayed in the office and Alex used a laptop on the dining room table. However they found that this meant they were too far away from each other to play co-operatively together, with their attempts at communication often deteriorating into incoherently screaming from room to room.

Further limiting their attempts at Borderlands 2 (2012) co-operative play was Alex’s inexperience with the keyboard and mouse controller configuration for computer based play. To solve these problems, the two reshaped their engagement with technology to alleviate these issues. Joshua moved the desktop into the living room, so that they two could sit next to each other and a controller was repurposed from their
Xbox One system so that Alex could play using the control system he found most comfortable.

The example of Alex and Joshua highlights how these Melbournians reshaped the norms of their domestic space to better facilitate their desired Steam usage—they reconfigured their domestic space to meet their in-game communicative needs but were also constrained by what the technology allowed. This is further evidence of a reciprocal relation rather than a one-side shaping, again moving beyond SST theory, and how Joshua and Alex’s case differs to the examples of Casey and Albert. Where Casey and Albert reshaped their homes around LAN parties and insufficient internet connections, Joshua and Alex’s motivation was to find a configuration more comfortable to them for the type of technology they wished to use on a frequent basis. Therefore, where Albert and Casey were responding to the limitations of internet technology in Melbourne, Alex and Joshua were using the Steam platform to engage and explore a new scenario of domestic videogame usage together. This domestic reshaping around internal habits of use relates to the discussion of spatial interactions with the Steam platform in Chapter 6.

It is also worth noting the technological colloquialism’s that come along with such conditions of play. Although Casey’s event featured no actual local area networking—instead being played completely offline, she still referred to the occasion as a ‘LAN party’. The usage of this terminology is testament to the widespread usage of the word in Australia. Therefore the term seems to refer less to the technological workings of the event and more to its play practices. The key segment of this practice is the physical co-passage of the players. In both Casey and Albert’s examples face-to-face communication played the main social form of discussion, with CMC set aside. This eschewing of a game component due to the social conditions of play links theories of domestication with Taylor’s notion of the assemblage of play (2009).

Again this theory of assemblage sits opposed to SST through its recognition of mutual shaping. Steinkuehler argues that the games people play are not always the game that was initially designed by its creators, but instead becomes the result of a back and forth dialectic between player, context and game (Steinkuehler 2006). This is seen in a particularly strong light in Albert’s LAN party, where the in-game communications
framework became redundant in a co-present domestic space. Not only did such reconfiguration of play practice shift the style of play, but it also shifted the style of communication. For both Albert and Casey, the location in which they played was influenced by the social contexts they were present in. For both of these participants, this social context was a significant advantage of the LAN parties they held. Albert was particularly positive about the social element of the gathering when he said:

For us, people who might not catch up much, it was a huge deal to spend so much time together. And we were playing the game sure, and talking about it, but we also talked about a bunch of other things too.

These LAN parties are by no means uniquely orchestrated through Steam. However, the variety of games on Steam means that far more types of LAN party play can be engaged through the Steam platform in comparison to other platforms. Even in console based gaming, there has been a strong decline in LAN based multiplayer gameplay. Instead game developers appear to be turning towards internet based multiplayer services such as PlayStation Plus and Xbox Live. Despite this decline in console LAN gaming, computers have several pieces of technology that allow LAN gaming to continue on a larger scale.

One of the key reasons participants gave for this Steam LAN preference seemed to be the user-friendly interface and networking options of Steam. When looking at Steam, the interface between user and system is just as crucial as the interface between system and game. This is a gap in social research into domestic technology usage. In particular there is an academic gap in research concerning the user’s relative position in this secondary interface. As videogames continue to expand into new areas of the social, mobile, and locative, interface dialectics are becoming an increasingly important consideration in digital ethnography (Hjorth, Burgess et al. 2012; Hjorth & Richardson 2014). The ease of access the Steam platform provides is an important example of this expansion. Casey explained how Steam’s interface, infrastructure, and connection with the game help to make local multiplayer gaming easier:

You don’t have to fiddle around with too many settings. Especially for us, we could just set up a game and go. Other things, like Minecraft can be a
huge pain to get going. And none of us are super tech-savvy, so it’s easier to play something that just works without us having to do too much setup.

Casey’s comments indicate how the Steam platform and software can streamline LAN gaming. This streamlining of game setup allows for a wider spectrum of game players to engage with the medium and social occasion of the LAN party. Rather than invest a significant amount of time into establishing servers, setting specific IP addresses, and trouble-shooting other issues, Casey was able to use the Steam platform to quickly begin her LAN party.

However, this quote from Casey also highlights an important difference between Casey and Albert’s events. Mentioned above were the various set-up components required for the game—both physical and digital organisation was needed. For Casey’s single device LAN party little digital organisation was required and for them, this was an advantage. In Albert’s case however, the LAN party required a larger amount of set up; closing teams and establishing matches, ensuring everyone was connected together, and that the LAN connection was maintained. Although this was a ‘hassle’ as Albert put it, it was also a key part of the experience. Such technological experiences can be usefully analysed via theories of the assemblage of play.

Taylor argues that modifications to a game can be unpacked to help researchers understand the myriad factors involved in establishing an act of play (2009). She extends this idea further, arguing that a focus upon these moments helps us to understand the interrelations between these various actors and worlds (Taylor 2009).

In Albert’s case, the ‘modifications’ and ‘practices’ informing the assemblage go beyond the world of the game. This movement across worlds is in turn influencing the physical domestic space and technological presence of devices. This is a key aspect of Steam gaming, particularly in reference to LAN parties. The Steam platform is far more malleable than console and handheld-based gaming, where settings are often largely unchangeable. On Xbox Live for example, players must pay for access to online gaming and modifications are largely unheard of. Also, as mentioned earlier, LAN gaming is becoming an increasingly uncommon feature for console versions of games. In contrast to this is Steam; many games are highly moddable, online play
comes at no extra cost, and far more games are available for LAN play. These factors help to locate Steam as more representative of Web 2.0 services, reflecting and facilitating a participatory media environment that is reciprocally shaped by its users. Examining such participatory media within the broader media ecology, the agency the Steam platform affords its users over other gaming devices and software technologies also helps to situate it as an innovative domestic technology. Particularly in the case of LAN parties, the ‘how’ of the play is an important factor to consider. It often requires unusual approaches to set up, adapting domestic spaces and technological configurations towards a mangled play location.

**Sharing and ownership**

Albert’s desire for connected play free from lag led towards legal purchasing options, rather than illegal downloads. In Casey’s example, her ‘shared’ ownership of digital goods highlights how non-physical ‘objects’ are given meaning to their users through the Steam platform and associated usage habits. In each case the erratic and slow nature of internet connections in the Melbourne geographical area played a significant role in driving my participants to find alternative forms of play. As well as this reshaping of scenarios of use around location affordances, the lack of local optimisation by both Steam and the games themselves amplifies the problem.

The second theme that emerges out of the examples of this chapter is one of digital ownership. The concept of digital ownership is a key part of Steam’s success as a digital distribution platform. By selling videogames without a physical component, prices can be cheaper and content more easily accessible. The practice of digital distribution is rapidly growing across various media, from music services such as iTunes or Spotify to streaming apps like Netflix or Stan. However the videogame market is perhaps the most digitally distributed medium (Edwards 2013; Chalk 2014). Steam’s dominance in this area is clear and with such a large percentage of games sales being made through Steam, how users display their game collections becomes a practice negotiated through the platform. Where older physical collections of games were displayed through cabinets, folders or drawers of disks, now they are often displayed online through lists on a user’s Steam profile.
The figure below (Figure 5.5) provides an example of these collection displays. On the left is the physical collection of the participant Francis. It shows his older assortment of Xbox 360 games and his smaller selection of PlayStation 4 games. On the right is his collection of Steam games. It should be noted that due to how Steam displays a user’s game collection (though a scroll-down window), only a fraction of Francis’ over 220 games are shown in the picture. On the Steam platform users have a degree of control over their collection; they can create lists of favourites, sort by thumbnails, and order subcategories to their liking. Such personalisation of media content again links Steam to a media ecology stressing interaction and participation.

![Figure 5.5: Comparison of physical (left) and digital (right) videogame collections](image)

This organisational component closely relates to Steam’s presence as a platform. The word ‘platform’ is a crucial one when examining Steam. Bogost and his Platform studies approach argues for a strong concentration on the platform (2009, 2010). As discussed in the literature review chapter, Platform studies is concerned with the underlying computer systems—in particular the relationships between the hardware and software of the computer system (Bogost & Montfort 2009). This is what is occurring through Steam, with the hardware of a computer interfacing with the Steam platform. In turn, the platform then interfaces with the gaming content on the device—it is coded to display the content in a certain manner. By taking an approach reminiscent of platform studies, it becomes easier to unpack how the networked
relationships and limitations of hardware and platform software can affect the creative output and visualisation of content. In the above example, where once a game collection took up physical space around the home, it is now stored and presented digitally through the Steam platform.

For Albert this change in storage and display method is a double-edged sword:

On one hand I really like how easy it is to find things, there’s no looking for the disc in the wrong spot, no wondering if I lent a game to someone. But then I also really liked showing off my collection, pouring through the guides and deciding what to play.

This change in how videogames are presented around the home also has repercussions for how Albert’s LAN parties occurred:

When I was little, friends would come around to play Xbox and the game we played would be secondary, we’d choose it once we were all together. But for the LAN party the other day, we were always going to play CS, it was chosen long before anyone even turned up.

In Albert’s youth, the hardware was the appeal; they were excited to play anything through it. As Albert and his friends grew older and their method of access changed, so too did their social gaming interactions. Instead of the social gathering being primarily concerned with the hardware of the device, it instead focused around the logistics of getting together and arranging the home in a way that best facilitates collaborative play of a particular game.

Another important aspect of these interactions is the legality surrounding digital ownership. Both Casey and Albert admitted that when they were younger, they had played pirated versions of their favourite games. Yet as the games industry has evolved and internet based multiplayer gaming become more commonplace, pirating for Casey and Albert became a difficult option. Albert got his illicit first copy of CS (Valve Corporation 2000) when his school friend installed an illegal version via a USB stick. However, that option is now not a viable choice for multiplayer. This is because, as
Albert said, ‘If you want to play online, you need a legal version, otherwise it probably won’t work and even if it does, you’ll end up getting banned’. For Casey, the move away from piracy came as accessibility grew and refunds became more readily available. Being able to buy or return games through a digital storefront such as Steam allowed Casey greater agency in how and when she purchased and played the games she was interested in.

These changes around digital distribution, particularly concerning accessibility and refunds, are part of why Steam has been so economically successful (Edwards 2013). For both Albert and Casey, the easy access to videogames from a variety of locations that Steam provides has led them away from pirating games. Steam is widely regarded as one of the few successful deterrents to digital piracy, due to the affordability and accessibility it offers. As detailed in an article by games journalist Luke Plunkett: ‘Steam’s design and sales strategy clearly beating piracy at its own game, both in terms of acting as DRM and encouraging purchases through ease of use’ (2015, p. 1). This is further evidenced in Casey’s example, where she and her friends decided to purchase the game after seeing it on sale. The inbuilt discount sales visibility of the Steam platform allows a direct marketing line into users’ homes. It is this same accessibility that is also creating easy conditions for LAN parties and other domestic-based multiplayer activities.

Even with the clearer path to ownership Steam and other digital distribution platforms can now offer, individuals still modify purchasing and ownership to their own contexts. In Casey’s example, this is seen in the shared ownership of Heroes (New World Computing 1999), where an agreement was reached within the group. Such shared ownership can go further. This is seen in another participant household in the example of Hannah and Evan. The two participants are teenage siblings. Their separate Steam accounts and shared desktop computer was located in their families’ ‘rumpus room’. All the games on the computer are shared, despite the two siblings having ‘separate’ accounts. Such sharing is achieved through Steam's ‘Family Sharing’, set up within Steam’s ‘Family Options’ settings category. Family Sharing allows files stored on a computer’s hard drive to be played by any authorised Steam account on that computer. Capable of allowing a Steam user to access a family member’s games on their own account (across up to 10 devices), Steam Family
Sharing gives domestic groups greater agency over how they play their games. Again relating these practices to domestication theory, much of the discussion around new media in Australian households focuses upon its ability to reshape behaviours, spaces and locations, (Lally 2002; Hollows 2008). In the case of domestic Steam usage, the accessibility and malleability of ownership is changing domestic interactions and behaviours of videogame engagement.

Returning to Casey’s shared ownership of *Heroes* (New World Computing 1999), even though the game was registered to Casey’s account, meaning that she legally owned it, she and her three friends used and engaged with the game equally. Casey informed me she hadn’t actually given her friends her account details, but would be happy to if they asked. Other cases of this sort of sharing are common in family households, where a single Steam account is owned by multiple members of a family, such as Evan and Hannah, mentioned earlier. On the shared computer, although only a single member of the family purchased a specific game, all members of the household can play it. The presence of a Family Sharing option indicates that Valve is aware of the phenomenon and is trying to expand and promote it through the accessibility of the Steam platform.

Coupled with Steam’s parental controls—known as Family Options—these tools highlight how Steam’s place in the household can reflect how the household is made up. Moreover, these tools allow individual progress to be tracked and ownership to be ‘formally’ shared—furthering Steam’s accessibility and advantages over videogame piracy. Although I did not interview another family that regularly uses the Family Options feature, many families have their own ad-hoc systems for sharing, such as Casey’s mutual understanding with the other members of her LAN party group.

**Limitations of the NBN**

The final theme that emerges through Casey and Albert’s examples concerns the limitations of the Australian internet network. Particularly relevant to the discussion here is Melbourne’s ongoing connectivity issues after the stymied rollout of the NBN and the arrival of data intensive services such as Netflix. An overview of the NBN was provided in the Chapter 2 and will be referred to throughout this section.
The NBN, despite its increasing availability, remains a service available only to a small percentage of Australia and Melbourne (Grubb 2013; Kohler 2013). Caught up in the middle of this tumultuous rollout are Steam users. In the context of the NBN, the medium of Steam becomes a point of significant tension. As mentioned in Chapter 2 the NBN is still widely limited to data capped plans, such as 500GB or 1TB per month. For Steam users, this amount is understood to be vastly insufficient to properly engage with their hobby.

Of the 18 households I conducted fieldwork in, only two had the NBN installed in their homes. A further 4 lived in areas where the NBN was available, while the remaining 10 lived in areas where the NBN had not yet arrived. Those who didn’t have the NBN had wireless internet in their homes, usually broadband/ADSL connections. The two houses with NBN connections both had limited data allowances, one with 1TB per month and the other with 500GB per month. The non-NBN households all had ‘unlimited packages’, where data is not throttled dependent on usage. Despite the frustrating connection issues of Melbourne internet, the city’s inhabitants continue to consume large amounts of internet content.

These differences in data limits and connection access have created tension between Melbourne based Steam users and the NBN. As games use significant amounts of data, several of my participants have opted not to get the NBN; either due to financial cost or for fear they would run over their data allowance too quickly. Their argument for not accessing NBN was that they preferred the greater agency of use that comes with an unlimited allowance, even if it meant doing so at a slower speed. Perhaps this is due to how Australians have come to understand and be accustomed to slower internet speeds. Albert, for example, seemed resigned to his intermittent connection, particularly at peak periods. His awareness of internet periods of activity in the home parallels other studies into home life and domestic habits such as Lynne Hamill’s exploration of time habits in Britain (Hamill 2011; Harper 2011).

Hamill argues that greater access to more stable internet results in increased internet activity. This research, alongside Hamill’s interest in the speed and access elements of domestic Internet usage, reflects Wajeman’s call for increased understanding of temporal perspectives in social theory (2008). A temporal perspective better recognises
the constraints time places upon social interactions and the subsequent impacts of such constraining. This recognition allows for an improved understanding of changing patterns. Concerning Steam users, these patterns often correlate to an inability to play. The commonly low data limits available through the NBN are often insufficient to fully engage with a videogaming hobby. This is due to the large download requirements and bandwidth consumption of online play. Additionally, current connections struggle to meet the requirements of many domestic Melbourne households’ general patterns of use. This has left many modern Australian households with internet speeds unsuitable to their digital needs.

Although neither Albert nor Casey had the NBN, Casey lived in an area where it is available. She considered having it installed, but eventually decided against it. She noted the cost as her main deterrent:

It was going to be way more (money) for limited data, and I stream and play too many games to not go over a cap. Also the upfront cost was crazy.

Although ‘unlimited’ NBN plans are becoming available in certain areas (as of 2017), the current practice among participant households continues to be that Steam users avoid the NBN due to the frequency of data caps and significant financial burden.

Highlighting this limiting data usage, an average hour of CS (Valve Corporation 2000) uses at least 100MB of data. When combined with communication tools such as Skype or Mumble, this cost can reach upwards of 1GB an hour. Adding further to this cost are downloads and updates required to play the game online. CS:GO (Valve Corporation 2012) is a 4GB download, with frequent patches and updates of around 1GB necessary to continue playing online. Had Albert hosted his LAN party through an NBN internet connection, it would have cost around 100GB of data—near to a fifth of the monthly data allowance on a basic NBN package. Even on a normal connection, this is a significant cost both financially and data-wise, as it is a large drain on the bandwidth of a home’s internet connection. This is a crucial reason as to why Albert hosted his event over a LAN connection, thus avoiding the lag and dropouts that can occur with heavy and therefore expensive bandwidth usage.
For Casey, in-game bandwidth consumption was less of an issue. Playing locally through the one computer, Casey and her friends did not need an internet or even LAN connection. However they did consume data during their LAN party as they streamed a movie via Netflix. Another research participant, Steven, offers an interesting insight into streaming media’s effect upon data and bandwidth consumption when coupled with Steam usage. Steven is a mid-20’s Melbournian, who lived with his partner Zoe and another housemate, Allen. Within their home, there was often significant demand for the household’s internet bandwidth.

Despite having ‘unlimited’ data per month, the bandwidth limits the amount the house can consume at any one time. For example, over one evening, Steven and Zoe would watch Arrested Development (Fox 2003) on Netflix while Allen played DOTA 2 (Valve Corporation 2013) and listened to music through Spotify. Doing all of these activities at once meant that none will work to a sufficient standard—DOTA 2 (Valve Corporation 2013) might lag, or Netflix may buffer for minutes at a time. Combined with the frequent dropouts Steven believed were caused by his household’s bad wiring, simultaneous internet usage was a source of much frustration in the household. This limiting internet usage provides a parallel to the issues that contribute to the desire of players to pursue LAN parties and other such events. For Zoe, Steven and Allen, a workaround was developed that centred on a heavily negotiated schedule of internet usage:

We’ll often choose what to watch a day or so ahead. Like, I’ll download a movie on Thursday night to watch Friday night. Of course we make household exceptions for things like Game of Thrones, but generally we stagger it like that. It’s kind of fun, building the anticipation through the day, it’s like we were really going to the movies.

Steven’s quote highlights the affordances that influenced his internet usage habits. Steven’s usage can be framed in relation to the functional aspects of the internet as an object in his household. While his actions were informed by the slower connections, they are not solely determined by it. Instead, it is through mutual understanding and communication with Zoe and Allen that this pattern of behaviour arose. This media usage etiquette was also impacted by the frustrating conditions of Melbourne internet
connections. In total, his household’s system of internet usage was a socially shaped adaption to technology informed by the affordances of the technology itself.

Within Steven’s house, there were two main factors that influenced when and how Steven could play games. The first was the limited bandwidth discussed above, while the second involved his desire to spend down time with his partner Zoe. A self-described ‘non-gamer’, Zoe often requested that they watch a movie together during their evening leisure time. Thus Steven negotiated his leisure time differently depending on whether or not Zoe was at home. When she had nights off work, they watched a movie or TV show together. However, when Zoe was at work, Steven used his leisure time to play games, either alone or with Allen.

Steven referred to this use of solo leisure time as ‘me time’. His terminology is interesting as it incorporates several levels of privacy within Allen’s household. Firstly there was the privacy of the household itself, removed from the outside world. Secondly there was the leisure time he and his partner shared in their room, where they watched visual media away from the rest of the house. Finally there was his own media usage when alone, differing not only in his level of privacy, but also in his choice of media consumption and medium of access. His negotiation of domestic game playing was therefore interpreted through the social contexts of his domestic relationships as well as the strength of his internet connection.

Further parallels can be made between Steam and Netflix as the two services share several similarities that affect data consumption in domestic spaces. Both can consume large amounts of data in short periods of time and are associated with high bandwidth consumption and lagging internet services around Melbourne. When Netflix was introduced to Australia, there was a noted slowing of internet services around peak periods (Grubb 2015). As noted during Chapter 2, Australia’s overall Steam access speed is below the global average (Steam 2016b). Steven, Casey and Albert all felt this slow speed when playing games through Steam, Albert most acutely:

People [in an online game] would always know I was from Australia because I’d be half a second behind. When we had the LAN party I felt like I was going in fast mode it was so smooth.
Albert’s LAN use of Steam sits in stark contrast to his online multiplayer experiences, further highlighting the impact Australian internet connections and services are having upon users’ interactions with Steam around the space of the household.

In contrast to Albert, Steven’s internet consumption revolved more around attempts to balance his consumption with the other members of the household. Again this is due to the fragile and disruptive nature of his Melbourne home’s internet connection. In Steven’s case the main constant in his internet usage revolved around negotiating the social relationships with the other members of his household. Although the difficult nature of internet connectivity in the Melbourne location plays heavily into this, it is still interpreted through Steven’s social gaze. He planned his usage according to his social contexts first, with his technological constraints playing a secondary role. These contexts are not separate—the ‘social’ is informed by technological affordances and constraints, just as technology use is shaped by social contexts.

Also entangled in Steven’s changing usage were the constant pressures of time—or what Michael Bittman, Wajcman and Judith Brown defined as ‘time scarcity’ (2009). This concept refers to the way mobile devices and ‘always on’ technology has created a social-cultural structure in which time is seemingly in constant demand (Bittman, Brown & Wajcman 2009). For Steven, this manifested as there never being ‘enough time to do everything’— instead he was forced to negotiate his media consumption through several parameters including his social obligations and internet connections.

**Conclusion**

This chapter has explored the relationships between the Steam platform’s use of internet connections and the fragile position this places it within Australian contexts. Particularly in Melbourne where the NBN rollout has been a subject of much discussion, the relationship between player and device is a complex one. By examining this relationship through the examples of LAN parties I have attempted to highlight how alternative uses of Steam can reconfigure a domestic space for gaming. The LAN parties of both Casey and Albert were solutions to troublesome internet connections. Each sought a way to play their games through Steam that limited its dependency on the internet, a stark contrast to Steam’s digital distribution model.
Chapter 5 has used these examples to explore the role Melbourne internet availability plays in gaming access and Steam usage habits across households. The chapter explored how domestic spaces can be re-configured for these LAN parties, further altering a user’s relationship to the home around the Steam platform. Through this focus on the phenomenon of domestic LAN parties, analysis was centred around three major factors; play styles, issues of ownership and the impact of the NBN on Melbourne household engagement with the Steam platform.

In particular, Chapter 5 has highlighted the ways in which LAN parties enable Steam users to reconfigure their domestic spaces and routines to enjoy multiplayer games and socialise through Steam without relying on the frequently sub-par internet connections experienced within the homes of Melbourne. Chapter 5’s exploration of how domestic use of the Steam platform facilitates LAN parties and allows users to adapt to the frustrating internet connections of Melbourne is crucial to this thesis’ efforts to detail and investigate the interactions between the Steam platform and Melbourne household domestic configurations. This chapter has also explored the impact of the NBN upon wider household internet usage through an exploration of how multiple high bandwidth consumption activities such as Steam based online play or Netflix streaming are balanced alongside each other.

The next chapter expands upon this analysis through an exploration of how households are reconfigured through Steam usage. It analyses how household spatial configurations are altered dependent on Steam usage and internet availability, building from the analysis of Chapter 5. Chapter 6 also explores how Steam usage and related domestic configurations are altered by changing domestic contexts and major life events such as moving home, having children, or retiring.
Couple Owen and Jill are in their late 20s and lived in a small, two-bedroom flat in Melbourne’s south. In the master bedroom there was little room for more than their bed and clothes rack, so they turned the second bedroom into a study. Each had a laptop and they also shared a large, double-monitored desktop computer, visible in the figure above (Figure 6.1). Although the desktop was originally Owen’s from before they moved in together, the two came to share it equally. There was a mechanical keyboard for Owen to use when playing games through Steam. But a smaller device that Jill was able to use without straining her smaller hands had replaced his gaming mouse. Seeking to embed this shared device, the couple tried hard to maintain a neutrality of the space around the desk, only adorning it with objects and items they agreed upon. Even the computer background was a negotiated, considered choice.
The two were fanatic supporters of the Western Bulldogs AFL team, so the desktop background was themed around the team they both enjoyed.

Owen and Jill highlight how a domestic space is considered and configured by those that lived in it. This chapter examines these configuring practices and the household environments of my participants. It builds upon Chapter 5’s discussions of Melbourne’s infrastructure and it’s subsequent relationships with the internet and Steam platform, by examining the everyday routines and configurations of the ‘home’ as a space for gaming.

This chapter aims to explore the impact Steam is having on the configuration and use of domestic space for multiple purposes. Such an exploration is achieved through an examination of the household setups visited during fieldwork and therefore a consideration of the revealing factors such as their personal contexts and computer location. Critical to this chapter’s analysis is a distinction between games platforms usage and internet usage within the affective domestic environment. While the two usages are entangled, this chapter aims to closely investigate the role of the games platform in this entanglement by understanding the specific impact Steam has within the physical spatialisation of the domestic realm.

This chapter begins its analysis by tabling data around several components in order to best highlight these configurations. The first component consists of a table (See Table 6.1 below) of all participants and the technologies in their house, as well as their various forms and configurations. My aim in tabling this data is to begin to place each household within its own context and along a spectrum of usage. After this setup, this spectrum of use is interrogated to reveal how Steam is networking with and impacting space within Melbourne households. This forms a key part of my research effort—to document how the Steam platform influences the constitution, state, and cohesion of a household.

**Domestic spatial configurations**

Throughout this chapter I explore how domestic households are spatially reconfigured around the changing Steam based scenarios of use of my participants. To this extent I have discuss some scenarios of use not specifically related to Steam usage, as wider
practices frequently emerge when discussing internet engagement. However where possible, these practices are related back to Steam through discussion with the participants. This section of the chapter discusses other academic efforts to explore how spatial configurations are shaped through new media usage, drawing out how domesticated environments focus around such networked similarities. The section also details how other authors influenced the approach to fieldwork and initial analysis of spatial configuration data for this thesis. Particular attention is paid to Steam’s place within the home and how domestic media is entangled within the shifting social contexts of a household over periods of time.

Stewart Hoover, Lynn Schofield Clark and Diane Alters (2001) explore how media usage—in their case, the medium and device of television—relates to other aspects of contemporary life. The authors describe the useful process of categorising participants through the use of thematic keywords. While they assert that this is not an entirely appropriate form of final analysis, they recognise the important role such allocation can play in the early stages of research (Hoover, Schofield Clark & Alters 2001). They also discuss how this organisational tool can help to develop an understanding of the ‘accounts of media’ presented by participants (Hoover, Schofield Clark & Alters 2001).

The forthcoming table (Table 6.1) is an attempt at emulating this exercise in order to bring potential effective spaces to the fore. It is by no means a final form of analysis, but rather an effective way of establishing the relationships between participant and space present in my fieldwork. The act of categorising participant demographics was one of the first data analysis exercises I completed after initial meetings were complete. This exercise was most useful especially when participant groups defied easy categorisation, such as a family with adult children, or households with a mixture of Steam users and non-Steam users.

Maria Bakardjieva’s work around the use of internet in everyday life also provides useful insight into the reconfiguring spatial capacity of new media technology upon domestic spaces (2005). Bakardjieva’s engagement with people in their everyday domestic contexts at this point in the internet’s history was an important methodological tool, as used effectively in Internet Society (2005). My own research has
attempted to emulate this approach in order to further understand the software of Steam and it’s connection to the internet. I employ similar analytical techniques in my exploration of Steam usage in Melbourne homes. These include the use of a detailed table, the exploration of genres, and her focus on the placement of important devices around the home (Bakardjieva 2005). Bakardjieva argues that the inclusion of these detailed tables can help to establish patterns to be used as an initial starting point for further ethnographic enquiry (2005).

The final area of literature relevant to this chapter is work that attempts to utilise empirically based ethnographic studies of domestic environments to analyse daily life. Academic parallels to my own examinations are found in work that unites domestication approaches with ethnographic methods. A useful example of this is Horst’s aforementioned research into Silicon Valley homes, outlined in the literature review (2012). In her worst Horst examines how the placement of new media technology can influence domestic affective spaces.

In contrast to much of the work on media and digital technologies in domestic environments, the fieldwork conducted for this thesis looks at the relationship between hardware and software. Other examples of useful ethnographic studies into domestic environments and their technological configurations include research into home set-top box trials (O’Brien, Rodden et al. 1999) and household mobile phone usage (Richardson & Hjorth 2017). These studies are useful for enhancing understandings of the nuanced domestic environment, and how device usage can shift the affective space. For example, Larissa Hjorth and Ingrid Richardson discuss how camera phone photography can play a role in the negotiation of place among WeChat users (2014), akin to the links between Steam usage and domestic cohesion covered throughout this chapter. Similarly, Jon O’Brien and his co-authors investigate how set-top box trials in the UK serve as evidence of the relationship between set-top boxes and household routines (1999). These shaped routines are a key focus of this chapter and its examination of how Steam plays an integral role within the domestic home. Therefore, all of these works establish an academic grounding that this chapter aims to contribute to.

**Participants and their homes**
The following table (Table 6.1) lists the various participants and households I have recruited across Melbourne. It also lists important categories of information regarding the households such as the locations and types of computers present. Listed by household, the aim of this table is to quickly and easily show trends of ownership and usage between participants, akin to the early analysis tools of media studies scholars such as Bakardjieva and Hoover, Schofield Clark and Alters (2001; 2005). Examples of these patterns include the high prevalence of Apple brand laptops—particularly MacBook Pros—among young adult (18–25) users.

This table has been built throughout the course of repeated ethnographic interviews and observations, expanded according to the data that became available through research and gleaned over repeat meetings. For example, in original interviews, I did not collect data on the types of games played and average hours played per week. However, upon returning to the household for follow-up interviews and play sessions, this emerged as an interesting point of difference between participant households. Accordingly, I amended the table to include such information. This inclusion provided another perspective through which to compare and contrast participant patterns of usage within domestic space.

Another category that became increasingly relevant throughout my research was participant’s gaming history across devices—their technobiography (Kennedy 2008). To include this data in the table, I asked participants to list the consoles and devices in their household—both working and non-working. This new data helped to illuminate the techno-histories of my participant households, generating interesting findings around how technological history is perceived within them and how this these technobiographical histories influence how participants understand the Steam platform. As well as being useful to this Chapter’s analysis, the influence of these past experiences based perceptions is also relevant to the analysis of ‘excessive play’ in Chapter 8.

Within Table 6.1 information is listed by household, it should be noted that not every member of every household used Steam. As I am analysing the impact that the Steam platform has upon the configurations of a Melbourne household, it is important to engage both with gamers and non-gamers. This is due to the impact a Steam user’s
habits may have upon a non-Steam user’s own household configuration and vice versa. Where I was unable to meet a household member in person, other members of the household would often relay the missing person’s device usage habits to me. However these occurrences were not ideal—it is possible that such third party data collection omits or misrepresents some of the scenarios of use present within participant households.

Several interesting patterns are seen in Table 6.1, however it is by no means a complete representation of Steam. The table is unable to show important aspects of Steam’s influence upon the nuanced patterns of a household’s spatial configuration. For example, the prevalence of MacBook Pro ownership among young Melbourne adults is mentioned above. Although Table 6.1 shows this high prevalence of ownership, it does not show how this pattern is manifested—i.e. where the MacBook laptops are used around the house, or how much of this usage concerns the Steam platform. Some participants mostly used their laptops in bed, while others had dedicated desks or even space at the dining table for their laptops.

Similarly, some participants’ sole point of access to the Steam platform was through their MacBook laptop⁴, while others had access to the platform through a desktop computer or other laptop. For this reason, the table is best used as a starting point for this chapter’s ethnographic enquiry into domestic spatial configurations. Although I have constructed vignettes of these practices and patterns of use, including information that does not exist in the table for the sake of clarity, a trait needed for efficient interpretation. Instead Table 6.1 is useful for identifying patterns and potential avenues for further questioning.

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⁴ Accessing Steam through the Mac operating system also limits the variety of games available to play as not all Steam games can run on the Mac operating system.
<table>
<thead>
<tr>
<th>Participants by household</th>
<th>Age &amp; Gender</th>
<th>Type of Home/location</th>
<th>Computer(s)</th>
<th>Hours played per week (approx.)</th>
<th>Other Gaming Devices</th>
<th>Job(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albert and Jack</td>
<td>21 (m) &amp; 23 (m)</td>
<td>Two person share-house/Brunswick East</td>
<td>Two desktop computers</td>
<td>20</td>
<td>1 Xbox One</td>
<td>Both students</td>
</tr>
<tr>
<td>Casey</td>
<td>27 (f)</td>
<td>One person flat/South Yarra</td>
<td>Small desktop and 15 inch MacBook Pro</td>
<td>8</td>
<td>1 PlayStation</td>
<td>Student</td>
</tr>
<tr>
<td>Francis and Peter</td>
<td>25 (m) &amp; 65 (m)</td>
<td>Family home with father/Glen Iris</td>
<td>Two desktops and one 13 inch MacBook Pro</td>
<td>15</td>
<td>1 PlayStation</td>
<td>Retail worker and retiree</td>
</tr>
<tr>
<td>Allen, Steven and Zoe</td>
<td>24 (m), 24 (m) and 27 (f)</td>
<td>Three person share-house/Thornbury</td>
<td>Two desktops, One Mac monitor and 15 inch MacBook Pro</td>
<td>20</td>
<td>1 PlayStation</td>
<td>Student, market researcher and artist</td>
</tr>
<tr>
<td>Barry, Arthur and Mick</td>
<td>24 (m), 25 (m) and 25 (m)</td>
<td>Three-person share-house/Northcote</td>
<td>Three desktops and 1 15 inch MacBook Pro</td>
<td>25</td>
<td>1 PlayStation 3</td>
<td>Students</td>
</tr>
<tr>
<td>Corri, Melanie and Alex</td>
<td>24 (m), 53 (f) and 55 (m)</td>
<td>Family home/Doncaster</td>
<td>1 Desktop, 2 13 inch MacBook Pro, 1 Alienware laptop, 1 15 inch MacBook Pro</td>
<td>15</td>
<td>1 PlayStation 4</td>
<td>Receptionist, lawyer and engineer</td>
</tr>
<tr>
<td>Margaret</td>
<td>30 (f)</td>
<td>One person apartment/Richmond</td>
<td>1 15 inch MacBook Pro</td>
<td>5</td>
<td>1 iPad mini</td>
<td>Teacher</td>
</tr>
<tr>
<td>John and Belinda</td>
<td>26 (m) and 28 (f)</td>
<td>Married couple/Tullamarine</td>
<td>1 Desktop computer, 1 Alienware laptop, 1 15 inch MacBook Pro</td>
<td>7</td>
<td>1 PlayStation 4</td>
<td>Corrections officer and para-legal</td>
</tr>
<tr>
<td>Felix, Grace and Oli</td>
<td>39 (m), 43 (f) and 6 (m)</td>
<td>Married couple with young child/Coburg</td>
<td>2 13 inch MacBooks</td>
<td>10</td>
<td>1 PlayStation 4</td>
<td>Removalist and part time child care worker</td>
</tr>
<tr>
<td>David and Lisa</td>
<td>57 (m) and 55 (f)</td>
<td>Married couple with adult children/Caulfield</td>
<td>1 Desktop computer</td>
<td>5</td>
<td>None</td>
<td>Semi – retired lecturer and nurse</td>
</tr>
<tr>
<td>Blake and Nina</td>
<td>28 (m) and 28 (f)</td>
<td>Young married couple/Thornbury</td>
<td>1 Desktop computer, 1 13 inch MacBook Pro</td>
<td>10</td>
<td>1 PlayStation 4</td>
<td>Engineer and research assistant</td>
</tr>
<tr>
<td>Eamonn, Zara and Jane</td>
<td>28 (m), 30 (f) and 40 (f)</td>
<td>Three person share-house/Northcote</td>
<td>1 13 inch MacBook Pro, 1 MacBook air, 1 15 inch MacBook Pro</td>
<td>21</td>
<td>1 PlayStation 3</td>
<td>Myotherapist, chemist and sculptor/curator</td>
</tr>
<tr>
<td>Isabel, Matthew, Hannah and Evan</td>
<td>34 (f), 33 (m), 14 (f) and 14 (m)</td>
<td>Family home in Footscray</td>
<td>2 15 inch MacBook Pro, 1 Desktop computer</td>
<td>12</td>
<td>1 PlayStation 4</td>
<td>Landscape gardener, chef and two students</td>
</tr>
<tr>
<td>Joshua and Alex</td>
<td>27 (m) and 28 (t)</td>
<td>Couple in Richmond</td>
<td>2 13 inch MacBook Pro</td>
<td>10</td>
<td>1 Xbox One</td>
<td>Personal trainer (both)</td>
</tr>
<tr>
<td>Zelda and Paul</td>
<td>68 (f) and 75 (m)</td>
<td>Elderly couple in Frankston</td>
<td>2 Desktop computers, 1 Lenovo laptop</td>
<td>4</td>
<td>1 iPad</td>
<td>Retirees</td>
</tr>
<tr>
<td>Vicky</td>
<td>30 (f)</td>
<td>One person apartment in Toorak</td>
<td>1 15 inch MacBook Pro, 1 Apple desktop</td>
<td>7</td>
<td>1 iPad</td>
<td>Receptionist</td>
</tr>
<tr>
<td>Leo, Thomas, Gae and Billie</td>
<td>22 (m), 23 (m), 22 (f) and 22 (f)</td>
<td>Share house in Abbotsford</td>
<td>3 MacBook Pros, 1 MacBook Pro, 1 15 inch MacBook Pro</td>
<td>30</td>
<td>2 iPads, 2 PlayStation 4</td>
<td>Students, part time bartenders and waitstaff</td>
</tr>
<tr>
<td>Owen and Jill</td>
<td>30 (m) and 31 (f)</td>
<td>Couple in Sandringham</td>
<td>2 13 inch MacBook Pro, 1 desktop computer</td>
<td>10</td>
<td>2 iPads</td>
<td>Marketing manager and student/waiter</td>
</tr>
</tbody>
</table>

NB: *Italics* indicate the primary participant of the household through which it was recruited. *Bold* indicates that the participant regularly plays games.
Participant patterns of leisure versus work usage were another key point for early data analysis. The table below (Table 6.2) offers a cursory glance into how participants breakdown their usage between ‘work’ and ‘leisure’. Such a breakdown provides insight into the amount of time spent using the Steam platform, how participants might interpret such usage, and how they may configure their domestic space accordingly.

When generating the data for Table 6.2, households were asked to define these two topics in whatever way they chose alongside a percentage breakdown of work and leisure. Participants frequently defined leisure as anything they interpreted as non-work related and work was most often understood as a task they felt obligated or required to do. In this breakdown, ‘leisure’ does not expressly refer to the playing of digital videogames through Steam, but covers any activity done as a form of downtime, relaxation, or novelty through a digital device. Table 6.2 is broken down into households, rather than individual participants. It also only involves device usage in the household. The name listed under each household was my main interviewee and is how the households will be categorised henceforth.

In Table 6.2 below it is clear that all households engaged in both work and leisure through their household digital devices. 10 out of 18 households had a higher percentage of work than leisure. Three more households believed they split their usage down the middle and the final five spent a majority of the time using their devices for leisure. This data mirrors other work into domestic use of technological devices within Australia, such as Lally’s analysis of the domestication of computers in Australia around the turn of the millennium (2002) or Goggin’s examination of Australian domestic internet usage (2004). These authors both note a pattern of Australian domestic new media usage dominated by work. In their comparative work between Canada and Australia, Catherine Middleton and Shanton Chang notice similar reluctance among Australian households to use the internet for online gaming purposes and other forms of leisure (Chang, Ahn et al. 2006; Middleton & Chang 2008).

These academic findings are echoed in my own fieldwork data, with many Melbourne households expressing similar feelings of resistance to digital and internet-based leisure
technology. Although all had accepted some degree of device-based leisure into their homes, many—particularly parents—were worried about the impact it was having on the wider lives of themselves and those around them. Table 6.2 also highlights some interesting patterns of usage when analysed through other criteria.

<table>
<thead>
<tr>
<th>Household</th>
<th>Work (%)</th>
<th>Leisure (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albert</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Casey</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Francis</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Allen</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>Barry</td>
<td>35</td>
<td>65</td>
</tr>
<tr>
<td>Corey</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Margaret</td>
<td>85</td>
<td>15</td>
</tr>
<tr>
<td>John</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Felix</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>David</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Blake</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Earnest</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Isabel</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>Joshua</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Zelma</td>
<td>85</td>
<td>15</td>
</tr>
<tr>
<td>Vicky</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Leon</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>Owen</td>
<td>75</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 6.2: Household work/leisure breakdowns of digital technology usage
For example, households with key female participants frequently had greater than 80% of their domestic new media usage revolve around work. Households with younger participants (24 and under) were more likely to spend a majority of their new media usage time on leisure activities. These findings ask important questions around concerns of gendered perceptions of device usage, the development of Australian youth policy around excessive play, and parental management of child videogame usage. When specifically asked about Steam usage, a majority of users believed the ease of access to digital games content the Steam platform allows meant that time spent using\textsuperscript{3} Steam was a main contributor to their domestic leisure percentage. Other activities that significantly contributed to the percentage leisure times shown in Table 6.2 included browsing social media, reading the news, and media streaming.

However, not all participants believed the ease of access to content through the Steam platform was a significant factor in their leisure time. Some participants took this idea further, understanding the Steam platform to be negatively impacting the configurations and rhythms of their households and private spaces. The examples below unpack this notion further, exploring how Steam is placed around and accessed in the household. Such ethnographic observations help to highlight Steam’s ability to change the role and positioning of a device around a household and the reconfiguration of space in the process.

**Francis: Context based Steam usage and access**

Francis was a mid-twenties student who had recently completed his studies when I first began conducting fieldwork with him. He worked part-time in a retail chain and had just moved out of his family home and into a share house in Melbourne’s inner east. At this time, he had decided to pursue full time work. However, upon contacting him for a follow-up interview roughly six months later, he revealed to me that he had moved back into his father’s home and decided to return to study. In late 2017, Francis had again moved out of home and into a share house, this time with his partner Ikora and another couple. During the time I conducted fieldwork, Francis has had to radically reshape his gaming habits based on his changing domestic

\textsuperscript{3} ‘Steam usage’ in this context included the playing of games through Steam, the purchasing of games, and communicating with others.
environments. These domestic environments consist of several factors all networked together—forming an assemblage. These factors include; the composition of his household, his access to high speed internet, and the location of his devices around the home. How Francis connected to Steam varied significantly over the course of my fieldwork—dependent largely on these various domestic factors.

When he first lived at home, Francis had an extensive ‘gaming’ setup, including several monitors, a laptop and a controller designed to play with a PC. As well as this he had several consoles such as an Xbox 360, an old Wii, and a large collection of games. All of these devices were located within a designated gaming space in his family’s large home in Melbourne’s east (See Figure 6.2).

Within this media hub, Francis played a wide variety of games, both through Steam and other mediums such as Blizzard’s battle.net service and Xbox Live. In addition to this variety of use, he often played his games while engaging with further media, such as watching Twitch streams on one monitor while playing a game through Steam on another, or listening to podcasts while absent-mindedly playing *Civilisation V* (Firaxis Games 2010. With over 200 games in his Steam account, Francis regarded himself as a keen gamer, calling it his ‘main hobby’. He estimated that across his entire collection (both physical and digital) he had over 400 videogames.

![Figure 6.2: Francis’ original home setup](image)
Francis’ gaming location within this family home was the result of discussion between he and his father. The computer and consoles used to be located in the living room, but after Francis’s father retired and began spending more time at home, his increased use of domestic space triggered a change in the household’s organisation. His father no longer needed a dedicated office and instead wanted to spend more time in the larger living room. To accommodate this change, Francis and his father swapped the spaces around. This made the living room the father’s space to pursue his own domestic hobbies, such as reading on the couch, watching TV, or painting. In turn the previously designated office was recast as the gaming space of the household with Francis’ desktop, consoles and monitors all moved into the space.

However, when Francis moved out of home, his gaming configurations and habits changed drastically. Living in a share house with 3 other people, Francis was far more restricted as to where he could set up his gaming apparatus, despite the fact that he lived with other gamers. The living room in this house was a common space devoted to communal TV watching activities and a single console (an old Nintendo 64) for playing local-multiplayer games such as *Super Smash Bros* (HAL Laboratory 1999). In this more contested domestic environment, Francis’ gaming space was absorbed into his bedroom—his only private space in the household (see Figure 6.3).

![Figure 6.3: Francis’ share house setup](image)
His computer was crammed onto a small desk next to his bed, now with only a single monitor, while his consoles were left behind at his father’s house due to lack of space. While this change in domestic spatial contexts had an impact upon how he engaged with Steam, there was another significant factor influencing Francis’ Steam usage habits in this new home environment—internet access.

The internet at his new share house was a very unreliable connection, due to both poor location and inferior to-the-premises wiring. Furthermore, Francis’ landlord was recalcitrant to update the wiring due to the impending rollout of the NBN. Unable to frequently download new games through Steam or reliably play multiplayer games online through the platform, Francis found that his usage of Steam plummeted. As he explained in our follow up interview:

Instead of playing a few hours on Steam a day, I would be lucky to play 5 hours a week. And it was never new games. I’d only get it out to play something old that I had already played a bunch of times before, because I couldn’t really download anything. My whole rig was going to waste.

In his share house environment, the advantages and affordances the Steam gaming platform offered to Francis were severely reduced due to inadequate internet access. PC gaming and hardware is heavily associated with customisation, players often construct and change their hardware system—a player’s ‘rig’, as Francis called it—in order to get the most out of it. This relationship interlaces the digital world of Steam with the physical contexts of the device and its environment—the push and pull between on and offline, digital and physical, platform and person (Kennedy 2003). Kennedy’s approach considers the relevance of context and I have found her call for attention to an individual’s reflective history with technology valuable to my analysis of Steam’s role in domestic space due to the discussion it generated between participants and myself around how usage changes over time (2003).

For Francis, these changes to his Steam usage formed a marked shift in his technobiographical history with digital gaming. Instead of buying and downloading games through the Steam platform, Francis found he was forced to purchase games
through a physical store, complete with a now seemingly antiquated disk. This was a practice he had not engaged in for several years. For him, this was an undesirable situation. But as he stated during our second interview, ‘It was the only way I could play anything new, and I still couldn’t play online’. However he found that some of the games he would have liked to play were not available in ‘hard copy’—instead only purchasable through Steam’s online store.

Another ‘work-around’ Francis used in this share house environment was to play more mobile games. The ability of his mobile phone to access internet through its cellular network meant that Francis played multiplayer games, such as Blizzard’s *Hearthstone* (Blizzard Entertainment 2014), on his phone. Unlike Blizzard, Valve is yet to publish a successful mobile game. While Steam does have a mobile app, its main function is to act as an ancillary tool to a user’s computer, through features such as the Steam authenticator discussed in Chapter 2. Therefore, while initially living in this share house, Francis’ only point of access into online gaming was through *Hearthstone* (2014) on his phone. Finally, unable to comfortably play games to the extent he wanted, Francis ‘cracked’ and bought a new console—a PlayStation 4. This was a very unorthodox purchase for Francis, who said, ‘I was always an Xbox fan boy, and then once I got a good PC I didn’t think I’d ever buy another console’.

However, all these work-arounds did not allow Francis to engage effectively with Steam’s online networks and multiplayer gaming. Due to the limited Steam access in his new home and the reduced availability of hardcopy PC games, Francis made the purchase so that he could continue to fully engage with his favourite hobby. Still unable to play online PC multiplayer, the PlayStation 4 at least allowed him to play some more recent games on local multiplayer with his housemates and guests. These changes to platform and practice caused new scenarios of use to emerge for Francis. In particular, the form and context of the devices around Francis’ use took on new meaning for him.

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6 This was the terminology Francis applied to his own behaviours.
7 Again, Francis’ phrasing.
In the case of Steam and Francis’ engagement with it, these new systems of meaning included patterns of use such as who had access to his computer, the times it was able to be played, what games were capable of being downloaded over his very limited internet, and games able to be played comfortably at his small desk and single monitor. As well as the genres or communicative habits taking place while interacting with technology such as the Steam platform, the spatiality of the home can shift the forms of play available within the domestic space. Where once Francis could use the Steam platform for more communicative roles and articulations such as communication and play with friends, in his new domestic environment, his use of Steam was heavily reduced to single player gaming actions. In Francis’ case, how Steam was interpreted and accessed within the contexts of his domestic environment was heavily informed by how he built his routines and the socio-spatial restrictions of his domestic space.

This year of change and drastic domestic modification ended when Francis moved back into his family home in order to save money while pursuing further study. Once more having reasonable internet access and a dedicated gaming space, Francis found his playing habits returned once again to Steam. Reflecting on these periods of change, Francis concluded:

> In a best-case scenario, it [Steam] is the best platform. It’s the cheapest and has the biggest range, with the most players. But it’s also pretty finicky at times. I don’t know if we really have the infrastructure compared to the US or other fast internet places like South Korea.

Upon my final meeting with Francis, he had again moved out of home, this time into a share house in Richmond with his partner Ikora and another couple. In this share house there was a dedicated room for much of the household’s technology, including Francis’ computer, PlayStation 4, and the turntables of his housemate Bert (see Figure 6.4).
Having far better internet here than at his first share house, Francis found that internet connections did not significantly impact his Steam usage (in comparison to his family home). However in this new domestic configuration, spatial negotiations played a larger role. With four people in a small terrace house typical of inner-city Melbourne, Francis had to take into account the other people within the home, as the loud noises of the computer carried through the thin walls of their home.

Interestingly, these factors of technological requirements are now also taken into account when building personal spaces and family homes (Vangen 2002). The role of technology within domestic spaces is beginning to create embodied practice through everyday media devices as it becomes more and more commonplace. This is seen in the rise of new terms, such as ‘smart home’ terminology (Strengers 2008). As Yolande Strengers observes in her research around smart homes (2008; 2015), much of the work done by designers and engineers in smart homes revolves around the roles technology can play in the home. For Steam users such as Francis, the domestic internet access and configurations required to use the platform effectively was still largely non-present. Across my fieldwork, such conditions were frequently present in
in lower socio-economic and youth households. The absence of smart home technologies and consistent internet access in these areas of society again raise questions around youth policy in relation to new media access and usage.

Research has been done into how technologies’ integrate into the home has influenced the bleeding of work into domestic space (Green 2004, 2010). Francis said of his return to Steam that he felt as though he was returning to ‘the real way’ of videogaming. Reclaiming his gaming ‘space’, his habits reverted to their previous form, his PlayStation 4 now relegated to limited usage alongside the Xbox 360 and Wii. Francis’ changing Steam usage habits can be compared and contrasted to the spatial configurations and resultant usage of Steam in young families.

**John and Belinda: Second-hand forms of play and shared spaces**

When John and Belinda were married in 2015, they rented in Melbourne’s western suburbs. John, a keen gamer, played *DOTA 2* (Valve Corporation 2013) through Steam with a team composed of players from around Australia. He played on a regular basis and spent least one night a week on Steam playing with his team. Belinda, despite John’s attempts, had no real interest in digital gaming (neither single nor multiplayer), instead preferring to watch television. She spent John’s gaming nights catching up on ‘her’ TV shows, mostly through streaming services such as Netflix. In their three-bedroom home, they had their master bedroom, a guest bedroom and a spare room set up as John’s ‘man-cave’.

The term ‘man-cave’ is used here to describe a space devoted to particular hobbies frequently framed as masculine—such as videogaming and comic book collecting. The term ‘man-cave’ was a term John himself used, hence its inclusion here. Situated upstairs, away from the main living room, this ‘man-cave’ was his space to conduct hobbies or activities that would be obtrusive or cumbersome elsewhere. It was his space, where he engaged his hobbies without disrupting the aesthetic and cohesive function of the wider household. John’s ‘man-cave’ featured comic books and DVDs, a projector and a large desk with two monitors and a top of the line gaming computer (see Figure 6.5 below). It was in this room that John used Steam. It was decided this would be his space due to the fact that the computer, John’s drawings and comic books were taking up the entirety of the living room. This left Belinda unable to watch
television, eat meals and enjoy the shared space. Due to the nature of the online team play Steam and DOTA 2 (Valve Corporation 2013) facilitated, John would make a fair amount of noise communicating with his team mates while playing, further necessitating the move to the ‘man-cave’ in Belinda’s eyes. Although the space was reserved for John’s gaming and hobbies, it was by no means a permanent arrangement.

In 2016, John and Belinda bought a house in Melbourne’s outer suburbs and moved in. This house, significantly smaller than their previous rental home, had no room for John’s man-cave. Instead the two shared a study. In it, John plays his games, but Belinda also had use of the space; she stored her books, art utensils, and other items there. In this new domestic configuration, John has noticed his engagement with Steam changing:

I definitely swear less now, for sure! I was hoping it would get Bel more into games, but all that’s happened so far is I’ve been on Steam way less.

Belinda instead blamed his decreased Steam usage on their internet woes, saying, ‘That’s because it took us six weeks to get the internet going’.
Their building of a home together was an ongoing process, also scheduled for further, rather major changes. Although John’s Steam usage and gaming habits were an important part of his leisure time, he still framed this activity as such—one he did during downtime, rather than a major domestic priority. Their assimilation into one study and reduction of John’s Steam playing space was part of an effort to reserve space for the future. Belinda explained to me during a meeting in early 2016:

Well, before too long we’ll probably want to start thinking about having children, and they [the child] will need the space a whole lot more than John or I do. So we share the space to get ready. That way we still have a devoted guest room for now, which is something we both agreed was important [Belinda’s parents often visit from Queensland]. We’ll probably move John’s computer into the guest room or something in the future, but I doubt he’ll have much time to play then anyway!

In the second half of 2016 John informed me over Steam that he and Belinda were having a baby girl, who was born midway through 2017. Although by the time she was born I had completed all my rounds of fieldwork meetings, I asked John via email if this new family member had changed his Steam habits at all. John’s reply was as follows:

Mate, we haven’t even had time for sleep habits lol, let alone Steam habits.
I don’t think I’ve played since Catherine [their baby daughter] was born.

This quote highlights the major changes large life events can have upon not only Steam usage, but also the domestic experience as a whole. Belinda and John’s understanding of gaming within the context of the home was that of a leisure activity. Both Belinda and John understood that the contexts of their home and their relationship to leisure time and technology would change dramatically as their lives moved forward. Once Catherine was born, they found no time for television, Steam, or many other leisure activities, with primary focus directed towards their new child.

**Grace, Felix, and Oli: Household spaces and games as leisure**
The interpretation of digital games and leisure time as an activity to be engaged when other responsibilities are complete is an interesting one. It has been written about extensively and useful discussion emerges at several points in existing literature that place videogame engagement as ‘inferior practice’. As discussed in the literature review, Newman argues that games continue to be perceived as a children’s medium (2005; 2013). Examining this claim through the lens of a domestication approach, the appropriation of videogame technology into the household was as a tool to keep children, members of many households, occupied (Newman 2005, 2013). One of the central tensions found in this body of literature surrounding play and leisure is the definitions placed around boundaries (Sutton-Smith 1977; Sutton-Smith 2009). In the everyday mindset, these boundaries often place leisure and ‘play’ as opposed to work and the serious. Within the limited social space of participant homes, these ‘boundaries’ can often conflict with each other through technologies such as the Steam platform.

The tension between these boundaries has created problems as increasingly, these lines are obfuscated by modern technology such as the Steam platform facilitating external social play in the private space of the domestic home. This hybrid, double articulated scenario of use emphasises the relational nature of engagement with new media technology. Devices like the household computer and platforms such as Steam are helping to create ‘virtual public spaces’ in the home, enabling new scenarios of use and complicating domestic understandings of work, play, private and public (Rao 2008). Throughout the literature an important contention regarding new media device usage is that devices are given negative connotations when they are used to play games, as it is an activity primarily associated with leisure and downtime (Sutton-Smith 1977; Shen & Yarnal 2010). Despite the fact that many scholars have highlighted the myriad of other ways videogames are played and the benefits of digital—and physical—gameplay, the persistence of this negative construction of games persists (McGonigal 2011; Granic, Lobel et al. 2014).

Though cases such as Francis’ moving in and out of the family home help to highlight changes in Steam usage habits and videogame play, understandings of games as leisure or downtime is still a perspective that persists across the household gaming spectrum (Hjorth & Richardson 2009). Videogame based activities are typically
associated with a more ‘casual’ interaction, regardless of the amount of time invested into engaging in them (Kuittinen, Kultima et al. 2007). In particular, the communicative options made available by technology such as the Steam platform further complicate these interpretations of play as downtime or distraction. This complication arises as the communication tools allow Steam to move domestic videogame usage into a social space, causing some users to frame Steam as a social activity that shifts the privacy of the domestic space. This theoretical thread is seen in other areas, such as the work Ronald Rice and others have done around the social aspects of new media, examining how communication usage habits change the constitution of organisations, altering how a space is interpreted by those within it (Rice 1992; Shapiro 1999).

Following this idea of leisure time and videogame usage as a useful distraction, the dominant public discourse of videogame discussion has revolved around this interpretation (Newman 2013). While there is some credence to these arguments, they do not properly unpack the stigma that can be attached to using new media technologies for leisure. Despite its acceptance into the household in recent decades and its movement away from perception as a ‘new’ media towards ubiquitous usage, computer-based leisure activities are still often perceived as detrimental to social experience (McGonigal 2011). Though this view is changing, such arguments overlook the growing cultural impact and agency personal device usage can drive (Boykin, Harbour et al. 2015). In Belinda and John’s case John’s Steam usage is not interpreted as an inferior leisure activity. Instead the two participants understood all their current forms of leisure to be in flux, bound to shift around their changing domestic space, with both their domestic environment and everyday experiences altering around major life events—such as the arrival of a child.

Felix, Grace and Oli offer a perspective into the everyday experience of Melbourne families with slightly older children. Felix and Grace are married and lived in Melbourne’s north-eastern suburbs with their child, Oli, aged 5 when fieldwork began. Felix was a keen gamer in his younger years, with a devoted gaming computer and several iterations of consoles. Particularly in his early twenties, gaming was a passion of his. He explained that, ‘It [gaming] was my go-to activity—whenever I had some downtime I’d play something, it didn’t really matter what’.
Felix remembers earlier versions of Steam, before it was such a widely used platform:

> It used to be terrible, ha-ha. Downloads would take forever, or just not finish. That’s why I had the consoles. But then Steam got better, and me playing on the computer meant Grace could watch telly, so I moved mostly to Steam.

While Grace never had the passion for gaming that Felix did, there was a place in her life for games. Growing up with two older brothers, she remembered playing *Mario Kart* (Nintendo 1996) on the families’ Nintendo 64. As she moved into adulthood games drifted from her interest and she had never heard of Steam until she met Felix. Felix believed that after they got together his gaming time dropped dramatically. However, by far the biggest change for Felix’s gaming habits around the household was the arrival of their son Oli. Their guest room was reconfigured into Oli’s room, eliminating the dedicated space used for their shared computer. Felix’s engagement with Steam dropped as his ‘downtime’ was now taken up with caring for his infant son. Similarly, Grace fell behind on her favourite TV shows. As she explained:

> We were both just too busy to do anything else. Even if we got some time to ourselves in the evening, we’d usually just fall asleep on the couch!

These changes highlight how the use of videogames and leisure media can change around new household constitution and subsequent spatialisation. These contexts can shift not only with games, but also with media engagement itself. In the domestic lives of Grace, Felix and Oli, what is more relevant than the specific game being played is how the game is engaged through the household contexts and the spatial boundaries it affords the gaming platform. These cases work to show the entanglement of videogames and their devices into the domestic contexts—the ‘interpenetration of the virtual and the actual’ (Boellstorff 2008, p. 200). This configuration of the home is a nuanced exchange between the demands of home life and individual desire for downtime, both social and private.
Like marriage and other forms of partnering, the birth of children represents a significant change in the life cycle. In the case of Felix, Grace and Oli, as Oli aged, media of several descriptions began to re-enter into their home and daily lives. Grace found time to catch up on TV shows and games again became part of Felix’s relaxation time. During our final interview, the family discussed how Oli enjoys watching Felix play games. One of Oli’s favourite activities was sitting on his father’s lap, watching as Felix played games such as Rocket League (Psyonix 2015) or Sins of a Solar Empire (Ironclad Games 2008). Felix and Grace decided that Oli would not be allowed to watch Felix play more violent or frightening games such as the psychological horror videogame SOMA (Frictional Games 2016), so Felix’s use of Steam remains altered by his son’s birth. Despite this, he explained that he had found a new angle of enjoyment through the play he conducts co-presently with his son—a close affectionate interaction negotiated through their Steam usage.

The two parents have also explored potential games for Oli to play with them through Steam. So far they have had the most success with point and click games such as Pajama Sam (Humongous Entertainment (1996) which Oli played with both his mother and father. Felix showed me that Steam has an entire category devoted to ‘family friendly games’, which made finding suitable experiences much easier. Similarly, he has categorised several titles on his own Steam account under the heading ‘Oli’s games’. This curation of a Steam ‘library’ links back to Chapter 5’s earlier discussions of digital ownership and how Steam can alter co-present play through co-ownership. Their desktop computer has now moved to the master bedroom, so that Oli can be separated from the screen if it is outside his allocated ‘screen time’ or if Felix is playing a more violent game that they have deemed inappropriate for Oli.

These examples highlight several different ways households engage with Steam and configure their private spaces around the platform. From dedicated gaming rooms to ad-hoc changes, Steam usage can be a malleable practice in domestic spaces, influencing, and influenced by, the spatial understandings of the home. This chapter now turns to critically consider the examples given above, highlighting the themes and scenarios of use that emerge, compare, and contrast out of their telling.

**Home and configuration**
The examples and cases outlined above help to highlight the reciprocal relationship between Steam and domestic spatial configurations. From Francis’ shifting use across his three home locations, to Felix and Grace’s engagement with new parts of Steam after the birth of his son, or John’s forgoing of the Steam platform after the arrival of his daughter, how Steam is placed and interpreted around the home has direct links to the contexts surrounding the domestic environment. Technologies such as the Steam platform have an important impact upon how families place, appropriate and experience new media around the home (Horst 2013). Domestic contexts also affect the ways Steam is integrated into domestic life. Even in ‘non-familial’ homes, devices and their patterns of use can significantly change how the home is perceived by those that dwell in it, just as the social relations of household members and the configuration of the home constrain and enable the use of Steam. Connecting these contexts of the home with ideas of sociality and leisure, videogame play through Steam is intrinsically linked to these domestic spatial configurations and conceptions of space.

When examining such configurations through a platform studies lens, this interaction can be viewed as constituting a focus on the final platform studies tenet of ‘reception and operation’ (Bogost 2007; Bogost & Montfort 2009). Domestic relationships and configurations is the space of ‘culture and context’—the broader societal influence upon the reception and operation of the platform. Domestic interactions are influenced by these wider contexts, highlighting the cultural and historical placing of the Steam platform. It is for this reason that the combination of platform studies and ethnographic analysis of domestic experiences is a highly useful technique when discussing the nuanced household negotiations and spatial configurations the Steam platform can influence.

These analytical techniques are also useful when examining Steam’s emerging dominance as a digital distribution platform. Examining the rise of digital distribution in the music industry, Joel Waldfogel explores how digital distribution challenges the ‘typical’ revenue streams of an industry (2017). Waldfogel argues that these new, more accessible, revenue streams are ushering in a new ‘golden age’ of digital content, thanks to the fact that consumers are now ‘awash in products that they find desirable’. (Waldfogel 2017, p. 212). Several parallels can be seen between Waldfogel’s interpretations of the impact digital distribution has upon media content and the role
Steam plays as the major digital distribution platform of videogame content. In particular, Waldfogel’s use of the phrase ‘awash’ (2017, p. 212) articulates the sentiments of many of the participants I spoke with.

Throughout my fieldwork, participants such as Francis explained to me that the Steam platform provided access to far more games than traditional Australian stores such as EB Games or JB HIFI. This is due to Steam selling many games that do not get a physical copy release. The other crucial factor in Steam’s increased reach enabling its users to be ‘awash’ in videogame content is its place within the home. Where previously participants would have to take time out of their day to travel to and from a store, the Steam platform and its store is accessible from within the home—reachable with a few clicks. Even in physical stores, Steam has access to consumers through Steam gift cards (Figure 6.6). These cards function similar to iTunes gift cards and allow users to add money to their Steam account.

Figure 6.6: A Steam gift card for $20 AUD
Therefore, as well as selling a wider variety of content, the Steam platform also provides more avenues of purchase and easier, in-home access to such content, recasting the spatial use notions of the domestic home as a private space. Steam’s in-home access is crucial to understanding the impact Steam can have upon domestic contexts and configurations.

Further considering the impact Steam can have upon the household and what can now be purchased online, another factor is found in the malleability of the platform. Steam being a piece of software found on household computers and laptops gives it a significant increase in malleability over other gaming platforms such as consoles or handheld devices. The increase in malleability is due to the role the computer can play in household life.

Other writers have made important note of how the presence of new media objects in the home can shape everyday life (Lally 2002; Pink 2004; Horst & Miller 2012). Where other videogame enabled devices such as the PlayStation and Xbox consoles, or even mobile devices such as the iPhone, have restrictive operating systems and capacity for user configuration, the computer is designed to be heavily configurable by users. For example, the Steam platform provides many compatible games for several operating systems and technologies, such as Windows, Mac, Linux and the HTC Vive. These extra options allow users to shape the platform to the home they are playing within and the device they are using, due to a single Steam purchase providing access to a videogame access to all applicable operating systems. An example of this malleability in action is seen in the case of 28-year-old Earnest.

During fieldwork Earnest had both a MacBook Pro and a Toshiba laptop. The Toshiba was his ‘work’ laptop, while the MacBook served largely as his ‘home’ computer. According to Earnest, his home computer was reserved almost exclusively for social media and Netflix. Earnest bought CS:GO (Valve Corporation 2012), intending to play the videogame on his work laptop, which he took home on weekends. However after he had purchased the game, Earnest was pleasantly surprised to find that his home MacBook was also capable of installing and running the videogame. This cross-operating system capability was not a feature Earnest was familiar with. He explained to me that growing up, his understanding had been that
videogames could not be compatible across systems. There is some truth to Earnest’s interpretation, with cross-operating system being a more recent advance in the videogame industry and Steam platform as discussed in Chapter 2. However, even in the present day not every videogame offers such malleability, with many still being restricted to specific platforms such as Windows.

However, the malleability of use achieved through a single purchase is far greater on Steam than any other in-home videogame software. For example, purchasing Rocket League (Psyonix 2015) on Steam offers the option to play it on Mac, Windows or Linux, whereas purchasing the same videogame on the PlayStation Store (Sony’s digital distribution service for their PlayStation consoles) only provides the option to play on PlayStation consoles. The files are incompatible to other consoles such as the Xbox One or Nintendo Switch. The ability for Steam to enter into a variety of households with different devices is partially responsible for its significant presence across the Melbourne landscape. The Steam platforms’ entanglement with the household is therefore found in many contexts where other videogame devices and conduits are not.

The ability of technology such as Steam to link the spheres of the interior with the exterior, the social with the domestic, the self with the other, is crucial in these household negotiations and spatial configurations. It causes the digital hardware and software to impact the physical configuration, spatial understandings, and social cohesion of the household. As Earnest experienced, the Steam platform enabled him to play CS:GO (Valve Corporation 2012) at times he had thought he would be unable to play. When he bought the videogame, he thought he’d be restricted to playing on weekends, when he could bring his ‘work’ laptop home. But as the Steam platform allowed him to also play on his MacBook Pro, he was able to play on weeknights through his ‘home’ device. In Earnest’s example the Steam platform had facilitated a new scenario of use and allowed him to articulate his ‘home’ MacBook Pro in a new way. Therefore, the Steam platform is reshaping Earnest’s domestic experience through its cross system flexibility.

Examining these articulations in more detail, the Steam platform and its computer conduit can be seen to be articulating meaning in two major ways. In the case of
Steam, it is articulating meaning both as a private point of leisure time through single player videogame play and a social conduit to the wider world. Such linkage is critical to understanding Steam’s domestic role; where use, purchase, and external communication are brought into the primarily private space of the household. This negotiation of ‘meaning’ is orchestrated both within the devices and through the devices’ usage.

These articulations of meaning provide insight into the patterns of usage and the role of the media in everyday life (Berker, Hartmann et al. 2005). On Steam, this articulation is the domestic patterns it causes. Essentially, it refers to how Steam is interpreted within the contexts of the domestic environment. The crux of this double articulation lies in how its users interpret such patterns (Hirsch & Silverstone 2003; Berker, Hartmann et al. 2005; Park, Jankowski et al. 2011). In the case of Steam these patterns are interpreted through the focal points of work and leisure—and how these interpretations change as household constitutions change.

The examples above highlight the dynamism of new media objects such as the Steam platform. Similar to other research into domestic new media devices, Steam is shifting and changing usage alongside the needs of the home and those within it (Hirsch & Silverstone 2003; Horst 2013). The household configurations of participants such as Francis help to reveal how the computer’s physical position in the home is greatly affected by the ways in which Steam is engaged and the subsequent ways meaning is articulated through the platform. In his family home, Francis’ computer was kept separate from the rest of the living room, as the noise was disruptive to his father’s leisure time, emphasising the computer’s role as a private activity. Francis’s relationship to Steam and his computer—a double articulation of work and leisure, is central to his understanding of how he operates with the household.

Recalling Lally’s idea of computers becoming extensions of the self and acts of personalisation, Francis’ computer is his grounding object, his marker of home (2002). Building from this, Francis’ ability to access the Steam platform was a key factor in how Francis perceived his home life. He was particularly frustrated in his first share house, where inadequate internet prevented him from using many of the online features of the Steam platform. Throughout the time I met with Francis, his home
location was impacted by where he engaged with the Steam platform. His understanding of a space as private was formed through this relationship to new media and having domestic access to Steam was an integral part of how he articulated himself during his leisure time.

Thus in both his family and share house environments, how and where Francis engaged with the Steam platform was an important consideration for his domestic configurations. His use of Steam articulated meaning in several ways, such as playing co-presently with his partner as ‘quality quiet time together’ or playing online with friends as social time enacted through the domestic space. Similarly, after the arrival of their baby Felix and Grace reconfigured their home, removing the computer from what was their guest room to make a bedroom for their child. In their case, the computer’s placement within the domestic spatial configuration was primarily dictated by how they interpreted the Steam platform through the requirements of their newborn. By its very ability to link public and privates spaces the Steam platform was deemed an inappropriate new media technology for a baby’s bedroom (Horst 2012; Horst & Miller 2012; Miller & Slater 2000). Belinda and John also found their previous household configurations incompatible with the arrival of a child, though in their case the incompatibility was based around the temporal limitations of domestic life, as well as the spatial configuration of their home.

These configurations can also occur in non-physical ways. In particular, the manner in which Steam brings social aspects of the public into the private space of the home is an interesting area of enquiry. These social aspects have been the focus of many other game studies writers, such as Taylor’s work into the movement of players across online and offline spaces (2009). Taylor’s research highlights how game worlds and platforms facilitate complex networks (2009). Parallels to this games studies literature is also seen in media studies, such as Rice’s work focused on the social aspects of new media, stressing its impact on choice, innovation and the push and pull of social forces (Rice 1992; Shapiro 1999; Webster 2001).

On Steam, these links between the configured home and the outside world are found in the way Steam integrates itself into the videogame experience. Chapter 2 mentioned the ‘Steam Overlay’ and its associated popup notifications. These popups
alert a Steam user when specific events occur, such as unlocking an achievement, when a friend joins a game, or whenever a friend comes online. These popups can be turned on or off by the user and can also be customised with an accompanying sound. Although they can be turned off, they are on by default. All participants had left these notifications on as they found them useful. The Steam Overlay and its associated popup notifications can turn even an initially private videogame session into a social experience, reshaping the habits of the Steam user as they do so.

For the users of Steam, the potential re-configuring notification service can have a significant impact upon how they engage in play with their friends. Several people described how they used the ‘friends’ list to engage in spontaneous play with their Steam friends and how notifications might change the play practice they had planned on conducting. Mick (aged 25 at time of first interview) explained one such experience:

I’d just finished work and got home, turned on the computer. I was playing a bit of The Binding of Isaac. Luke and Jarryl (two of Mick’s friends) were playing CS:GO, Jarryl messaged me telling me to come play with them. I didn’t really feel like it at first, and thought about ignoring the ‘notie’ [the notification] but felt obliged to hang out with them, but after a few rounds I was super into it and ended up playing for a couple of hours and winning some close games.

This above quote shows how the friends notification system of Steam contextually places one in a social digital environment and changes how people conduct social interaction from within the domestic environment of the home, mirroring Taylor’s recognition of how guild ‘broadcast messages’ in EverQuest (Sony Online Entertainment 1999) can help to connect players (2009). In Mick’s case, the interactions he had through Steam immediately impacted his planned play experience through a perceived obligation to take part in social interaction. This impact changed the private space of his bedroom and the act of playing The Binding of Isaac I (McMillen & Himsl 2011) into a social interaction in a different game. In this way, the time Mick had initially set aside as private domestic leisure time was transformed into a social experience through the communicative tools offered by the Steam platform.
Also interesting in this example is that the Steam-based social interaction facilitated a later ‘real world meet up’ as Mick put it. Jarryd and Luke told Mick about a musical event coming up that weekend and after they discussed the concerns through a Steam chat window, the three purchased tickets and attend together. Mick explained to me that they spent a significant portion of the concert discussing the close games they had won on CSGO (Valve Corporation 2012) earlier in the week.

In this example Steam facilitated this shift to a physical context. This would frequently occur in other online communicative spaces, like Facebook. However in Mick’s example, there is a continuation of their digital communication and socialising into a physical space—in this case the musical event. Other academic work has noted the relevance of digital interactions in face-to-face communication in both new media studies (Abidin 2013) and games studies (Taylor 2006; Cole & Griffiths 2007). In the case of Mick, Jarryd and Luke’s interaction, despite their physical ‘meet-up’, the context of their friendship and the topics of discussion remained closely linked to their Steam engagements. The phenomenon of Steam usage and videogame play being a topic of discussion separate to acts of play is a focus of Chapter 7’s analysis of obligation and reciprocity.

In the above example, it is clear that Steam played a role in influencing Mick’s shift from private to public interactions within the spatial location of the domestic home. Engaging with communicative practice, relationship maintenance, and social identity, the Steam platform can reshape and reconfigure these social worlds based around the interactions users have through the platform. Reciprocally, domestic contexts and arrangements of domestic space can impact Steam usage within the home.

Also evident in the cases explored above is the domestic interchanging of devices’ contextual usage. None of the computers are used solely for playing games through Steam. Even participants who bought a computer to primarily play videogames through Steam explained that they often used the device for other purposes such as email or social media. Instead of singular usage, these domestic computers occupy multiple roles comprised of both leisure and work and are placed around the house accordingly. Such placement is partially influenced by the interpretation of the Steam
platform within a particular home and through a particular device. In these domestic contexts, how media devices are physically placed in both public and private contexts is an important consideration. This is due to the ability of device placement to alter how a space is navigated, perceived and experienced (Flynn 2004). In Geography of the Digital Hearth Flynn argued that the home console is:

shifting the spatial and social norms of domestication from previous electronic media. In addition it represents gaming in the home as symptomatic of changes from public to private forms of entertainment which constitutes a changing geographic base for social networks (2003, p. 551).

Through the examples given above, I argue that the Steam platform is facilitating similar changes and partially negating the barriers between domestic and exterior. This argument is grounded in this chapter’s exploration of how Steam can create social interaction from within a domestic space. This line of argument, similar to Flynn’s, links domestication theories with wider games studies theory on how we interpret the domestic experiences and practices of others (Flynn 2003, 2004).

In households, the evolution of dedicated media spaces such as computer desks, console hubs, and wireless router requirements has played an important role in shifting the organisation and cadence of everyday family life (Green 2004; Horst 2012). In the case of Steam usage in Melbourne households, these rhythms primarily revolve around the interpretation of leisure within the household space. They are further shaped by domestic spatial interpretations informed by the placement of the Steam platform and its conduit computer. Such cadences can be further unpacked through an analysis of how these spatial configurations change around life events.

For Felix, Grace and Oli these tempos are most evident in Felix’s changing play habits. After Oli’s birth, Felix began to play different type of games. Where once he played a variety of shooters such as CS (Valve Corporation 2000) or Call of Duty (Infinity Ward 2003), he found these inappropriate to play while his young son watched. Indeed, he perceived that online multiplayer gaming in general was a risk, as
he could not control what people might say over voice and text chat. The family’s solution to this was two-fold. Firstly they physically moved the computer into the master bedroom so that they could better control what Oli experienced. Secondly Felix also changed some of the games he played, leaning more towards RTS and puzzle games. Although he enjoyed these games in their own right, there was a driving factor behind such choices—these were genres he and Grace felt would be appropriate for Oli to watch and potentially play collaboratively with his parents.

As mentioned earlier, the family also invested in several children’s games for Oli to play. In doing so, they expanded the types and genres of games played in their home. Although Oli was still only allowed to play when an adult was present, he now had a place on the family’s Steam account and was a significant influencer in the domestic negotiations around Steam in their household.

Wajcman’s aforementioned work with Mackenzie can provide further insight into this area of my research. Focusing on the SST, it places important emphasis on how social contexts influence technological development (1986). However, this shaping continues to occur within the domestic space of the home. As a Steam account grows and develops, it is continually shaped by the social forces of the domestic environment, as seen in the examples above. Parallels can be drawn between this contextual influence and the meaning negotiation of double articulation. Both theories argue that there are critical interactions taking place between domestic media devices, their users and the social contexts surrounding them (MacKenzie & Wajcman 1986; Hirsch & Silverstone 2003). This idea was continually reinforced by my fieldwork, from Francis’ changing use around his various iterations of ‘home’ and Steam to John and Belinda’s shifting desires around how they might want to configure their family home and its access to Steam in the future.

By understanding these changing domestic configurations and rhythms as experiences, it becomes easier to analyse how technology is converting these experiences—just as its own meaning is being converted by the experiences

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8 Oli was just learning to read during our final meeting and Grace and Felix were concerned about him learning to spell swear words through online interactions.
themselves. This is evidence of the reciprocal impact of meaning creation in domestication theory and follows the pattern of double articulation explored elsewhere in academic literature (Hirsch & Silverstone 2003; Livingstone 2007).

For example, after moving to their new house, John and Belinda reconfigured their domestic space to better articulate the usage of Steam within their smaller environment. They reconfigured John’s ‘man-cave’ (a domestic space dedicated to videogame playing), to a more equitably shared study space for their leisure activities and household items. In turn, rearranging their space altered how they engaged with the Steam platform. John now had to be more considerate of the noise made while playing and exercised better self-control around the language used when communicating in-game. This domestic pattern was again changed with the arrival of their newborn, which meant they turned their study into an additional bedroom. Now with significantly more domestic duties, Belinda and John had less time and space for leisure activities. For John this lack of leisure time translated into a ceasing of his Steam engagements and ‘retiring’ from his DOTA 2 (Valve Corporation 2013) multiplayer team.

However, the phenomenon of domestic configurations reciprocally impacting new media is not limited to digital software such as Steam. Nor is it even limited to personal computer devices. TV’s, consoles, and laptops were all designated particular spaces within the households of participants and affected different roles accordingly.

In Felix and Grace’s case, Grace’s laptop resided mostly in their bedroom for Grace to watch Netflix. However, the bedroom was also where she checked her work emails while at home. Therefore the device can alter the domestic space into one of leisure or work, depending on the context through which it is engaged. Similarly, in their shared study, all of John and Belinda’s house plans and legal documentation were backed up on John’s high-end gaming computer. For them, a device primarily reserved for leisure engagement through the Steam purpose also served a secondary purpose as a tool for work. Earnest also provides evidence to the contextual use of devices reframing their interpretation. Earnest had clearly demarcated ‘work’ and ‘home’ laptops. Despite this demarcation, he had been keen to reshape such framing through the use of the Steam platform on his work laptop.
These examples all highlight how new media devices are often understood through a certain paradigm. However, when considering new media technology such as the Steam platform or social media, these paradigms are not absolute. As a non-Steam example, social media platforms have completely transformed our use of the computer as a work station (Bucher 2015). Steam and other software can reshape the ways in which users engage with their household devices, moving them through spheres of work and leisure. This movement of influence can also impact how a computer is placed within the home, further emphasising the nuanced relationship between the Steam platform and the domestic spatial configurations of Melbourne households.

As well as affecting the placement of computers around the home, the Steam platform has other important interactions within domestic contexts and domestic experiences. The types of games played through Steam, such as the different styles of play between parents and children, are one of the other key interactions seen in the ethnographic examples of this chapter. The context of play has always been a crucial factor in how play is understood and entangled with our personal lives, from childhood through to adulthood (Fromberg & Bergen 2006). The social play of children has been a key area of academic interest for many years (Bruner, Jolly et al. 1976; Shaffer 2006; Bretherton 2014; Giddings 2014). In particular, Seth Giddings work into children’s play provides detailed examination of the importance of play activities in children (2014). Much of this scholarship highlights the impact of play experiences across a variety of contexts. Throughout this chapter, this impacting process has been explored in detail through Steam’s impact upon domestic household configuration through facilitated acts of play in a domestic space.

This body of literature largely concerns physical based play and children’s acts of play. However, scholarship has examined other forms of play experiences. Such work explores the important interactions between the physical person and digital play. Nardi’s work into player interactions and behaviours in WoW (Blizzard Entertainment 2005) is one such work (2010). Throughout her work, Nardi makes consistent note of where she is conducting these acts of play and through what device (2010). To this extent Nardi’s research enquires into a similar phenomenon to this chapter’s focus—
the reciprocal relationships between the configuration of space the act play is engaged from and the intent of the act of play (2010).

It is to this area of reciprocal configurations that this chapter contributes, focusing its contribution on domestic contexts. This contribution is found in this chapter’s detailing the ways in which software, hardware, and the changing contours of domestic life are shaping the ways people relate to the Steam platform. Shifts in lifecycle and domestic arrangements challenge both the fixity of the household as well as the fixity of practices. This chapter is building upon the contention that what and how we play has an extensive impact upon our everyday lives through informing our interpretation of social interaction and domestic experiences (Flynn 2003; Granic, Lobel et al. 2014). As more and more acts of play have moved into digital spaces and the domestic context of the personal computer, new scenarios and practices are emerging around the form and function of videogames within domestic spaces (Yee 2008). This phenomenon is clearly visible in my fieldwork on Steam, where the platforms’ structure is increasingly interwoven into broader everyday videogame practices and social engagements.

**Conclusion**

This chapter has explored the complex relationships between the Steam platform and the domestic configurations of Melbourne households. These domestic spatial configurations have been shown to exist in wide variety, from single person households to family homes. This chapter has shown that across all of these demographics, the Steam platform is capable of reshaping domestic spatiality and everyday experiences.

The first section of this chapter illustrated the variety of demographics examined through my fieldwork and detailed the interpretations of work and leisure breakdowns within each household. After this introductory section, several detailed examples were given. The first of these case studies concerned Francis and how his Steam usage changed in the various homes he lived in during my fieldwork research. Francis’ use of Steam as a marker of home and his adaptive Steam practices around the affordances dealt to him in various domestic configurations serves as evidence of how the Steam platform can install—and help formulate—a person’s domestic experience.
The second major section of this chapter discussed families with smaller children. For this component, two households were highlighted: Belinda, John and Catherine’s evolving family and the household environment of Felix, Grace and Oli. These two households provided insight into how the significant life event of having children can alter domestic Steam usage. Also, their cases indicated how households’ in-home spaces could be reconfigured to adjust access to Steam for both children and adults. In the cases of these families, such reconfiguration was seen through the repeated ethnographic visits to households. Over time, participants experienced domestic and lifestyle shifts.

In the case of young family households, domestic spaces were shaped to allow parents greater control of their child’s access to Steam and the potential dangers of the platform perceived by the parents. Following these detailed case studies, this chapter moved into broader discussion of the domestic shaping capacity of Steam. Crucial to this discussion was the reciprocal nature of the relationship between the Steam platform and the domestic environment. As I have argued, not only does Steam usage influence the domestic space of the home, but also a user’s domestic space can influence Steam usage and play experiences.

The final analysis contained in this chapter identified a breakdown of the work/play dichotomy of the household computer and how the Steam platform complicates this dynamic within the Melbourne household. This complicating was shown through ethnographic examples such as Earnest’s reimagining of his ‘home’ and ‘work’ laptop computers through his engagement with Steam. In other cases, computers had been specifically designated for leisure, a practice primarily done through Steam for several participants. By designating access to Steam as a computer’s purpose and placing it accordingly around the home, the Steam platform can play a significant role in the spatial reconfiguring of space around the home. In particular, this chapter has provided new understandings into domesticated everyday gaming routines through its analysis of the Steam platform’s relationship with domestic spatial configurations.

As this chapter has shown, all the various contexts of videogame play are influenced by where they are being played. Within the domestic spaces of Melbourne
households, the physical location of one’s conduit to Steam plays a crucial role in how play is undertaken. Additionally, the domestic configuration of Melbourne households and the forms and function of the home plays a similarly important role in influencing Melbourne-based Steam access. This chapter has shown how these contexts, spatial configurations and interpretations combine to form the nuanced relationships between the use of Steam, the user and their domestic environments.

The following chapter attends to a similar phenomenon, examining the impact of Steam upon domestic habits. Where this chapter has concerned itself primarily with spatial configurations, Chapter 7 focuses on temporal interactions. These include participant defined ‘appropriate times of day’ for Steam usage and the forms of communication and friendship the Steam platform facilitates. In addition, Chapter 7 analyses how time and obligation are understood on the Steam platform through an examination of Steam based social capital and reciprocity.
Chapter 7. ‘Time spent hanging out’: Temporal habits and communication

The temporal context in which play takes place has always been a crucial factor in how play is negotiated and entangled with our personal lives (Gershuny 2003; Wajcman 2008; Hamill 2011). This entanglement between temporal context and play occurs throughout modern life (Bergen 1998; Fromberg & Bergen 2006). Previous chapters of this thesis have considered these wider concerns including domestic spatial configurations and location limited access. Where, how and why we play has an extensive impact upon the subsequent influences the play experience has upon daily life (Caillois 1961; Malaby 2009).

As more and more acts of play have moved into the digital arena, new scenarios and practices are emerging out of these shifting contexts (Yee 2008). The Steam platform makes them particularly visible because of the ways in which users access the Steam platform and the component structure of the software. The global platform design, matchmaking capabilities, and customisation options of the Steam platform have allowed it to significantly impact game and play activities in domestic households.

This chapter further examines these impacts through an analysis of four other ways in which the Steam platform is reconfiguring domestic life. The following section briefly outlines how this chapter approaches analysis of these four factors; time-managed friendship, exchange and reciprocity, communicative patterns, and the ‘global time’ of the Steam platform.

**Temporal communicative habits**

The first focus of this chapter is the temporal effects Steam usage has had upon the participants’ daily schedules and households. In order to examine this phenomenon, I explore fieldwork cases that help to reveal Steam’s impact upon understandings of, and engagement with, notions of ‘time’. This includes data such as people altering their daily schedules to better suit online multiplayer times, those using the Steam platform to participate in international teams, the temporal knowledge the Steam platform gives its players, and the limiting of Steam access to certain periods of the daily schedule in participant households.
To properly explore the phenomenon of Steam influencing the temporal contexts of people's domestic lives, the chapter engages several pieces of ethnographic data. These include cases from both the digital platform of Steam and its configurations, as well as the physical reality of participants’ domestic lives, daily schedules, and relationships with Steam. The main literature relevant to this chapter is scholarship concerning time and media usage. This scholarship includes Wajcman's work into time scarcity (2008), Martin and others’ examination of certain videogame usage changing around temporal interactions (Martin, Chu et al. 2011), literature examining gaming capital and communicative tools (Kücklich 2005; Consalvo 2007; O'Neil & Fraysé 2016), and games studies works concerned with networked participants (Taylor 2009; Chen 2010; Cockshut 2012). By engaging with these areas of literature this chapter is better able to contribute to academic understandings of time usage in relation to networked games leisure activities and platforms.

The crucial contribution this chapter makes to this body of knowledge is the development of new insights around how Steam influences the interpretation of time and temporal habits in participant’s domestic households. Through its separate online and offline behaviours, Steam’s contextual impact and limitations can be readily observed. This chapter explores how these contexts and configurations influence the communicative methods engaged on the Steam platform and how they are involved in play experiences from within the Melbourne household. This includes the ways users adapt and shift their communication around the temporal conditions of their Steam gaming habits.

It is these communicative multiplayer aspects that drove many of the temporal changes observed during fieldwork. In addition, earlier discussions around Melbourne specific access, such as slow internet connections, content updates, and regional pricing remain relevant to these temporal impacts upon the context and meaning of the play engaged through Steam.

Entangled in this data is first theme this chapter explores—Steam’s influence on the developmental contexts of friendship. Steam facilitates such friendship through features such as; friends lists, groups, and sub communities of the platform. Actions
such as co-present spoken communication at home versus in-game text communication show how communication can be integrated or obfuscated through Steam. In turn this plays an important role in how scenarios of use are manifested into a game and their subsequent effects upon the everyday schedules and personal interactions of the people that use Steam.

The second phenomenon this chapter analyses is exchange and reciprocity on the Steam platform. This section considers Wajcman’s time scarcity (2008) and in particular attends to how notion of time scarcity are entangled in the reasons why participants chose to invest their ‘scarce’ time into the Steam platform’s wider community. The section analyses both monetary exchanges and temporal exchanges (or ‘effort gifts’) between users, other users, and the Steam platform. Such discussion provides insight into how access to the global network of the Steam platform can reshape interpretations of time, time-usage, and exchange within the Melbourne household.

This chapter’s third area of enquiry concerns the communicative patterns taking place on the Steam platform from within Melbourne households. Through an examination of the forms of communication engaged at different times of day, a third section analyses how Steam can influence domestic tensions around temporally orientated appropriate forms of play.

The final component of time this chapter discusses in this chapter is the ‘global time’ of the Steam platform. Being a piece of software engaged with by users around the globe, Steam has differing periods of activity based on the time zone in which users happen to be. The final analysis section of the chapter engages with ideas of global time through an analysis of ethnographic data where participants changed their daily routines to better coincide with particular times of Steam activity. These cases include people changing sleeping habits, moving work shifts, and altering other aspects of their daily routines to better facilitate certain Steam practices.

As the two areas of time and communication are heavily entangled through the Steam platform, they are discussed side by side throughout this chapter. This form of analysis better highlights their relationships within the domestic household, as well as
recognising the impact of networked play through the Steam platform. This chapter begins analysis of Steam’s temporal impacts with an examination of how time and ‘temporal investments’ into friendship creation and consolidation are made on the platform.

**Time-managed friendships**

The ‘context’ of friendship is tightly linked to the place where such a relationship occurs (Buhrmester 1998). Terminology such as ‘work friends’, ‘weekend friends’, or ‘school friends’ shows how the contexts we use to engage in our friendships can change how we can imagine these interactions. These changes can constrain, shift, or expand our social networks (Huckfeldt 1983). A crucial component to this categorisation is the time periods in which such negotiations are made. In an online context such as the Steam platform, these notions of friendship and time become further nuanced through the digital distribution platform. As outlined in Chapter 2’s detailing of the Steam platform, ‘friendship’ on Steam is offered through a request and can be accepted or declined at will by the receiver. Current friends on Steam are shown through a ‘friends list’. It is the friendship service on Steam that helps to digitally locate those ‘around’ you on the platform by showing you ‘where’ they are, what they are doing, and who they are doing it with. It also places a sense of time management to the existence of friendship on Steam. 34-year-old participant Isabel described an example of this ‘time management’:

> I’ll turn on Steam briefly whenever I use my computer. If no one is online, I’ll turn it straight off again. But if people are online I usually try and play with them.

For the users of Steam, this ‘friends’ list indicates the digital presence of others and has a significant impact upon how they engage in play with their friends. In turn, this can affect the times of day that people are likely to play. A similar phenomenon has been noted in games studies research into MMOG (massively multiplayer online games). For example, Mark Chen discusses the use of the WoW (Blizzard Entertainment 2005) ‘invite function’ to coordinate a high level ‘raiding’ group (2009). In Chen’s raiding group, players would schedule a time to meet up and invites would be sent out as a coordination tool (2009). On Steam, a similar tool (the invite function) can be used in
a different manner. Several participants described how they use the ‘friends list’ to engage in ‘spontaneous play’ with their Steam friends. The previous chapter provided the example of Leon, Jarryd and Mick’s multiplayer interaction and how the invite system facilitated an unscheduled act of play.

Margaret conveyed a different type of communication experience, where the communication tools of Steam were used in a way that removed a videogame play experience and instead facilitated a different type of friendship interaction:

There was this time… I got home and turned on Steam. I was going to play Portal 2, but then Alice [one of Margaret’s friends] messaged me asking what I was doing tonight. I said I wasn’t doing anything in particular, so she invited me out to drinks with some people. So I went along and met up with Alice and everyone. What was kind of funny was Alice and I spent ages talking about how good Portal 2 was, ha-ha.

This story, told to me while I watched Alice play Portal 2 (Valve Corporation 2011) helps to show how the friends list system can change user interaction and temporal management. The conversation Margaret had with Alice was done through a Steam chat window. In Margaret’s case, the interactions she had through this Steam chat window had an immediate impact upon the context of friendship. Originally planning to play solo games for the evening, the communicative tools of the Steam platform provided her with access to the public space of the platform and social interactions with her friends.

Although many other new media technologies, such as social media or the mobile phone can provide similar opportunities, the emergence of face-to-face social interaction arising out of engagement with the Steam platform highlights how the Steam platform is generating social interaction outside of initial videogame activities. Interestingly, similar phenomena are seen in social network games (SNG)—scholars have argued that a major reason to play SNGs is to ‘create common ground for future social interaction’ (Wohn, Lee et al. 2010, p. 4423). A similar example of using games interaction as a foundation for future social engagement is seen in Margaret’s Steam
usage and is indicative of the temporal impacts Steam can have upon user’s lives, beyond the context of its usage within the domestic household.

Margaret explained to me how, even though she was happy to see her friends, she was a bit ‘bummed’ not to get to play Portal 2 (Valve Corporation 2011) that night. She made clear note of the time limitations placed on these interactions and how in this case, the two events were mutually exclusive. This data highlights the ‘time scarcity’ many participants experienced in relation to their digital devices and leisure time (Wajcman 2008; Bittman, Brown and Wajcman. 2009). Although the work of Bittman, Wajcman and others focuses on the mobile phone, these ideas can be translated to Steam effectively.

This translation is best seen in the continuous mediated interactions Bittman and his co-authors discuss in ‘The Cell Phone’ (2009). In these interactions, mobile devices are repeatedly used to intensify ties between people. In a similar way, Steam is used to extend and strengthen friendships by ‘staying in touch’ through the playing of videogames and communication through chat windows. These in-game acts and social discussion of Steam can continue outside the realm of the computer. This phenomenon again stresses the temporal impacts of Steam beyond the context of videogame play and the influence it can have upon post-play social relations. Examples such as Margaret exemplified the important ability of the Steam platform to mobilise across the different facets of a user’s life. It also stresses a key difference between how Melbournians use the Steam platform and other domestic digital distribution services such as Netflix—direct communication.

Margaret’s example contains a shift from digital social interaction to a physical context. This shift was facilitated through Steam, a continuation of their digital communication into a physical space—in this case, Saturday night drinks. Crystal Abidin discusses similar experiences in her work ‘Cya IRL’, exploring the movement from digital to physical communication and interaction (2013). Abidin’s noting of how online media continues to be relevant when communicating face-to-face is clearly seen in Margaret’s story (2013). Although Margaret and Alice physically met up, the context of their friendship and the topics of discussion remained closely linked to their recent Steam engagements, akin to Abidin’s findings (2013). This comparison further
highlights interesting similarities between the games platform of Steam and networked platforms more commonly associated with social media. In these cases, the time spent on Steam again engages in a form of double articulation. As well as being leisure time Margaret spent at home, it was also social time spent with her friends and remained part of their friendship—their technobiographical history together—into the public space of the social Saturday night drinks.

Blake, who was 28 when we first met, lived in an apartment in Melbourne’s outer north with his wife, Nina. Blake was an avid videogame and new media user. Their home was connected to a variety of devices, such as computers, a PlayStation 4, several tablets, and Bluetooth coordinated lighting. Blake framed much of his world through his digital interactions—and often scheduled specific times for videogame play. Several times during my meetings with Blake, he described a technobiographical history where his engagement with videogames was formative. An example of this included becoming friends with his primary school classmates through their discussion of the original Halo (Bungie 2001) game. The importance of videogames to Blake continued into his adult life through both social and private leisure time. Many of these interactions and subsequent framings were navigated through social forms of play, using games both as a source of fun and also as a tool for communication. Blake played everything from small indie mobile games to ‘triple AAA’ PC releases. Although he was far keener to play games than his wife, Nina admitted that she had a ‘soft spot’ for videogames.

When growing up, Blake’s main partner for his multiplayer videogame playing was his older brother Declan. Declan and Blake spent many Saturday afternoons on the couch together in their childhood home. Even after they had moved out, the two brothers still frequently met up to play videogames together. This play occurred across a variety of platforms, such as playing the Call of Duty series of games together on PlayStation, or heated sword fights against each other on the Steam local co-op game Nidhogg (Messhof 2014).

However, recently Declan moved interstate for work. Despite this move he still frequently played competitive games with his brother, only now their interaction was achieved through the online multiplayer servers of Steam and it games. These
interactions created a bridge across the space and time between the different physical contexts that Blake and Declan inhabited. Due to different time zones and schedules between Western Australia\(^9\) (where Declan moved) and Victoria, the two brothers used the Steam platform in an entirely different way to their prior gaming history.

The ‘resistance of time to visualisation’ (Boellstorff 2008, p. 105) was seen in Blake and Declan’s case. Such resistance occurred as although the time difference between the two was only a few hours, it was enough that ‘typical’ videogame play did not work for them. In this case, the term ‘typical’ was employed by Blake and referred to the FPS acts of play they engaged in before his brother moved to Western Australia. Due to Declan’s busy schedule, they often struggled to play games requiring constant attention. To circumvent this limitation, the two brothers mostly played turn-based videogames such as the RTS *Civilisation V* (Firaxis Games 2010) or the digital card game *Shadowverse* (Cygames 2016). The turn-based format of these games meant that if either player could not respond immediately, there was no detrimental affect upon the play session. I asked Blake how they felt about playing these games, given that their former preference seemed to be centred more on shooting based games. Blake explained to me that it was really about keeping touch with his brother:

> We’re never going to call each other. That’s not what we’ve ever done. But if we play something together, it kind of counts. We can chat, and it’s not a formal ‘how are you, how’s work?’ kind of thing. We’re just hanging out.

Blake and Declan’s main form of communication was through the chat systems of the Steam platform. It was through the Steam platform that they were able to continue their gaming interactions, something that Blake understood to be very important to their relationship. By playing these turn-based games, the two were able to engage in a more leisurely manner. Blake could play while Nina was home, typing quietly to his brother and playing *Shadowverse* (Cygames 2016) while Nina studied. The nature of these games and the fact that they could be played while still present in the domestic

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\(^9\) Western Australia is typically two hours behind Melbourne—although this becomes three hours during the summer months where Melbourne observes daylight savings. Perth, Western Australia’s capital city sits in the Australian Western Standard Time (AWST) time zone, while Melbourne is located within the Australian Eastern Standard Time (AEST) zone.
space meant that users such as Blake and his brother, while still bound by the time zones of their physical locations, were able to circumvent the separation this would have otherwise created. As Blake described it:

It’s like a little separate bubble we play in within everything else. We might save a game and not play for a week, but when we start up again, it’s like no time has passed between us, we go right from there.

While examples of play similar to Blake’s are common in games studies research, the scenario of use through the Steam platform has a distinct difference due to the Steam Overlay. Often, Blake explained that the in-game score was completely irrelevant, with videogame play acting merely as a conduit for easy communication between two brothers. Several times a competitive game of Civilisation had to be conceded when the brothers realised they were paying more attention to the YouTube clips they were sending each other through the Steam Overlay than the game at hand. The easy accessibility and integration of the Steam platform and its overlay meant that the communicative space of the game was not bound solely within the games’ world. Through the use of the Steam Overlay, the brothers chatted, shared links and engaged in other communicative practices, allowing for a much looser engagement. The traditional scope of the game was relegated to third place.

The framing of Steam through such social engagement can again be linked to the SST approaches (MacKenzie & Wajcman 1986; Williams & Edge 1996). When considering Blake and Declan’s case and engaging the idea that technology is shaped by the social requirements of its users, it is clear that many participants in this research engaged the Steam platform with social interactions at the forefront of their usage. Essentially, the usage of the Steam platform’s technology is shaped by how it was used socially by the two brothers, with the Steam Overlay playing a pivotal role in their interactions, distinct from other in-game communication methods.

This is similar to Dovey and Kennedy’s findings into the importance of visual interface designs (2006). Although Dovey and Kennedy’s work focuses on the ability of these designs to provide immersive interaction into game worlds, their recognition of the role visual interfaces can play holds true in regard to Steam. The visual
interface of the Steam Store, Library, and overlay has a notable impact upon user’s engagement with the platform and the social interactions it facilitates. However again here we can see that there was a reciprocal relationship, with the configuration of Steam facilitating and conditioning the mode of communication between the brothers and their respective homes. This example of reciprocal influence further highlights the entangled relationship between Steam, the user, and the domestic space of the home that this thesis is ethnographically engaged in.

In a similar manner, the influence of the social contexts of the household upon Steam can be further analysed. Using the text-based chat of the Steam Overlay, Blake was able to maintain a period of time as ‘home time’, even while engaged in social behaviour with his brother. Similarly, Margaret’s use of the Steam notification functions allowed her to reshape her time within the home through her use of technology, just as her social desires shaped her engagement with it. Through these nuanced engagements Blake and Declan were able to use the Steam platform to fit their main communicative habit of co-playing together throughout busy lives, separated by time zones and geographical distance. Their case highlights how the technologies we use to play—in this case, the Steam platform and in-game Steam Overlay—can change the function of the game and the resultant way the players engage with it at a domestic level.

However, all of these uses are predicated upon reliable internet connections. As discussed in Chapter 4, reliable access to internet is an intermittent state in Melbourne, particularly in relation to the uneven availability of the NBN. While Blake did not highlight any difficulties in communicating with his brother, he did believe that this was partly due to the fact that they mostly played turn-based games—eliminating some of the need for a fast internet connection. The impact of Melbourne’s inadequate internet connections is more noticeable in participants attempting to play and communicate through other genres of games, such as FPSs or RTSs. Owen and Jill explained to me how they had attempted to play Team Fortress 2 (Valve Corporation 2007) together when Owen was overseas. Jill described some of the difficulty they experienced:
We joined a server, and I had no idea what was going on. I was so far behind the game, it was lagging like crazy. We were talking over Skype, and Owen was doing fine, but he said I looked like I was just standing still, glitching over the map.

Jill’s quote expresses an experience that was common to many participants. Upon attempting to engage with international players, most participants found the lag too much for them to be able to play. In Jill’s case, her attempt to spend some time playing with her partner while he was away were severely hampered by the inadequate internet connections available to her in Melbourne. Eventually, the two stopped trying to play Team Fortress 2 and relegated their meet-up to Skype. Jill explained that this was somewhat of a compromise:

Skype is a bit weird, you know? I feel like conversation doesn’t really flow, it always feels a bit jagged. That’s why we tried to play together on Steam, it makes it feel much more like a normal interaction for us.

Jill and Owen’s experience highlights how many participants attempted to use Steam in order to strengthen relationships through communication and time investment into game experiences together. However, not every use of the Steam ‘friends list’ and time engagement is positive in maintaining close relationships. Through the context of friendship and the Steam friend’s list, scammers have been known to try and convince their ‘friends’ to hand over personal information—such as their account password, physical location, or personal email details. In these exploitative situations, the dangers of digitally contextual friendships are revealed. Often these attempts are obvious, yet sometimes users are ‘scammed’. While this area of networked games usage has been discussed in MMO research around account fraud and trading scams (Bardzell, Jakobsson et al. 2007; Meyer 2011), this chapter seeks to examine the phenomenon from a different perspective by employing more anthropological notions; exchange and reciprocity. Two important notions in this area are the notions of ‘lateral’ and ‘vertical’ reciprocity within a particular community—in this case the Steam platform.

**Exchange and reciprocity on Steam**
Chapter 2 detailed the ways in which goods on Steam could be exchanged through the Steam marketplace. These goods can be sold, traded, or even gifted between users. This section of examines how these practices inform understandings and temporal ‘investment’ into the Steam platform. This ‘investment’ refers to the exchanges made on the Steam platform—both monetary exchanges and ‘effort’ gifts consisting of time being given to other users of the platform. Analysis of these investments helps to determine how users understand the time they spend engaging, exchanging, and interacting with both the Steam platform and its other users.

There are two main factors to consider in relation to exchange and reciprocity on the Steam platform. The first considers more unorthodox forms of lateral exchange such as Steam ‘trading cards’ and the time investment required to ‘earn’ them. The second addresses the idea of vertical exchange on Steam—where users invest time into improving their own account by engaging with the Steam platform’s community. In both these cases, reasons and obligations for participation play an important part in how a user engages the platform, but play out differently.

At this juncture it is useful to discuss in the work of anthropologist Marshall Sahlins. Sahlins, along with Claude Lévi-Strauss and Marcel Mauss, are the key anthropological proponents of exchange theory (Lévi-Strauss 1969; Sahlins 1997; Mauss 2000). Their works inform much of anthropology’s understanding of group cohesion through participation and exchange—understood in this thesis as the time investment users put into the Steam Community. Sahlins frames his understanding of social theory through several types of exchange. These types included ‘generalised exchange’—exchange between large groups, ‘balanced exchange’—rapid person to person exchanges (such as a transaction or gift) and ‘negative exchange’, such as haggling or theft (Sahlins 1965). Each of these types of exchange can be engaged laterally between the same category of person within the community, such as between children in a family or employees in a work place, or vertically—the social exchange between an individual and the overarching community or society—in this case, the Steam platform (Peterson 1993; Hage 2003).

Applying this system of exchange onto Steam, most of the exchanges on the platform take place within a lateral context; whereby both giver and receiver understand
themselves to be Steam users, exchanging a good over the marketplace, tips on a forum, or blows in-game. Exchanges occurring laterally on Steam are a crucial part of how Steam’s sense of community is built. Erika Pearson discussed the use of lateral exchanges on the digital platform ‘LiveJournal’, arguing that it is through these exchanges that ‘lateral bonds within the technological boundaries of the community’ are established and consolidated (2007, p. 1).

Similar practices occur on Steam through the time investments users place into the Steam platform and community services. Pearson’s quote details the significance of lateral exchanges on digital platforms—rather than constructing social and economic exchanges around power relations, the reciprocity in such contexts can often be an attempt to enter into a community or accumulate social capital within it. On Steam, this sense of camaraderie is seen in the walkthroughs and guides Steam users spend significant time creating in order to assist users through difficult sections of a game or to find hidden secrets within them. Rather than exchanges brought about through economic activity, these social ‘gifts’ and interactions are centred around their ‘bonding value’—how it is interpreted to establish and reinforce communal ties (Godbout & Caille 1998). This anthropological approach to Steam exchanges generates insight into the structural significance of Steam and how this significance is entangled with everyday understandings of reciprocal exchange.

On Steam this ‘bonding value’ (Godbout & Caille 1998) was certainly noticed by research participants. Frequently, when I asked a question about who participants were playing or trading with, the answer involved describing the other user as a stranger, but also as a fellow Steam user. Giesler and Pohlmann find similar phenomena in file sharing communities, where although users are aware of the distance between each other, the shared social exchange and temporal investment reinforces the social bond between users (2003). The importance of these lateral exchanges is found in the bonds that allow this stranger-friend categorisation.

Returning to the example of the community written game walkthrough or guide, one of the most commonly cited reasons for labelling a guide as ‘good’ by a Steam Community member was due to its personality—a ‘personal touch’ to the guide. An example of this is a guide to the bosses of *Dark Souls II* (From Software 2014), where
the author humorously describes the hours he spent ‘getting ganked’ by a group boss. This guide had been ‘liked’ by other Steam users over 150 times. Guides such as this again stress the relationship between Steam usage and time investment, as well as the return of this time to the Steam Community. Embedded in this notion of reliability is the ‘lateral bonds’ that Pearson describes (2007). To this extent, participants who had used walkthroughs almost exclusively preferred those that had been written by other Steam users rather than formally printed guides such as the ‘Prima Games’ series of guides. As Barry explained in relation to the guides he used to help him beat difficult bosses in Dark Souls II (From Software 2014) (which included the guide mentioned above), ‘You’d rather have help that was written by someone who’s been through it, whose spent heaps of time on it—who feels your pain!’

Despite the importance of the lateral exchanges between Steam users, the role of vertical exchanges is perhaps more crucial to understanding the nature of Steam and the reasons that users invest such significant time into the platform, outside of in-game play practices. Vertical exchange is distinctly less direct than the lateral social and economic exchanges outlined above. Vertical exchange involves exploring exchange in a different way—investigating the exchange of ethical reciprocity and responsibility between a person and the group they inhabit.

When imagined in the context of the Steam platform, the idea of virtual exchange and reciprocity can be difficult to interpret. The first difficulty encountered is imagining Steam as a cohesive whole. While this imagining is quite difficult from an external position, within the Steam platform and among several participants there was a strong engagement with this idea. Frequently, it was discussed in terminology such as the politics or responsibility one has to the Steam platform, expressed through maintaining equitable discussion while on the Steam forums. This focus on equitable discussion is further emphasised through the form structure, with the phrase ‘Do not start flame wars’ listed as one of the key guidelines for interaction in the Steam forums.

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10 Ganked is the gaming slang terminology for an outnumbered fight, such as a two versus one.
Interestingly, it was participants who had used the community written guides, or trading hubs of Steam that called to mind these ideas of equitable discussion within the Steam Community. These same participants were also generally those that spent more hours per week on the Steam platform, both playing videogames and elsewhere within the platform—again stressing the relationship between time investments into Steam and being a socially functioning ‘member’ of the Steam platform. It is important to note that the Steam platform is designed to reinforce this approach to interaction—an example of this is the use of the term ‘community’ as the hub of Steam’s user interaction area.

This notion of ‘community’ sits somewhat at odds with Steam’s overall position as a digital distribution marketplace. However, Valve’s nomenclature appeared to be working effectively among my participants, who frequently referred to interactions on the platform as interactions with the ‘Steam Community’. Although many users engage the Steam platform without taking part in this area of the platform, those users appear less likely to identify with, or be recognised as part of the ‘Steam Community’ by other users. In this way, it is still an example of what exchange anthropologists would term a hierarchical exchange (Befu 1977). Rather than writing guides for a specific user, or putting up Steam trading cards to an individual, these exchanges and gifts are broadcast to the wider community at large for consumption—anthropologically known as ‘effort gifts’. Rather than the exchange of commodities, effort gifts include acts of service or the investment of time into a community, frequently serving as a form of maintenance for social hierarchy (Miller 1995). On Steam, this maintenance of social hierarchy is lived out in the way users post their effort gifts onto the Steam Community pages.

Effort gifts requiring time investment such as guides or reviews are offered to the platform as an act of participation in the Steam Community and are formally recognised by the Steam platform itself through the awarding of profile ‘experience points’. Suhonen, Lampinen, Cheshire and Antin’s research identifies evidence of similar circumstances in an interesting example of online reciprocity in the local online gift exchange system, Kassi (2010). They used a seven month examination of Kassi to analyse how ideas of ‘generalised exchange’ can benefit from the emergent reciprocity of vertical exchange (2010).
On Steam this ‘emergent vertical reciprocity’ (Suhonen, Lampinen et al. 2010) builds upon earlier contributions, creating an obligation for others to also participate in the community—acts which frequently require temporal investment. Again, the Steam platform itself generates obligation here through offering ‘experience points’ and allowing users to display their Steam ‘level’—a quantified representation of their community engagement. An example of this Steam levelling system is seen below (Figure 7.1).

![Figure 7.1: My Steam ‘level’ and a community ambassador badge (Steam 2016a)](image)

Certainly, the exploration undertaken here indicates how crucial these exchange practices are to the social cohesion and perceived intimacy of Steam. But such attempts at exchange can backfire or be exploited through cases of ‘negative exchange’ (Sahlins 1965).

Examples of negative exchanges between Steam users include attempts to gain access to another user’s account, stealing what they have invested time into and costing the user further time in dealing with the attempted negative exchange. This is usually done by persuading a Steam user to hand over their password and account information—what is known as ‘phishing’ (Jagatic, Johnson et al. 2007).

Phishing, more commonly associated with email scams, usually involves three phases (Hong 2012). These phases are the initial ‘hook’ being the email or message, the
second involves the victim following the directions of the hook (usually to go to a fake
website or to install malware) and the third is the ‘phisher’ using the account details
they have gained access to, usually for monetary gain (Jakobsson & Myers 2006). On
Steam, these phases play out in a manner very similar to email phishing attempts and
serve as an example of how a user’s time can be exploited on Steam.

During the course of my fieldwork, I had two separate users attempt to ‘phish’ my
passwords and Steam account information. Both were obvious to me and I quickly
reported them using Steam’s ‘report a user function’, which has a specific section for
attempted ‘account scammers’—Steam’s terminology for phishers (Steam 2017e). Interes-
tingly, both attempts at phishing attacks came in the form of a message contextually
posing as a friendly request. The message asked me to go to the Steam
website under the pretence of trading in-game goods for CS:GO (Valve Corporation
2012), providing a URL link to do so. However, upon closely inspecting and clicking
the link, the website was not Steam’s, but a fake website disguised as Steam,
requesting me to put my account details in. Had I put my account details into this
‘fake’ Steam webpage, the phisher would then have had access to my own Steam
account and item inventory to sell or use. Although Valve tries hard to combat these
fake accounts, there are always more than it can handle and unscrupulous users
continue to exploit digital friendships.

One of Valve’s more noteworthy attempts to limit account phishing has been ‘Steam
Guard’ and two-step authentication. Steam Guard sends users a unique code to the
Steam mobile app when a new login or sale occurs. Users receive this code on their
mobile phone and then must enter it, along with their password, when logging in from
a new location or purchasing goods. Steam Guard also provides another barrier to
phishers gaining account access. After encounters with phishers, I enabled Steam
Guard on my own account, out of fear of more sophisticated future attempts.
However, among my participants, Steam Guard usage was fairly split. Those that did
use it were often the more heavy users of multiplayer games with ‘in-game loot’ such as
DOTA 2 (Valve Corporation 2013) or CS:GO (Valve Corporation 2012), as they
believed they were more likely to be targeted for their valuable items—items of
significant rarity that could be sold at a high price.
Participants that didn’t use Steam Guard often cited the increased time the authenticator added to logging in or purchasing, claiming that it was a ‘hassle’ (in that it cost more time) if you didn’t have your mobile nearby. Others were completely oblivious to the existence of the two-step authenticator. These users—such as Paul, an elderly casual user of the Steam platform—were generally those who did not engage in the community-based access of Steam or frequently purchase videogames through the platform. These users typically engaged the Steam platform only as a launcher for their videogames. Paul, for example, was not worried about any phishing attempts as he did not use the Steam friends list and had no plans to use the Steam marketplace for trading, as his son setup a Steam account specifically to play the Sid Meier’s Civilisation series.

The differing interpretations of the Steam platform and fears of phishing attempts among participants often seemed to revolve around the investments (in both time and money) they had made into the software. Participant fears of phishing were largely centred on losing access to their collection, or having items stolen from their in-game loot inventories. However the potential damage of phishing and account manipulation can go beyond economic damage. The invasion of a user’s physical and digital privacy can severely impact a user’s every day and personal state long after the time they have gone offline. The Steam platforms provides interesting new insight into fraudulent communication practices and account phishing due to its hybrid position as both a platform for videogaming access (through the Steam Library), discussion (through the ‘Steam Community’), trading (through the Steam Marketplace) and digital distribution (through the Steam Store).

The next section of this chapter further unpacks the communicative practices that take place on Steam, paying particular attention to the entanglement between communicative habits on the platform and communicative habits used in the domestic and everyday life of my Melbourne participants.

**Communicative patterns**

Despite the presence of negative exchange practices such as false friends and account scammers on Steam, another critical component of account management is the communication that ensues through it. The communicative tools of Steam were
outlined in Chapter 2. Communication on Steam occurs between players, between users, between users and the platform—all play a role in Steam’s usage and configurations within participants’ domestic households.

The next section of this chapter discusses these communicative practices with regard to temporal and physical contexts. Through such discussion, this section analyses how Steam users change their forms of communication around the Steam platform depending on where and when they are using Steam.

A useful example of such communication is seen in *CS:GO* (Valve Corporation 2012). When playing the game, players constantly update their teammates with the state of enemies, typing notes such as ‘B’ (meaning the enemy is heading for a particular site on the map) or ‘awp’ (meaning an enemy is using a certain sniper rifle). These commands can be typed or spoken through a microphone and certain commands even have an in-game version. Hot-keyed to certain buttons, these in-game actions (known as ‘emotes’) allow a player to get their in-game avatar to announce their actions (such as guarding the bomb site, moving forward, or replying affirmatively to instructions from other players). In order to be successful at *CS:GO* (Valve Corporation 2012) players must effectively communicate in a timely manner to gain an advantage over the opposing team.

Unfortunately for my fieldwork, I am terrible at *CS* (Valve Corporation 2000) in all of its various forms. Despite repeated attempts to play the videogame, I have never been able to develop proficiency in the series. This is largely due to my lack of knowledge around these contextual commands and in-game locations, which leads to an unfortunate inability to communicate quickly whilst in play mode. This lack of communication has meant that I am often more of a hindrance to my team, wandering aimlessly about the map.

At one point during fieldwork, I took up an offer to play *CS:GO* (Valve Corporation 2012) with a group of participants who played the game competitively, including placing is several local tournaments. I stressed that I was no good at the game, so they decided we would play a casual match. When playing with this group of participants commands would regularly be screamed at me in person across the table we were
playing at to go a certain way in-game. I wouldn’t know where to go, often resulting in a loss for our team. Another teammate, playing elsewhere over the internet laughingly typed, ‘mrfalconcat [my Steam handle] lol, you’re rubbish!’

They meant it warmly, but the statement was true. Without the awareness of context, one’s ability to successfully play a game (videogame or otherwise) is severely limited. Taylor notes a similar experience in WoW (Blizzard Entertainment 2005), where knowledge of the contextual commands and communicative methods is central to taking part in multi-person raids and other difficult in-game content (Taylor 2009). This knowledge was also gleaned from the wider CS:GO (Valve Corporation 2012) community—guides on the Steam platform, blogs, or in-game advice from other players. Mark Chen also explores group collaboration and cohesion in WoW raids, examining the crucial role effective communication can play in helping players defeat end-game bosses (2009, 2010). Talmadge Wright, Eric Boria and Paul Briedenbach explored communicative practices in early versions of CS (Valve Corporation 2000) (2002). The authors noted similar phenomena to the practices mentioned above, such as innovative verbal dialogue and co-existent forms of communication such as verbal, textual and ‘nonverbal’ (Wright, Boria et al. 2002).

Such communication practices can often be quite noisy. Corey, a student living at home with his parents in Melbourne’s outer north, often ran into domestic issues due to the problem of noise in the household. Although his desktop computer was kept in the family study, the study is close to his parents’ bedroom. When he played late at night, Corey had occasionally disturbed his parents with his team’s in-game communication. Corey’s parents explained their feelings about these late night play sessions:

We get he’s playing with his friends, and it’s exciting, so he’s going to make noise. But he has to remember he’s not out and about, he’s at home and we’re trying to sleep.

This quote contains two different understandings of temporal location within the domestic home. Late at night, Corey’s parents understood their domestic home to be a place of rest. In contrast to this, Corey’s temporal place was renegotiated through
the videogame play facilitated by Steam—and subsequently recast as a social space. Corey’s example stresses the links between time and communication on Steam. In the case of Melbourne, this temporal tension is highlighted further by the Australian time zone often clashing with Steam’s more popular play times in North America. Even when not actively playing videogames, the Steam platform still functioned as a ‘meeting place’ for Corey and his friends—he explained that they might be on voice chat during Steam sales, excitedly discussing the best deals and new purchases. Even so, Corey recognised the discomfort he caused his parents and tried to keep his voice down when playing at night. He even communicated this limitation to his friends and fellow players, explaining to them that he would use text chat and in-game emotes, unless ‘absolutely necessary’. Through this managed communicative practice, Corey’s domestic Steam practices have been re-negotiated through the context of the home in an attempt to alleviate the domestic tension between Corey and his parents and temporally appropriate times of social interaction.

However, aspects of this tension still remain between the two groups. Corey admitted that he ‘probably still makes too much noise’ when he gets excited. On these occasions, the ‘space’ Corey imagined himself in was once again cast as a social space, seen through the lens of the Steam platform. In one, Corey’s home was the quiet house where his parents were trying to sleep and in another it was a social space for him and his friends. This contextual imagining was largely influenced by Corey’s moment-to-moment contextual communications, which overrode the temporal context of the domestic night and the expected domestic norms accompanying it.

These contextual communications and in-game gestures can also carry over into everyday life, where users apply aspects and quirks of the Steam platform and videogaming habits onto their wider everyday lives. This includes the discussion of videogame experiences when meeting up, as detailed above in the cases of Margaret who went online to play and ended up physically meeting up with friends. These constructed and hybridised contexts echo Isabella’s notion of ‘virtual and real’ construction (2007). A significant difference here though is that it is not being enacted by any researcher, but rather by the player themselves, shifting and renegotiating their contexts around their communicative methods (Isabella 2007). In these cases, as well
as Corey’s, the play experience has been shaped through the entanglement of
temporal domestic contexts and the communication practices Steam facilitates.

Taylor and other writers on assemblage argue that the games we play are not always
the one’s that were designed (Steinkuehler 2005; Taylor 2009). Taylor contends that
videogames are ‘artifacts that traverse multiple communities of practice and can hold
multiple, often contested, meanings’ (2009, p. 333). However, through the cases of
Corey, such traversal can be seen beyond the videogames. In his case, the Steam
platform itself plays a role in allowing meanings to traverse their context and develop
new applications. In this way, the Steam platform itself is central to the mangle—a
hybridised space of play and social engagement within a private domestic home.

In these cases of hybridised mangling, the lives of participants are influenced by the
dialectic tensions of the videogames they play and their use of the Steam platform to
play them. Writers such as Kücklich and Moore have explored similar phenomena in
other manifestations (2005; 2009). The two authors have examined how digital
distribution platforms such as Steam are changing the gaming design landscape,
touching on its capacity to reform and reshape relationships between producer and
consumer (Kücklich 2005; Moore 2009). Kücklich’s now well-known term ‘playbour’
meshes play and labour together, capturing this essence and the inherent inter-
contextual nature of videogames (Kücklich & Fellow 2004, 2005). Elsewhere in the
literature, similar terminology places primary emphasis on the work, creating the term
‘weisure’ (Conley 2009; Bartlett 2014).

The links between producer and consumer are particularly relevant in the Australian
context of Melbourne, where regional pricing (as mentioned in Chapter 2, this pricing
is often referred to, with some vitriol, as the ‘Australia Tax’) impacts the affordability
of videogame content. Although the increased costs of purchasing videogames in
Australia remains a sensitive topic to Steam users, the easy access the Steam platform
affords its users has meant that Australian users are able to access content
simultaneously to other regions—where once content would be released in Australia
at a later date. In other digital media mediums, particularly television, the inability of
eyeasy access to content in a timely manner is regarded as a significant contributor to
the high rates of digital piracy in Australia (Reynolds 2014).
In the context of my fieldwork, these are important examples of more efficient communicative practices between game developer and game player—facilitated in the Melbourne context through the Steam platform. Such phenomena provide new insight into the overlaps between domestication, videogame usage and communication between different groups along the chain of videogame creation to videogame consumption within Australian contexts. The following section of this chapter expands upon these notions of consumption by further unpacking how the Steam platform is influencing the times of day my Melbourne participants play videogames within their homes.

**Time across contexts**

In *Coming of Age in Second Life*, Boellstorff notes how ‘time resists virtualisation in a way that space does not’ (Boellstorff 2008, p. 105). Within a chapter exploring ‘place and time’ he discusses how this resistance to virtualisation means that users of Second Life (Linden Lab 2013) are restricted in their access by the physical context of their bodies (Boellstorff 2008). As an example of this restriction, all of a user’s Second Life (Linden Lab 2013) friends might be online, within their physical location it is 3am and they are physically exhausted. This temporal limitation has a significant impact upon how users engage with Second Life (Linden Lab 2013), from whom they interact with in-game to the times of day they might play.

Similar temporal limitations can occur on Steam, particularly within Australia and the city of Melbourne. This section of the chapter details these temporal limitations and the ways participants navigated the tension between their physical time zone and Steam’s popular periods of play. Several participants noted how their physical time and location affects their in-game experiences and vice versa. However, compared to Second Life (Linden Lab 2013), Steam is a space less concerned with ‘worldness’—it is not a single bounded game world but a hybrid platform that serves several purposes, including providing access to videogames. This important difference means that these temporal limitations and contexts can manifest in different ways, such as the number of total users online versus the number of users currently playing a specific videogame. Despite these potential differences, the Steam platform still experiences patterns of temporal activity. When looking at a graph showing Steam’s concurrent online user
numbers (see Figures 7.2 and 7.3 below), there is a clear correlation between time of day and the number of users.

Figure 7.2 below, is taken from Steam’s website and based on US Eastern Standard Time (EST). Examining this graph, similar to Chapter 2’s Figure 2.5, a wave-like pattern is clearly visible, correlating to certain times of day. Important to note in

![Figure 7.2: Concurrent Steam users across a 48-hour period during the week in 2016 (Steam 2016c)](image)

Figure 7.2 is that these numbers were taken over a 2016 US weekend (Saturday and Sunday, or Sunday and Monday Melbourne time), where far more people were playing games during the day. A second graph, found below, shows the user numbers over a 48-hour period during the week in early 2018 (see Figure 7.3). Two interesting distinctions can be made when comparing the two graphs.

![Figure 7.3: Concurrent Steam users graph (Steam 2018c)](image)
Firstly, the peaks and troughs are more pronounced during the week. This is likely due to many people being busy during weekdays—working, attending school or other such activities. The second important distinction to notice is the increased peak numbers of 2018. In 2016 the highest number of concurrent users was 11.5 million. In contrast, the 2018 peak numbers are 14.7 million—an increase of 3.2 million concurrent users. This is a large increase and shows the clear growth of the Steam platform, even over the course of my fieldwork (Steam 2016d, Steam 2018b).

These peak periods of user-activity cause several issues for some of my participants, due to their temporal location in the Melbourne time zone (AEST). This is due to time-based contexts of play creating issues around access to populated multiplayer activities. The peak Steam periods differ between AEST and North American time zones. For example, when it is 8pm in Melbourne, it is already 2am in Los Angeles and 5am in New York. For some participants and their family members, these asynchronous time differences have created significant disturbances to their daily routines, particularly on weekends.

Arthur, in his mid-twenties, studied his Bachelor of Arts when I began fieldwork. Arthur spent his weekends waking up at around 3pm (9pm in LA) to catch the peak US activity times. He would then play until 10pm (4am LA time) before taking a quick break and then catching the peak Australian time (11pm–4am) before heading to sleep around 5am. Arthur described himself as a ‘night owl’ and enjoyed this routine, however he admitted that it was probably ‘a little unorthodox’. Even during the week, Arthur would often stay up well past 2am playing videogames, with both Australian and international friends. Arthur’s habits were not solely based around Steam—he was also a keen WoW (Blizzard Entertainment 2005) player.

A play schedule such as the one just described means that players are often staying up late into the Melbourne night, disturbing both their domestic environments and their own sleeping habits. Another example of this was given above in the case of Corey disturbing his parents’ sleep with his late night social play through Steam. Chrystle Martin and others have noted similar phenomena around online videogaming research (Martin, Chu et al. 2011). Martin notes that the physical context of the individual can have an impact upon their observations and experiences in a digital
field site. Their research concerns raiding in *World of Warcraft* (Blizzard Entertainment 2005) (Martin, Chu et al. 2011). One crucial finding these authors make is that playing at certain times changes user interactions. For example, playing at 3am can influence the type of players a researcher meets and particular times become popular for certain groups of users (Martin, Chu et al. 2011). Similarly, Boellstorff notes that players might feel ‘left out’ when events occur during their night-time, or experience ‘jet-lag’ type symptoms as a result of trying to align their sleep schedules with popular online periods of play (2008). Although Martin et al. focus their studies from a perspective concerning temporal variables between researcher-to-participant perspectives, my research participants noted similar experiences with other players, akin to the phenomena Boellstorff investigates.

When he began playing *Csgo* (Valve Corporation 2012), Earnest found that when playing during the peak US time of Australian early afternoons, the standard of other player’s skills was significantly higher than when he played during the Australian evening peak periods (when most US Steam users were in bed). Not being a particularly experienced player, this led him to try and avoid playing during his weekend afternoons as he didn’t enjoy frequently losing to the more difficult players he came up against. This was a rather frustrating compromise for Earnest as this was also the time of week he was most likely to have the leisure time available to play. In this example, Earnest’s desired use of the Steam platform came up against significant temporal tension, due to the dominant US time zone of Steam. Earnest’s case is evidence of time resisting the virtualisation of the Steam platform.

Although the matchmaking and online capabilities allowed Earnest to remotely interact with people from around the globe, his interactions were bound by the temporal context of Melbourne—his physical location. In this manner, he found that he was often playing against other Australian users. As well as highlighting the temporal limitations of global platforms, the grouping together of Australian players also ties back to the slower speeds of Australian internet. When playing against non-Australian players, Earnest, and other participants such as Owen and Jill, found their lag was significantly worse. This situation further limited play and communication practices within the Australian time zones.
In contrast to this example of temporal limitations is Arthur. A more competitive gamer than Earnest, Arthur tried to play both during the afternoon and later at night. Arthur employed such a practice in an attempt to improve his videogaming skills by catching the higher standard that he believed occurs during US peak periods and Australian peak periods of Steam use. This practice subsequently required a very large time investment from Arthur. It became the main temporal frame of his weekends. Arthur also had significantly better internet than many of my other participants — one of the few with the NBN installed in his home. This meant he was able to play on more international servers with what he deemed ‘reasonable lag’. He also chose to connect his computer to the internet via a wired ethernet cable, as this provided a more reliable connection than his home wireless internet and avoided the dropouts he experienced when using the NBN wirelessly.

It is important to note that Arthur still experienced a certain amount of lag and often felt disadvantaged in competitive videogames due to his access coming through Australian internet, despite his higher standard of access than other participants and wired use of the NBN. This combination of temporal and infrastructural framing is a major reason that this thesis focuses mostly on Melbourne-based experiences with Steam. Melbourne offers an unusual perspective on access to networked videogaming, where periods of play and technological access significantly alter the forms of communication and play of Steam users. Essentially, Melbourne Steam users cannot completely escape the Melbourne time zone, or the state of Melbourne internet. Short of drastically changing sleeping habits, the Steam Australian gamers experience will inevitably be different to the Steam experienced by users in the United States, Europe or Asia. However, throughout my fieldwork I encountered cases of users such as Arthur significantly reshaping their temporal practices around their Steam usage.

Another participant, Barry, inadvertently did change his sleeping habits around his play practices. When playing DOTA 2 (Valve Corporation 2013) to a rather competitive level on a regular team, he stayed up later and later at night:

Eventually I’d be waking up at 5pm, playing with Australian friends and generally going about my ‘day’ until 3am or so. Then my team would come online in the US Saturday morning around 10am their time and
we’d play *DOTA 2* until 6 or 7 in the morning Australian time. This was because my US based team often trained in the US mid-morning and afternoon—they all worked in the US in restaurants and bars, so they’d start work at like 1pm their time and go into the night. For me, it wasn’t particularly healthy!

In this extreme case, Barry’s entire temporal habits were based around his engagement with this team. To this extent, he felt his own daily life suffered as a result of such temporal constraints. Eventually, Barry decided that these temporal practices were not worth the temporal reshaping and investment of effort—he decided to stop playing *DOTA 2* competitively in order to focus on his career by pursuing further study in Melbourne. To this extent, his team’s odd playing times did not align with a more orthodox Melbourne schedule, so he decided to leave the team.

Eventually, Barry found a more relaxed, Australian-based team that played Australian afternoons and evenings to catch the US peak periods. As well as being better suited to Barry’s own temporal location, his new Steam schedule allowed better access to the peak periods of play. In our final meeting I queried Barry as to why he had established his original team at such an inopportune time for both his schedule and Steam concurrent player numbers. He responded that he ‘wasn’t too sure’. Playing late one night he’d met his old team and they got along well, so they kept playing together. Eventually, Barry told me, it was more of an obligation to engage with his friends. He explained to me that these friendships were, much more than any enjoyment of *DOTA 2* (Valve Corporation 2013), what kept him ‘struggling’ in his old Steam habits.

Barry’s case highlights the two major temporal pulls of asynchronous videogame usage uncovered during my fieldwork. The first is a temporal investment into maintaining relationships through the platform, while the second is a desire to play during particular time periods—in an attempt to interact with specific groups. The domestic access the Steam platform provides expands these issues by allowing players full access at any time, creating tension between local temporally orientated domestic practices and popular periods of global networked play.
Similar cases of videogaming based daily routines occur in other countries, as is shown by the research Tobias Rothmund, Christoph Klimmt and Mario Gollwitzer conducted into the temporal stability of videogame usage among German adolescents (2016). James Ash also offers insight into how the use of videogame technology shapes awareness of temporal habits (2012). However, the Australian case offers new insights due to two major considerations.

Firstly, Australian time zones (and, in the case of this thesis, Melbourne in particular) are drastically different from the dominant gaming time zones of the Northern United States. Secondly, unreliable Australian internet connections further hamper the ability of Australians to access these more international networked play groups. These issues are brought to the forefront on Steam, a platform that is designed to facilitate global networked play. Other time zones are even more out of sync in relation to Australia. For example, someone in Melbourne wanting to play with gamers based in London during their peak period would be playing from 4pm–11am AEST. Therefore, the context of local time has an immense impact upon how users engage in play experiences through Steam. Indeed, participants had attempted to change their sleeping habits, staying up very late or getting up very early to better align with the time zones of North America or Europe.

In another example from my fieldwork, Belinda described to me how her 19-year-old cousin Louie was well known to fall asleep before dinner, only to wake up around 11pm ready to join his DOTA 2 (Valve Corporation 2013) team for a training session. They would play through until around 4am. He would then return to bed until around midday, before working until 7pm, returning home for a few hours sleep before he met his team again. Interestingly, Louie’s team was apparently Australian-based. They played these late night slots, as it was simply the only time everyone could all make it online, squeezing in time together around the rest of their lives. Louie’s Steam usage can be usefully explored through Wajcman’s theories of ‘time scarcity’, where users feel as though there isn’t enough opportune time in the day to engage in all that they would like to (2008).

In the case of Louie, this time scarcity resulted in using unusual periods of play. The Steam forums are also littered with posts of people asking questions around what time
is best to play a certain game from particular locations, to best fit in Steam usage in a time scarce life. Games with daily quests are a particularly common topic, with users setting alarms or reminders to login at awkward times to maximise their in-game advantage. Particularly in Australia, many games’ daily resets occur at times unsuited to the typical temporal schedule, again indicating issues of time scarcity in regard to Melbourne domestic Steam usage.

**Conclusion**

This chapter has explored how concepts of time and communication are engaged and negotiated through Steam usage in Melbourne. The first section of this chapter examined the management of friendship on Steam. It analysed how participants put time into the Steam platform, measuring such investment in hours. This temporal investment provided insight into how users manage their Steam accounts, interacting with friends and employing certain communicative practices through the Steam platform. The second section of this chapter further unpacked these investments through an analysis of the exchange practices on Steam. Primarily focused around effort-based exchanges, it also examined occurrences of negative exchanges and ‘account scams’ on Steam.

For some participants, the times they engaged in the Steam platform had a significant impact upon their overall daily schedules and household rhythms. These rhythms were most significantly disrupted in cases of networked play, where Melbourne-based players played, often late at night, with teams with members from other places. This phenomenon was investigated throughout the third section of this chapter through case studies such as Barry and Arthur. Exploring temporal communicative habits, the second section examined the various ways Melbourne’s time zone impacts Melbournian’s access to networked global play. These temporal impacts were examined both within the home—such as Corey’s reshaping of his domestic space and the wider Steam landscape.

These scenarios of use were further contextualised through an analysis of the ‘global time’ of the Steam platform and peak periods of concurrent users. Participants were often limited by the disparate internet connections found throughout Melbourne and by the high-speed internet connection required to engage effectively with more
international groups of players. Within Melbourne, these difficulties result in many Steam users interacting predominantly with other Australian players. As a result, Melbourne's internet issues limit the practices of certain Australian social groups, for example: professional players seeking to further their skills, or younger groups (with less agency in the infrastructure of their domestic internet connections) seeking more extreme temporal changes in order to access networked videogaming.

The ways in which my participants engaged these notions of time through their Steam usage had a variety of effects. For some, it had an overall negative impact upon their daily Melbourne life by severely altering sleeping habits. For others, time was more positively reinforced through Steam, reinforcing social experiences during periods of the day that would otherwise be spent alone. The next chapter pays particular attention to these differing models and practices of Steam usage by exploring the loaded terminology of ‘excessive play’ on—and through—the Steam platform in Melbourne households. In particular it examines ideas of ‘balanced usage’ among participants and how such perceptions are developed within Melbourne households.
Chapter 8. ‘It’s just about balance’: Excessive play and techno-literacy

The following quote comes from a conversation I had with Lisa, a retired nurse living in Caulfield, a suburb of southeast Melbourne:

Whenever she comes around, all she wants to do is play on her laptop. She doesn’t want to watch TV, or even play Scrabble or anything, she's just addicted to her videogames.

In this quote, and throughout our conversation, Lisa discussed her adult daughter Emily. Following in her mother’s footsteps, Emily worked as a nurse at a hospital in Caulfield. After night shifts, Emily often slept at her parent’s house during the day. According to her mother, Emily was ‘addicted' to playing videogames on her laptop. The notion of ‘addiction’ to digital content found within Lisa’s quote is a topic of discussion that frequently emerged during my fieldwork. From parents such as Lisa, worried about the playing habits of their children, to university students who were late for work after staying up well into the night playing DOTA 2 (Valve Corporation 2013), many participants employed terminology concerning ‘addiction’ when discussing domestic usage of the Steam platform.

The term ‘addiction’ implies a psychological dependence, which neither I, nor this thesis, is qualified to assess. Therefore, this chapter will employ the term ‘excessive play’ as detailed by Karlsen (2016). Karlsen’s terminology, as discussed in the literature review section of this thesis, makes the important distinction between ‘life phases’ in contrast to addiction such as substance abuse (2016). Karlsen’s distinction centres on fluctuating levels of engagement with videogames across a player’s lifetime compared to other everyday demands. By using ‘excessive play’ terminology, this chapter engages with the negative connotations of videogame over-usage and ‘problematic play’, without engaging with the diagnostic framework implied by ‘addiction’ (Nielsen & Karhulahti 2017).

However, despite my own usage of ‘excessive play’ terminology, this chapter does examine the usage of such terminology by my participants. Through the use of several key ethnographic examples from fieldwork this chapter unpacks when and why
participants chose to employ such terminology. The chapter analyses these examples through three key themes.

The first section of this chapter discusses the patterns of practice participants linked to excessive and problematic play, as well as problematic engagement with the other facets of the Steam platform. Drawing from theories on ‘time scarcity’ (Wajcman 2008; Bittman, Brown & Wajcman 2009) it explores the periods of time participants deemed acceptable to use Steam, as well as the length of time spent in various play sessions.

The first section of this chapter also details the influence of the Australian media upon Melbourne household interpretations of domestic Steam usage. Drawing on mainstream media, digital health theory, and academic writing around excessive play, it compares the presence of such writing to the viewpoints of participants. This comparison includes examples of ‘labelling’—the identifying of another’s videogame or Steam usage as problematic. Theories of labelling originate in Howard Becker’s Outsiders (2008) and Goffman’s interpretation of stigma (Goffman 2009). Examining cases of labelling in relation to videogame usage (Brus 2013), this first section considers differing notions of domestic videogame usage in Melbourne households between Steam users and non-steam users. Such a focus helps to build knowledge around Australian government guidelines concerning parental management of childhood videogame content engagement.

A second section examines temporal based understandings of ‘balanced usage’ among participants. Expanding upon Chapter 7’s discussion of temporal practices on Steam and domestic videogame usage, the section serves to identify how participants form particular patterns of practice and categorise these patterns, such as ‘downtime’, ‘wasting time’ or ‘doing nothing’. However, where the previous chapter analysed how and why these practices occur, this section will interrogate the usage models of participants and their relation to excessive play theory.

The third and final section of this chapter expands upon these differences in usage models to analyse the intergenerational differences around notions of techno-literacy within Melbourne homes. Through the use of a techno-literacy framework, this
section compares cases within my fieldwork where users outlined Steam usage and videogame practices across the spectrum of age. This comparison serves to identify the differing criteria for interpreting play practices and Steam usage as excessive or problematic among various forms of the Melbourne household. Also relevant to discussion within this section is the variety of domestic configurations and practices employed by different generations in regard to Steam usage and videogame engagement.

It is crucial to restate here that this chapter is not attempting to make a definitive statement on whether or not videogames can be ‘addicting’. Rather, it examines potential cases of excessive play and why participants choose to employ ‘addiction’ orientated terminology when discussing their domestic videogame practices. A formal discussion of clinical addiction would require deep background research and knowledge in psychology—well beyond the scope of this thesis. Therefore, this chapter should not be read as an analysis of the potential for the addictive in videogame usage. Rather, it is an examination of how Melbourne households frame and understand videogame and Steam usage, conducted to reveal how such framing influences the domestic configurations of the home.

**Perceptions of excessive play and videogame ‘balance’ in Australian media**

Even as videogames achieve increasing commercial success in recent times, videogames continue to struggle for acceptance as a cultural form in both domestic and public contexts (Bogost 2007; Chalk 2014). This ‘struggle’ is found in detail across the Melbourne-based households of my research.

The ‘struggle for acceptance’ is discussed within several bodies of academic literature. Although most scholars argue that this inferior positioning is lessening, they agree that there is still a disparity between the economic and cultural impact of games (Bogost 2007; Flanagan 2009; Bogost 2010; McGonigal 2011). This pattern is discussed with regard to the Australian context by the aforementioned Green, who notes that despite the rapid uptake of new media technologies in Australia, digital gaming retains an element of social negativity in public perception (Green 2002, 2004, 2010). The following section of this chapter examines the continuing social negativity in
Australian media. It interrogates how the portrayal of videogames by the Australian media has influenced the ways in which participant households include Steam within their domestic configurations, comparing my own findings with other recent data sets, such as the 2016 *Digital Australia Report* (Brand & Todhunter 2016).

Mainstream media has argued that video games are a ‘negative practice’, with frequent links made to violence, addiction and aggression (Anderson, Shibuya et al. 2010; Granic, Lobel et al. 2014). Although the media frequently explores these ideas with references only to extreme cases, in the popular mindset less extreme versions of the ‘negative practice’ of videogame usage is common. As well as issues around over-usage, videogame engagement is often related to other problematic practices. The *Digital Australia Report* lists a variety of ‘concerning elements’ in relation to digital media usage, including gambling, privacy, and harassment (Brand & Todhunter 2016). For many of my participants, these concerning elements were entangled with ideas of overuse—they became increasingly concerning as play periods per week increased. Paul, a retiree whose son had set up Steam for him to play early versions of the *Civilisation* series of empire building games, described his perception to me as follows:

> I think that videogames can be quite dangerous. You always see on the news stories of people getting addicted, playing so long they die or spending all their money. Particularly for kids I think it’s important they do other things, and limit their videogames. It just seems quite risky, particularly the more violent shoot-em-up games, teaching dangerous habits.

Paul and his wife Zelma regarded themselves as quite tech-savvy. Paul explained to me that the videogames he played through Steam were more like ‘board games’ and, as seen in the quote above, it was shooter games that worried him. He also told me that his son had set up his Steam account for him and showed him how to open the *Civilisation* games—and that he had no further interest in the Steam platform beyond that. When we discussed that Steam was also a store to purchase videogames through, he expressed concern at such easy purchasing occurring within the home.
Paul’s trepidation towards ‘violent’ videogames and their perceived potential to lead to real world violence is a topic that has appeared numerous times in the Australian media (Apperley 2008; Jones, Scholes et al. 2014). Articles such as ‘Video Games Sending Kids Crazy’ (McDougall 2011), ‘Violent video games linked to teenage crime risk’ (Writers 2014) or ‘Violent video games could pose danger for children’ (Griffith 2017) reflect Paul’s fear of violent videogames having a negative impact upon the lives of young people through incitement to violence. The particular concern of ‘the children’ is a common theme in both these articles and among participant parents I spoke to during fieldwork. The presence of this concern is also relevant to the analysis of this Chapter’s third section—an examination of the differing interpretations of Steam usage along the age spectrum.

Paul’s interpretation of videogames echoed the arguments of mainstream media consumed by the Australian population. Another useful example was seen in Zoe’s comparison of the television show Broad City (Comedy Central 2014) with her housemate’s domestic Steam usage. Zoe lived with her boyfriend Steven and their friend Allen. Zoe did not use Steam and Steven was not a ‘heavy user’ (as she described him to me) but Allen was a keen gamer. When they all moved in together, Allen set up his desktop computer in the living room and often played games during the evenings, frequently with other players. Zoe compared Allen’s habits to a character on the TV show Broad City (Comedy Central 2014) named ‘Bevers’. Within the show, Bevers often neglects the other aspects of his life to play videogames on the couch, leaving the rest of the apartment he lives in filthy. Zoe told me that after watching Broad City (Comedy Central 2014):

I just couldn’t ‘not’ see Bevers when Allen played in the living room. It made the whole space feel so dirty! Him talking and all the little notifications and noises made it so uncomfortable in here.

As a result of this association, Zoe asked Allen to move his computer into his bedroom. Allen wanted to be an understanding housemate and so obliged his friend’s request. He explained:
It wasn’t too much of a hassle. I get it, like computers can look pretty gross out of context. Here’s this thing we’re supposed to do work on and keep nice and neat and I’m sitting in my dressing gown shooting zombies and screaming at the computer (ha-ha). When she asked, it seemed fair enough.

This example highlights how the media consumed by participant households influenced their interpretation of acceptable domestic configurations. Contained within Allen and Zoe’s interpretation of what a computer ‘should look like’ and ‘should be used for’ is an interesting tension between the articulations of devices within the home. Allen’s Steam usage in the shared space of the living room made Zoe uncomfortable as it changed the socio-spatial context of the room through the practices Allen accessed through Steam. In particular, Zoe highlighted the communicative habits of Allen and the notifications of Steam as a central issue. Flynn would argue that this tension arose out of differing interpretations of the ‘hearth’ of their home and the way digital technology (in this case, Allen’s usage of the Steam platform) was used to mediate the space (2003). This tension helps to elucidate why several participants framed certain models of Steam usage as problematic in the way it negatively altered the social configurations of the domestic home.

Contained within the entangled tensions between addiction, time wasting, and domestic configurations is further evidence of the role of new media technologies in domestic configurations (Berker, Hartmann et al. 2005; Livingstone 2007). In particular, the usage of Steam by participants altered how a technology was used and subsequently configured within a household. Similarly, which facet of the household device was used, and how it was used, was highly dependent on the context the user finds themselves in. This context in turn informed how the user framed the articulation of the device—giving rise to perceptions of excessive play and problematic usage within participant households.

An example of this is seen through the household computer found in Emily’s parents Lisa and David’s home. In their home, the computer was located in a small study on the second story. While David primarily used the computer, Lisa also used it to check her emails. David worked on the computer during the day and also used the device to play *Age of Empires II* (Ensemble Studios 1999), *Banished* (Shining Rock Software 2014)
and other games during his self-described ‘downtime’. In relation to Lisa and David’s household computer, the computer could be a device for work—used to check schedules, upload lectures and organise meetings. It could also be a social device, engaged to contact and communicate with friends. In addition, it also acted as a gaming device when David logged into his Steam account.

Importantly, these multiple functionalities of their household computer blurred into one another—Lisa used her email to contact work and also to organise social outings with her friends. Similarly, David used the social function of Steam to play Age of Empires II (Ensemble Studios 1999) with his friends who live overseas. These multiple functionalities raise questions around ‘appropriate’ usage of the device—there are certain contexts in which Lisa and David felt they could not justify the use of a certain facet of the device. For example, Lisa framed David’s gaming habits as far more ‘useful’ when he played with his friends as he was using the Steam platform to build and maintain social connections. Although Lisa didn’t classify David as ‘addicted’, she admitted that she worries about David’s ‘over usage’ of games (the term she used in place of addiction) when he played alone.

It is here that the social notion of addiction begins to emerge. Lisa understood their household computer as primarily a device for work, in line with much of what Lally, Goggin and other researchers found around earlier Australian generations imaginings of computer devices and the internet (Lally 2002; Goggin 2004; Green 2004). This imagining has been strengthened by current popular media discourse around the impact videogames can have upon their users—as seen above in the cases of articles reporting negatively on videogames and their portrayal in the media consumed by participants. Such media portrayal had significant impact upon how participants configured Steam usage within their households.

It is important to recognise the self-awareness of participants around how they use terminology concerning ‘over usage’ and ‘addiction’. When Lisa discussed with me her feelings about David and Emily’s Steam usage, she noted that she wasn't actually fearful of her husband’s habits and critiqued the common media discourse around how videogames generate aggression in the people who play them. As she told me:
I’m not at all worried that he’s going to play the games and then go and rob the corner store. I think some of the stuff reported today is quite sensationalised. Really, it’s just about balance, and sometimes I simply worry he doesn’t balance his usage enough, and it’s unhealthy.

Lisa’s identification of the sensationalising role the media can play was a common point of discussion among my participants. For many of them, their primary concerns around addiction were not issues of violent tendencies, but rather issues of ‘balance’, as Lisa phrased in her concern. Interestingly, these interpretations of balance are also found in the Australian media landscape.

While notions of ‘videogame addiction’ are linked to pathological symptoms within much of the mainstream media, the data gathered from games studies research offers an important rebuttal (Nielsen 2015). One of the critical arguments made by games studies researchers is that discussions of addiction in mainstream media overlook the social worlds of videogames (Yee 2006). Jocelyn Brewer’s work attempts to engage with these social worlds to show the ‘range of cognitive, social and educational values contained in the technology enabled media content we consume’ (Brewer 2013, p. 1). Again here a range of viewpoints is evident. While Brewer makes the important point that screen time is not directly related to healthy usage, other writers, such as Daniel Sieberg, stress the need to overcome ‘tech additions’ (Sieberg 2011). Sonia Livingstone has also conducted thorough examinations of technology usage, examining such usage through ‘healthy’ terminology, risk exposure and digital literacy (Livingstone, Van Couvering et al. 2005; Livingstone, Haddon et al. 2012; Davies, Coleman et al. 2015; Livingstone 2015). Karlsen argues a similar point, interpreting a social play balance as a significant driver in cases of excessive play (2011, 2016).

The issue of ‘balance’ in domestic configurations and Steam usage was also of primary concern to participant parents managing children’s playing times through Steam. It is to this area that this chapter turns to address. These differing interpretations of balance ask serious questions around inter-generational literacies and the domestic configurations influenced by such balancing. The following section examines notions of balanced Steam usage through a discussion of parental monitoring of child Steam
usage and inter-generational differences in Steam usage across Melbourne households.

Patterns of practice
In the quote opening this chapter, Lisa discusses her daughter (Emily) and the gaming habits Emily displayed when she stayed over at her parents’ home. On these occasions, Emily had just finished working a night shift and was resting at her parents’ house during the day. During this time in the family home, she often played games on Steam through her MacBook Pro laptop. Emily had no ‘main’ game that dominated her periods of play. Instead, she played a variety of games and genres such as *The Binding of Isaac* (McMillen & Himsl 2011), *Faeria* (Abrakam 2017) and *Subnautica* (Unknown Worlds Entertainment 2018). She estimated that she spent several hours of her day playing these games while the rest of her social network was at work. These hours of daytime play are those that her mother referred to as evidence for her daughter’s excessive play.

Regarding temporal notions of play, there have been links made between time and digital play engagement within academic writing on problematic and excessive play (Leung 2004; Beranuy, Carbonell et al. 2013; Karlsen 2016). Temporal concerns around the number of videogame hours a person plays per week have also become a common theme of discussion in more mainstream media (Aamoth 2014; Rapaport 2016). Nielsen explores the psychological notion of ‘addiction’ in relation to videogames in his manuscript *Is Game Addiction a Mental Disorder* (2017). There are also tabloid articles highlighting extreme examples of excessive play, where game players have apparently died shortly after ‘marathon’ gaming sessions lasting several days (Post 2012). Popular media has long pursued a line of argument that video games are a ‘negative practice’—as discussed in the opening section of this Chapter (Anderson, Shibuya et al. 2010; Granic, Lobel et al. 2014).

Among my research participants, videogames were often seen as an activity designed for leisure. Videogame usage outside this designation was frequently referred to as ‘wasting time’. While I have chosen to employ the term ‘excessive play’ in my analysis, the term ‘addicting’ was one that interviewees frequently used to describe videogaming, on both the Steam platform and other new media technology such as
console gaming and mobile devices. One of the most common scenarios participants discussed in relation to their ‘addiction’ were periods of videogame usage outside designated ‘downtime’—time they believed would otherwise be spent ‘doing nothing’.

An example of this ‘doing nothing’ time is found within the household of 30-year-old Vicky. Vicky lived alone in one of Melbourne’s more affluent suburbs. Her home was a small apartment and Vicky worked nearby as a receptionist in an office building. Thanks to her short commute, Vicky had a large amount of what she calls ‘free time’ in the evenings. Vicky sometimes used this free time to play videogames through her Steam account on her Apple desktop computer. Her genre of choice during our initial meeting was survival horror games, with Don’t Starve (Klei Entertainment 2013) being one of her favourites. While Vicky was happy to play games on Steam during her evening ‘free time’, she identified mornings as the time in which she should be conducting other activities—both over the weekends and before work. Accordingly, she referred to cases of playing videogames in the morning as time where her engagement with videogames was a negative practice:

I wasn’t late for work or anything, but I was cutting it fine. I felt like there was more important things to do in the morning than play the game for 20 minutes. I felt like playing in the morning wasn’t a healthy thing to be doing.

For Vicky, it was her videogame usage entering into other temporal parts of the day that caused her concern. These notions of work and leisure being delineated around the day are a common aspect of modern life (Gershuny 2003). Several scholars argue that the domestic presence of new media devices helps to facilitate the integration of work and leisure, drawing them closer together through device access (Hamill 2011; Boudreau & Consalvo 2016; Chess 2018). Vicky’s adoption of videogames into this schema of work and leisure reflected how many participants understood their domestic videogame usage. It was not frequently considered a ‘serious’ activity. Rather, it was imagined in these scenarios as a ‘leisure’ activity, reserved for when other facets of life had been completed. Although outliers to this imagining did exist—particularly among participants who were part of more formal videogaming teams—
the dominant usage practices of participants concerned framing videogame usage as a leisure activity.

In this regard, participant Steam usage was frequently understood as leisure time, whether participants were playing a game, browsing the Steam Store, or engaging in other actions through the platform. Often this classification went further, with participants neither identifying as specific gamers, nor listing videogaming as a purposeful hobby. Instead, they saw videogaming as a tool to limit boredom or an activity for ‘dead time’. Other examples of this ‘dead time’ play among participants occurred when they could not get to sleep, or when waiting for a meal to cook. Even some of my participants who identified as keen gamers adopted this line of thinking.

One of the likely causes of this perception is due to the cultural interpretation of videogames in the Australian cultural and media ecology, as discussed in the previous section of this Chapter. Many of my participant households expressed some level of worry around the potentially negative impact upon everyday and social life when videogames were engaged outside of these self-assigned ‘dead’ or ‘down’ time. For this reason, many participants frequently self monitored their time spent playing—often trying to only play during the aforementioned ‘downtime’, or for limited hours per day or week.

Another example of addictive terminology and timing play comes from Margaret and her use of Steam to play the puzzle adventure game Portal 2 (Valve Corporation 2011). Despite being a self-described ‘huge-fan’ of the game, Margaret found some aspects of it drew her towards ‘unhealthy’ usage, which she framed as addictive. In particular, she found that the endless content of player created puzzles featured within the game lead her towards what she viewed as ‘addicted’ tendencies:

I feel like games like this where you can just keep playing, trying to beat your high score again are really addictive, because it's as soon as you fail you have a chance to beat that attempt again. And even if you do beat it, someone’s always made a new level. Then I go into my account stats and see I’ve played 15 hours this fortnight.
Margaret went on to say during our play session of *Portal 2* (Valve Corporation 2011) that the addictive quality really emerged when she had a desire to play the game when she had other tasks to do—for example, when she was trying to get ready for bed or while eating dinner at home. Margaret’s periods of usage and self-regulation echoed Vicky’s usage habits. However, Margaret paid closer attention to her hours per week. She was able to track these hours as Steam automatically records the number of hours a user has spent in-game. For an example of this statistic on my own Steam account, see Figure 8.1 below.

*Figure 8.1. My own recent Steam account hours played in January 2018 (Steam 2018a)*

Where Margaret understood her game-playing to be negative was when she used Steam ‘when she shouldn’t’—and could track this usage by examining recent hours played. It was in these instances that she (and other participants) described playing games as a ‘waste of time’, detracting from their overall daily goals and tasks, again reflecting notions of Steam and videogame usage impinging upon daily time.

Margaret explained to me that when she checked her hours played and saw that she had spent six hours playing games, she felt as though that was six hours she could have spent ‘getting ahead on work’ or another similar task orientated project. Margaret’s interpretation of her Steam usage and engagement with the Steam time-tracking feature caused her to re-evaluate her domestic Steam usage and the temporal configurations of her home and daily routine. In turn, the affordances of the Steam platform within her domestic environment impacted the ways in which she framed aspects of her videogame usage as problematic.

Another affordance Margaret found problematic was the login function of Steam. By default, Steam is set to automatically log a user in when they start their computer.
Margaret found this setting problematic as it ‘tempted’ her to play when she had work to do. Margaret disabled the setting to make logging in to her Steam account a more conscious process. Again, Margaret’s use of the Steam platform was complicated by the nature of the household computer. The household computer was designed to be used for a variety of purposes, and often these purposes can come into conflict with each other (O’Doherty, Rao et al. 2007). In Margaret’s case, this conflict arose out of the computer being both her work device and the access point for her Steam account. Concerning videogames, this negative connotation is heightened when the device often engaged for ‘work purposes’ is used to play games, an activity primarily associated with leisure and downtime (Sutton-Smith 1977; Shen & Yarnal 2010).

Similar ideas of problematic play in relation to times of day and hours spent playing were of prime concern for parents that I spoke with. However in these cases it was more hypothetical—parents were worried that their children spent too much time on Steam and conversely, not enough elsewhere. Isabel and Matthew, the parents of teenage twins Hannah and Evan, invested effort into managing their children’s playtime to ensure they didn’t ‘become addicted’ or ‘waste their whole weekend in front of the computer’. Books such as Reality is Broken (McGonigal 2011) are reducing the stigma of games as a ‘waste of time’ and ‘addictive’ by opening up videogame literature to a wider audience through approachable content. Even so, my fieldwork indicates that a perception of many forms of videogame play as problematic persists among Melbourne households. Many players I spoke to believed their videogame play habits became damaging to their lives when they were engaged outside of ‘free time’—the ‘balance’ (as many participants described it) tipped away from engagement in their physical private and social lives.

In contrast to these cases of domestic Steam usage being reserved for free time, several participants imagined their Steam usage as far more ‘serious’ and important to their daily routines. Steam is well known for its frequent sales around major seasonal events, such as the winter and summer sales (Chalk 2014). When I first began fieldwork, these events would feature ‘flash’ sales of particularly high discounts, named so because they would only be available for a brief ‘flash’—typically around eight hours. Although this format has now changed, most likely due to Steam’s revamped refund system—early fieldwork highlighted flash sales as having an interesting impact
upon several participants’ engagement with Steam. Albert and Jack, early twenties students who lived together in Melbourne’s north, provide an interesting example of this unorthodox engagement.

During the flash sales, the two housemates would have alarms set on their phones for every eight hours to ensure that they didn’t miss a single flash sale opportunity. While many of these alarms were superfluous, with Albert and Jack regularly being online, the late night and early morning alarms caused a fair amount of disruption to their daily routines. However, both imagined these sale alarms as valuable and enjoyed the ‘thrill of chasing the sales’ as Jack described it to me. I asked the two how other people in their lives felt about these ‘sale alarms’, to which Albert answered, ‘My girlfriend thinks I’m completely crazy. She says I’m addicted to buying games more than I am to playing them (ha-ha).’

Albert’s quote offers two interesting pieces of insight. The first is further evidence of a model of problematic and excessive play being applied to others based on a perception of their practices—similar to Lisa’s interpretation of Emily’s Steam usage discussed in the opening of this chapter. The second concerns a scenario of Steam usage not yet discussed in relation to balance or excess—the purchasing of games through Steam. As mentioned at various times throughout this thesis, Steam’s position as a digital distribution platform is one of the main factors in its success (Edwards 2013). The ease of purchase access it allows users far surpasses any previous form of purchasing videogame content I have come across throughout research.

Even other digitally based stores that might sell videogames such as eBay often rely on the physical movement of goods, delaying the time between purchase and delivery. Other stores, such as Amazon, that sell digital copies of videogames in some markets (though crucially Amazon does not offer digital downloads in Australia) often simply sell Steam ‘codes’ (digital vouchers that can be redeemed on Steam for certain games), so ubiquitous is Steam with videogame purchases of a digital form. On Steam, where all content is digitally based, a user can purchase a game and have it appear in their library moments later. While there is an important difference between appearing in a user’s library and being playable (with a game still needing to be downloaded and
installed), its appearance as an item within a library offers a tangible sense of ownership for many Steam users.

In particular, the ease of access around Steam purchases has significant ramifications for the marketing and distribution of DLC. DLC refers to expansions to videogames through the addition of new content, often available for additional purchase. Where Steam is distinct to other platforms with regards to DLC is the Steam Workshop—discussed in Chapter 2. The Steam Workshop allows users to download player made content (envisaged here as ‘amateur’ DLC) for free. However, paid, studio made DLC is also very common on Steam. A game is quite likely to go on sale before a piece of DLC is released, in order to encourage new buyers to purchase both pieces of content. While this phenomenon is not limited to Steam DLC purchases, the frequent sales of Steam and competitive pricing models digital distribution allows leads to unique models of user purchasing practices.

The combination of easy purchasing and frequent sales has led to the phenomenon of some participant users declaring they are ‘addicted’ to purchasing games—rather than playing them. There is even an associated meme, where Steam is shown to be pilfering users wallets through their sales—sometimes against their will (See Figure 8.2).

As seen in the case of Jack and Albert above, the Steam sales have a marked impact upon daily experiences. Although neither Jack nor Albert interpreted their behaviour as addiction related, some of the other participants did. One example is Joshua’s Steam library. Joshua had over 210 games in his Steam account, of which only 33 were currently installed on his computer. A further 92 of his 210 had no recorded playtime. Joshua did not believe this recorded usage to be entirely accurate, as playing offline is not recorded as playtime. However, he conceded that there were ‘dozens’ of games he had bought and never played. While it is tempting to limit these practices to notions of time scarcity due to their temporal framework (Wajcman 2008), this phenomenon can be further reflected through other theories.

Joshua’s Steam usage is not solely framed around temporal limitations. Entangled within his Steam usage and purchasing habits is the fact that he often bought games
he had very little intention of playing. Games might come in discounted bundles, or as Joshua said, ‘be so cheap it’d be silly not to buy them’. Sometimes games might be free for 24 hours, where Joshua would pick them up simply to ‘add to his collection’.

Paul Van der Grijp discusses collecting in his book *Passion and profit: Towards an anthropology of collecting* (2006). He outlines the economic and temporal investment into a personal collection as ‘pleasant sacrifices’ toward a personal project (Van der Grijp 2002; Van der Grijp 2006). Within digital contexts, Gregory Steirer offers a useful delineation between the various phases of collecting; pre-acquisition, acquisition and ownership (Steirer 2013). For digital collectors (and collectors of other mediums) the phases of pre-acquisition (the searching for) and acquisition (the moment of collecting) are as engaging as the ownership phase (Steirer 2013). In the case of Steam purchases, the models of Steam sales, bundles purchases, and games franchises prompts users to pursue curated collections, often at significant overall financial cost.

*Figure 8.2: A ‘meme’ satirising Steam sales (Know Your Meme 2014)*
In a follow-up interview with Joshua, I discussed the academic thinking outlined above. Joshua agreed with Steirer’s understanding of the importance of the pre-acquisition and acquisition phases (2013). He was however, more critical of Van der Grijp’s ‘pleasant sacrifices’ (2006), remarking that in a best case scenario they were initially pleasant exchanges, but often they became ‘tinged with regret’. For Joshua, this is where he began to apply the label of ‘addiction’ to his Steam collection habits. He believed he was no longer buying these games to add to a collection, but with an air of impulsivity, out of a fear of ‘missing out’. When coupled with the case of in-home purchasing Steam offered him, his game buying habits had become something he felt necessary to ‘manage’.

When I returned to Joshua’s home for our final meeting, he told me that he had now set a monthly limit on his Steam purchases, tracking his spending through a budgeting application on his iPhone. Through such managing, Joshua felt he was achieving stable management of his videogame purchasing habits. This negotiation and self-regulation of Steam purchasing practices indicates the nuances and subtleties that can exist between a Steam user and the Steam platform. Particularly as the Steam store offers in-home access to content these relationships can develop to be understood as damaging by a Steam user—as seen in the case of Joshua. Again Joshua understood his own Steam usage model as ‘healthy’ when he was able to engage it as a balancing act between self-envisioned addiction and leisure—a management of economic and temporal investments alongside the other facets of his domestic life.

Returning to discussion of play practices engaged through the Steam platform, another area where participants frequently discussed ideas of excessive play was around sleep habits. This expands Chapter 7’s discussion of time and the assertion that the location and time of day in which a game is played through Steam can have significant impact on how play is engaged and interpreted. Frequently, participant concerns in this area were centred on the damage such a hobby could have on an individual’s sleeping pattern, or ‘sleep hygiene’ as several participants labelled it. Blake described to me how he and his wife Nina had to limit their playing of videogames in the evenings:
We had to stop playing by 9:30pm. Otherwise, when we went to bed, we’d just be too wired from the games. It wasn’t really about what we were playing, just the fact that we were playing past when we should.

Nina echoed this sentiment and added that it was sometimes difficult to stop playing at the designated time, such as when they were in the middle of a mission in the tactical sci-fi game *X:Com* (Firaxis Games 2012) or a boss fight in *Borderlands 2* (Gearbox Software 2012). It was on these occasions, when they were tempted to (and sometimes did) go past their agreed upon stopping point that they felt their self-described usage drifted into ‘addicted’ territory. Nina and Blake felt they were addicted to a game when it began to alter their sleeping habits. This is an important distinction to the discussion of the previous chapter. Chapter 7 discussed time and how participants changed their schedules around their Steam usage. The discussion here is focused on how a Steam user’s habits begin to infringe upon the other aspects of their life, specifically to the perceived detriment of those other facets. In Nina and Blake’s case this facet was time that should be spent asleep, and in Joshua’s case, financial burden.

Another example of excessive play in relation to temporal practices is found in the case of Matthew. Matthew was 33 when I conducted my first meeting with him, his partner Isabel and their children in the Melbourne suburb of Footscray. Mentioned earlier in this chapter, Isabel and Matthew were keen to ensure that their children, Hannah and Evan, did not invest ‘unhealthy’ amounts of time into videogames within their home. Part of their drive for such management apparently came from Matthew’s prior experience with videogames. Matthew recounted to me a time in his early twenties where he played *Left 4 Dead 2* (Valve Corporation 2009)—a team-based zombie shooter game developed by Valve and played through Steam. Matthew believed he was ‘addicted’ because he would stay up ‘all night’ playing it and then sleep through his university lectures in the morning.

This pattern of excessive play continued until Matthew failed a subject in the second semester of his first year course. After this catalyst and discussion with his parents, Matthew decided to ‘quit’ the game ‘cold turkey’. Matthew then didn’t play any
videogames for several months, which he described to me as ‘breaking his addiction’.11

Matthew’s case highlights a scenario where a user’s domestic videogame usage had an adverse effect upon their lifestyle—leading them to characterise their model of usage as addicted. In Matthew’s case it was the impact late night play sessions of *Left 4 Dead 2* (Valve Corporation 2009) had upon his sleeping habits—and the resultant impact his lack of sleep had upon his daily life. Research has found that an unorthodox sleeping pattern and lack of sleep can have a severe negative impact on an individual’s physical wellbeing and immediate social circle (Durmer & Dinges 2005). The Steam platform and the games it facilitates is particularly well poised to disrupt sleeping patterns due to its prominent position within the household—generally the location where sleep takes place. In the case of Matthew and many of my participants within the 20—30 year old bracket, this access was made even easier as their main Steam computer was located in their bedroom. This domestic configuration was most prevalent in share houses with limited living room space.

Although Matthew’s case was the most extreme example of Steam usage negatively impacting sleep, several other participants echoed his sentiment of videogame usage negatively impacting daily life through disruptive sleeping habits. Participant reactions to this domestic disruption were varied. Some were keen to place daily and nightly limits on hours spent gaming, such as Nina and Blake’s 9:30pm limit. Others restricted themselves to a certain chunk of time, such as two hours a night (but did not set a specific time to be finished by). Several participants, such as Matthew, also mentioned to me how the removal of their computer from the bedroom, in an effort to ‘remove the temptation’ to log onto Steam at night helped them address their perceived problematic play practices. This practice can be seen as similar to Margaret’s disabling of the Steam auto-login function, was she described as ‘tempting’ her to play. These solutions often differed around what configuration was feasible in certain households—for example Matthew’s removal of the computer from his

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11 Such a description was eerily similar to Sieberg’s terminology in ‘The Digital Diet’ (2011), however the similarity is coincidental—Matthew had not read Sieberg’s book.
bedroom would not have been possible in his previous share house, where domestic living space was far more limited.

These domestic configurations often reciprocally influence personal frames of time on the experience of excessive play within Melbourne households. Thomas provides another good example where a participant felt the need to ‘quit’ a game. In discussing the time per day he spent playing the multiplayer game Payday 2 (Overkill Software 2011), Thomas raised issues of excessive and problematic play:

I was totally addicted to that game…. It was the first thing I did in the morning and the last thing I did before I got into bed, I had to stop.

Although this line was recounted to me with some hyperbole, Thomas explained to me that he felt the time he was investing was beginning to damage his relationships. In particular he felt it limited the ‘quality’ time that he spent at home with his partner Billie. Billie admitted that it was quite annoying when Thomas played late at night. Eventually Thomas made the choice to stop playing Payday 2 (Overkill Software 2011) altogether. Thomas made this choice when he began post-graduate study in-between our initial and follow-up meetings. Although Thomas did concede that he missed the game, he acknowledged that he felt his study habits and domestic life had benefited as a result of his altered habits.

Interestingly, when I returned for my final meeting with Thomas, he ‘admitted’ to me that he had been playing the game a small amount recently. He described his renewed playing as ‘far more healthy’, employing terminology similar to Matthew’s around ‘breaking the habit’ of excessive play. Thomas had also enacted limits to ensure he didn’t resume playing to an extent that negatively impacted his daily life—setting alarms on his phone in order to limit his play sessions to two hours per day. These temporal configurations and the structures put in place by several of my participants reflect notions of time scarcity within modern urban life (Hamill 2011).

This time scarcity is particularly evident within Melbourne, where internet usage continues to be accessed through problematic channels such as slow speeds or frequent dropouts, creating issues around access times and usage habits.
In these scenarios, domestic access to leisure devices such as the computer and Steam platform are often interpreted through concepts of excessive or problematic play—with users seeking late night time slots in order to avoid bandwidth competition, both within their homes and the broader locale of Melbourne. In turn this temporal configuration can create other domestic issues within the home, such as disrupting sleeping members or limiting ‘quality time’ with other members of the household. Participants often felt that these issues required addressing through time management approaches. For participants such as Thomas, this time management revolved around access to leisure and social connections—and the entangled balance of household relationships and leisure time within the home (Boudreau & Consalvo 2016).

It is these perceptions of balance in domestic configurations and how ‘unbalanced’ usage habits are framed as problematic addiction that affect how the participants engaged with videogame media at home. In turn, this engagement impacts the extent to which Steam is incorporated into, and capable of influencing, the domestic configurations of Melbourne households.

**Inter-generational usage, configurations, and techno-literacy**

Corey, a mid-twenties student, lived with his parents in one of Melbourne’s more affluent outer suburbs. Corey explained his personal videogaming history during our first meeting in 2015. When he was a young teenager, Corey’s mother and father had what Corey described as ‘strict’ limitations upon his domestic usage of videogames.

The only times Corey was allowed to play videogames during the week were after school, before dinner. On the weekends, Corey could play in the afternoons and on Saturday nights. As Corey became older and got his own computer, these parental restrictions were relaxed. However, Corey had strong memories of the boundaries set by his parents. Corey remembered his Dad telling him that if he played too much his ‘eyes would go square’ or that the games would ‘rot his brain and ruin his imagination’.

Corey’s recounting of his childhood gaming habits again speaks to interpretations of ‘balance’ in relation to new media usage. This section examines these interpretations
and the different levels of Steam techno-literacy present among my research participants in order to better understand how households with cross-generational interactions engage with Steam.

Much has been written around parental management of children’s online access, commonly referred to as ‘Internet parenting’ (Bakardjieva 2005; Valcke, Bonte et al. 2010). The terminology refers to the myriad of approaches parents take to protect, teach, and manage the online digital consumption of their children. Such actions are often deemed necessary due to the potential risks that can be found on the internet such as cyberbullying and the invasion of privacy (Livingstone, Haddon et al. 2012). Although internet parenting covers parental involvement into any and all online activities, most relevant to this thesis is internet parenting practices concerning the videogame habits of their children.

Kyunghie Kim & Kisook Kim provide an example of approaching parental management of child gaming habits in their examination into Korean adolescent-parent gaming relationships and addiction (Kim & Kim 2015). The authors argue that parental influence can have a marked effect upon the gaming practices of children (Kim & Kim 2015). Other academic works have identified a correlation between parental involvement and videogame over-usage (Song & Sim 2003; Kwak 2004). In the Australian context, there has been both medically based (King & Delfabbro 2009; Rikkers, Lawrence et al. 2016) and socially based (Brand, Borchard et al. 2009; Ross, Miller et al. 2013) work into this area. In much of this academic body of work, the focus concerns the ‘health’ impacts of excessive play in relation to videogames (King & Delfabbro 2010). These parental health concerns frequently manifested during fieldwork, as discussed above in Alex’s (Corey’s father) fear of video games ‘rotting’ his child’s imagination or harming his eyesight.

Elsewhere in my fieldwork, these health concerns manifest around videogames detracting from physical health. Felix and Grace, participant parents discussed in Chapter 6, were worried about the impact videogames might have upon the health of their son Oli as he started school. Although both took steps to manage their own videogame (and other digital media) consumption, they worried that the social pressures of school may direct Oli towards a sedentary social life. The rise of
videogames such as *Minecraft* (Mojang 2011), *The Sims* (Maxis 2000) and the *Lego Star Wars: The Force Awakens* (TT Fusion 2016) videogames have meant there is significant playground interest in videogames, according to these parent participants. Grace and Felix believed that these social trends might unbalance Oli’s school social life, causing him to spend less time ‘running around the playground and backyard’, instead spending significantly more time ‘sitting in front of the computer’.

Such fears for child health and wellbeing tie into the current Australian discourse of childhood obesity. According to the Australian Institute of Health and Welfare (AIHW), obesity among Australian children continues to rise (Welfare 2017). This trend is being combated in Melbourne through a Victorian government initiative promoting healthier leisure habits among school children through the ‘Active for Life’ scheme (Vic Health 2015). Such a physical health focus upon excessive videogame play within government policy mirrors the perspectives of mainstream Australian media discussed in a previous section of this chapter (King & Delfabbro 2010). These societal factors play a significant role on parental management of their children’s videogame habits. As well as such factors, the government’s position—at both a state and federal level—and the media discourse are other contributing factors to how videogame play is interpreted and enacted within the domestic households of Melbourne. Crucially these interpretations are not only linked to the games themselves, but to the hardware and software (such as the Steam platform) the games are played through.

Entangled within this discourse is how the Steam platform manages and facilitates parental monitoring. This is an area where platform studies can be useful, particularly its recognition of the interactions between the ‘interface’ and ‘reception and operation’ levels of the platform. Steam offers two major tools to its user to engage in internet parenting (perhaps more specifically named here as ‘Steam parenting’). These tools are grouped under ‘Family Options’. The first is Family Sharing, discussed in Chapter 5’s examination of location and the domestic context. The second, named ‘Family View’ is more directly related to Steam parenting. According to Steam’s website, Family View can be used to:
Limit an account’s access to a subset of its content and features. With Family View, access to the Steam Store, Library, Community, and Friends content and features may be gated by the entry of an additional PIN (Steam 2017b, p. 1).

The digital control this limiting PIN can offer parents allows for a manipulation of the reception of the Steam platform through its interface. Such a PIN is similar to other digital parental content segregations—the cable television password or the ‘kids’ sections of Netflix. By encoding limitations into the interface of the Steam software, a far greater level of control can (potentially) be achieved. The bracketed use of ‘potentially’ in the previous sentence is a very deliberate usage as none of the parent participants had used Steam’s family view when I began fieldwork. Even Grace and Felix, who had employed several strategies around management of their son’s engagement with the Steam platform throughout his life, were only mildly aware that such control was available to them. Instead, they managed Oli’s computer interaction through a physical movement of the computer to a separate space and the grouping of particular games as safe for their child, as detailed in Chapter 5.

Similarly, Corey’s recollections of his parent’s management strategies revolved around removing him from the point of interface, rather than using the interface to manipulate the receptions and operations available to him. These cases raise important questions around the incongruity between parental fears of videogaming consumption and the subsequent actions they take to manage the exposure their children receive. Rather than adapt or engage software, parents appeared more likely to physically reconfigure their domestic spaces, either geographically or temporally, in order to manage their children’s Steam usage. Such management techniques provide a useful starting point for this chapter’s final area of discussion—differing levels of inter-generational Steam literacy.

Earlier, I discussed Paul’s limited Steam usage, with his son setting up his account and installing the games Paul requested onto his computer. This, one of my first participant meetings, was the first instance during my fieldwork of inter-generational differences in how Steam (and other digital technologies) are understood and engaged by its users within the home. These understandings are often understood as ‘techno-
literacy’ (Marsh 2003). The term is used here to refer to the state of being capable with new media devices and technologies such as Steam.

Several participants brought up the presence of Steam techno-literacy within their households, albeit without using the academic terminology. In most cases, the households discussing techno-literacy were households comprised of several generations. One such case of particular interest is Francis and his father, Peter. Francis was a key case in Chapter 5’s discussions of location-based access to Steam services around Melbourne. Over the course of my fieldwork, I met with Francis in several different homes. One of these homes was his father Peter’s house in Melbourne’s Eastern Suburbs. Peter had recently retired when I began the fieldwork component of this research. Looking for some new activities to ‘fill his time’, Francis asked his father if he’d like to try playing some videogames through Steam. Peter was hesitant to accept. He told me this was because:

Computers have only ever been work for me. I don’t know how to play games on them. It took me long enough to figure out my email.

Peter’s identification of computers as ‘work’ again reflects the research findings of Goggin, Lally and others around Australian resistance to computers as a device for leisure (2002; 2004). When much of their academic research was being done in the early and mid-2000’s, Peter was part of an adult generation learning to use computers. As Peter explained to me, this learning was mediated through a work-orientated focus. Peter’s quote also illustrates the techno-literacy differences between Peter and his son. Although Peter does technically know ‘how’ to use computers, he doesn’t know how to play games on them. He has no prior knowledge of the Steam platform or the software of videogames. So it was with some trepidation that he agreed to have his son coach him through the Steam software and some of its games. Francis asked his father what type of game he would like to play, such as a ‘shoot-em-up’ or ‘adventure’. After some discussion, they decided to play a fantasy game, as Peter had always been a fan of the fantasy genre of literature such as Lord of the Rings. Accordingly, Francis set about ‘teaching’ his father to play Skyrim (Bethesda Game Studios 2011).
It was not an entirely smooth process. Although Peter quickly became accustomed to getting into the game by logging into Steam, navigating to the games library and loading *Skyrim* (Bethesda Game Studios 2011), he experienced significant difficulty moving within the game world. In particular, he found the combined usage of the mouse to look around and the ‘wsad’ keys (the common movement keys in first person videogames) difficult. He would often walk in unintended directions, while frequently looking either directly at the sky or straight down at the ground. Francis attributed his father’s difficulty to ‘a lack of practice’:

He’s never played a first person game before; he’s basically taking his first steps! Whereas I have grown up playing them, it’s as simple to me as reading a book—I can do it without thinking.

This quote further highlights techno-literacy differences based on generational experience. Through his father’s lack of control, Francis reimagined his game playing as a skill—one that his father was not experienced at. Thanks to Francis growing up with increased exposure to videogames and typical control systems, he was far more techno-literate with typical videogame worlds. Eventually Peter and Francis decided that *Skyrim* was too steep a learning curve, so they adopted a different approach. Instead of focusing their interest around Peter’s enjoyment of fantasy novels, they went for a ‘medium’ more recognisable to Peter—board games. They found digital versions of board games such as *Ticket to Ride* (Days of Wonder 2005) and *Risk* (Sperasoft 2013) and eventually moved into more modern board and card games like *Faeria* (Abrakam 2017). These proved far easier for Peter to learn and, accordingly, he expressed more interest in playing. However, Peter mentioned to me that he never really took the ‘initiative’ to play. Really, he explained, he only played when invited to by Francis.

Peter’s example indicates how a techno-literate individual has access to a greater amount of content on Steam compared to someone with a lesser level of technoliteracy. Within my fieldwork, these discrepancies in techno-literacy are most clearly manifested across generational differences.
Another example of techno-literacy differences is Paul’s lack of knowledge that the Steam platform was also a digital distribution service. In my data concerning generational techno-literacy, there were several clear correlations between the average ages of my participant households and the amount the Steam platform was used within the household. While it was not an exclusive pattern, households with teenagers and individuals in their 20’s had seemingly higher levels of engagement with the Steam platform than households comprised either of older parents with adult children or younger families with smaller children. These capabilities are similarly discussed by Kennedy and Dovey in their work on ‘technicity’, where the authors discuss how power becomes embedded in participatory culture (2007). In the case of this fieldwork, the power frequently consisted of greater levels of techno-literacy. Certainly not all of these cases revolved around generational differences. However, the households I entered often engaged with this paradigm of generation-based techno-literacy.

Another example of this paradigm was uncovered when I brought up techno-literacy levels with Grace and Felix. Felix was quick to state that he would not be emulating his parent’s patterns:

They never understood my interest in games at all. It was quite a point of tension for us, especially when I was 16 or so. I know they were trying to be good parents, but I hope to have a much better time with Oli. I want to play games with him, teach him what I know, not try and stop him. I want to teach healthier balanced usage, which was not what they [his parents] tried to do at all.

Felix’s use of ‘healthier’ usage here again highlights the public discourse around videogames and healthy practice—again expressed through terminology of ‘balanced usage’. However, for Felix this healthy use was also important as part of both his and his son’s navigation of their inter-generational relationships through the Steam platform and its associated games. Where Felix felt his parents treated him and his videogame usage unfairly, he aimed to treat his own son’s potential usage in a ‘better’ manner—according to how the two engaged through the Steam platform.
Important to note here is how different levels of techno-literacy across generations can impact the communication and relationships of households’ constituents through domestic engagement with the Steam platform. This was seen in Felix, Grace and Oli’s case and also in Peter and Francis’ case. Both of these cases concerned parent-child relationships. Such a dynamic was by far the most common intergenerational relationship during my fieldwork.

Inter-generational literacy and, specifically the differing levels thereof, can create tension around the usage of the Steam platform in domestic family homes. While this ‘tension’ does not always manifest as conflict, it is clearly seen through the different Steam usage habits of my participants. Throughout my research this intergenerational tension primarily entered conversation around the main concern of this chapter—fears of ‘addiction’ and addictive-like behaviours to the Steam platform within participant households. Despite the availability of parental control tools on Steam, these tools seem more designed to prevent access to inappropriate content. Accordingly, participant households seem far more likely to use physical and temporal management techniques in their attempts to negotiate and foster balanced Steam usage. An important reason for these management strategies is the discourse of ‘balance’ that pervades Australian understandings of ‘healthy’ new media technology usage.

**Conclusion**

This chapter has examined interpretations and discourse around excessive play through the Steam platform within Melbourne-based households. Participants frequently employed usage practices that revolved around configurations of ‘balanced usage’ when discussing their domestic Steam habits. This chapter has unpacked how and why participants engage with issues of excessive and problematic play when discussing their Steam usage, providing insight into how domestic configurations and rhythms are shaped through the usage of the Steam platform within Melbourne.

This chapter’s exploration was broken down into three key areas. The first concerned the ‘patterns of practice’ participants engaged in that either they, or other members of their households identified as potentially excessive or problematic. The section indicated that there were strong links between time periods of usage and understandings of addiction, building from the discussion of temporal configurations.
in Chapter 7. This first section also engaged the phenomena of excessive and problematic purchasing practices through Steam. These were seen in the case of Joshua purchasing games on Steam not to specifically to play, but rather out of a fear of ‘missing out’.

The idea of ‘negative practices’ was the second focus of this first section. Negative practices formed a key part of how my participants framed their Steam usage as problematic and disruptive to their domestic configurations when their scenarios of use, or patterns of play, began to have a perceived negative impact upon their daily experiences. One example was Matthew’s failing of a university subject. When participants began to understand their domestic Steam usage as problematic, they sought new domestic configurations that would help balance their usage.

The second main section of this chapter also examined perceptions of Steam and videogame usage in the media consumed within Australian households. This examination uncovered links between popular media portrayals of videogame technology and the domestic Steam usage behaviours my participants engaged in.

During participant observation for this research, it became clear that this area of public portrayal was a necessary area to interrogate. Coupled with the significant economic impact of the videogame industry, much of my participants’ self-awareness around their Steam usage was mediated through the lens of the popular news media they consumed. Such consumption influenced not only self-awareness, but also impacted domestic configurations between Steam, its user, and the household.

Fieldwork examples of this media influenced interpretation of Steam usage included Zoe’s categorisation of her housemate’s Steam usage through the TV shows she watched or Paul’s identification of the links between videogame violence and physical violence developing out of the newspapers articles he read. This media discourse often concerned ‘appropriate’ patterns of usage—again stressing the notion of balance in relation to videogame content usage. Participants’ usage of terminology such as ‘healthy practices’ or ‘time wasting’ further builds on these notions of balance. These interpretations also reflected a common thread of resistance to leisure-based usage of
digital technology within Australian homes (Lally 2002; Goggin 2004; Green 2004; Middleton & Chang 2008).

The final section of this chapter sought further examination into Melbourne interpretations of ‘balanced usage’ by pursuing a line of enquiry concerning intergenerational interpretations of Steam usage. This final section was framed around the notion of ‘techno-literacy’. Differing levels of competency in the Steam platform further altered the usage habits identified as ‘balanced’ by different generations. These ideas of balanced usage are informed by a user’s experience and have a significant impact upon the usage habits participants are likely to describe as problematic.

This section also used the topic of intergenerational techno-literacy to discuss the affordances such techno-literacy can either allow or inhibit Steam users. The primary example of this came from Peter and Francis’ different ability levels when navigating through the Steam platform and attempting to play videogames. Peter showed varying levels of ability, based largely around similar technology he had prior exposure to and experience with. Therefore, the techno-literacy of individual participants can have a marked influence upon how the Steam platform is understood by individual users within the same household. This understanding can also influence how Steam users interpret excessive play; with participants potentially understanding required proficiencies and temporal investments differently due to varying techno-literacies. These different understandings directly impacted the parts of Steam engaged by participants and their subsequent Steam orientated domestic configurations. Techno-literacy is specifically relevant to discussions of Steam as it was a significant factor in how participants employed the Steam platform within their homes.

This chapter examined domestic understandings of ‘balanced usage’ of the Steam platform and its games within Melbourne households. The variety in these approaches to ‘problematic’ vs. ‘healthy’ models of usage again stresses the role of ‘balance’. Issues of balance lie at the centre of household interpretations of problematic Steam usage and videogame play. For example, Nina and Blake serve as a comparison between Lisa and David’s ‘balance’ through screen time hours and the ‘bedtime’ self-control limit the two employed. Both engaged with discourses of balance through their
recognition of managing digital engagement of the Steam platform. Similarly, Margaret’s disabling of Steam’s auto-login function was conducted to regain agency in how the ‘balance’ was configured within her home.

This balanced usage is reinforced through several external factors, such as popular media and government policy, creating new interpretations of balanced usage within Melbourne homes. This chapter also highlighted how despite the tools for controlling usage present within the software of the Steam platform, Melbourne Steam users were far more likely to employ physical and temporal re-configuring techniques external to the Steam platform to achieve balanced usage. These techniques highlight differing levels of techno-literacy within generational groups in Melbourne and identify an area of public policy in need of addressing—better education of the full range of techniques available to users to achieve desired levels of balanced technology usage. Current systems typically sensationalise notions of harm and stress physical reconfigurations, rather than highlighting the social potentials of new media technology such as Steam and it’s inherent checks and balance that promote balanced usage.

The following and final chapter of this thesis collates and reviews the findings of the discussion chapters. It concludes this thesis’ investigation of Steam’s roles within Melbourne households, offering direct links to where the investigation has contributed ethnographic findings. In particular, these contributions can best be found in areas concerning domestic digital technology, domestic gaming configurations and public policy concerning domestic usage of videogame content with regard to Australia’s NBN. The final chapter will also demonstrate how this thesis has contributed to the academic discourse at the intersection of digital ethnography and games, media, and platform studies. Beyond this, the conclusive chapter puts forward several ideas on how the research findings of this thesis might be expanded in scale by suggesting several areas for future research—offering provocations that build upon the work of this thesis.
Chapter 9. Conclusion: Findings and futures

This thesis has explored the interactions between the Steam videogaming platform and Melbourne based households. The research question ‘how is the Steam gaming platform influencing the domestic configurations of Melbourne households?’ has been central to this thesis’ enquiry. By asking this research question, this thesis has examined the contexts of engagements between player, platform, and home through a focus on the scenarios that emerge through domestic usage of the Steam platform. The investigation undertaken throughout the thesis contributes to three major areas of knowledge; conceptions of balanced videogame usage, domestic videogaming configurations, and wider knowledge of Australian internet usage practices. In this chapter I will highlight these contributions, summarise the findings of the research and point to potential avenues for future research.

The first area this thesis has contributed to the body of knowledge of is academic interrogations of how videogame usage is framed by those engaging with the technology. Understandings of ‘balanced usage’ and problematic play have been critically examined in this thesis, contributing new knowledge to academic understandings of how users interpret and categorise their videogame usage. The main contribution to this area of knowledge is found within Chapter 8, which discussed the concept of ‘excessive play’ in relation to the Steam platform. In doing so, the chapter highlighted how the Steam platform can influence how users interpret their usage as balanced—and the subsequent configurations they employ to maintain such usage.

Chapter 8 unpacked how these interpretations and models of excessive play inform and shape the contexts of Steam usage in Melbourne households. As the chapter uncovered, despite the rise of digital gaming, many popular opinions of gaming remain fixed on its negative aspects. In the case of Steam, these negative aspects were discussed through phenomena such as users owning more games than they play, or the automatic login function of Steam causing participants such as Margaret to play when they felt ‘they shouldn’t’. These engagements with the Steam platform had further impact upon the actual act of play, with participants explaining that they were only able to engage in play without a sense of ‘guilt’ during time specifically
designated ‘leisure time’ or ‘downtime’. In this regard, Steam users create usage habits that they may identify as problematic or excessive.

In cases where participant households described an ‘overuse’ of Steam, such overuse was understood to lead to a decline in social engagement. As an example, parents of Steam-using children were worried about their children ‘wasting’ time on Steam. Likewise, adult Steam users discussed the negative properties of Steam and its ability to ‘pull time’ away from other activities when overused.

These interpretations of Steam usage were another focus of Chapter 8 through its examination of how balanced usage and excessive play are portrayed in the wider Australian media. This exploration was undertaken by paralleling mainstream media interpretations with the understandings put forward by my participants. Providing ethnographic examples around how the Steam platform’s domestic usage is altered by the influences of wider media and social society, these findings help Chapter 8 to contribute to academic knowledge of how Steam users generate their personal schema of balanced usage and excessive play.

This was not a phenomenon unique to Steam and the videogames it hosts, but was discussed by my participants in relation to several forms of new media technology. Chapter 8 also explored the notion of inter-generational techno-literacies in Melbourne homes. Again, the Steam platform provided an excellent focal point for such examination due to its widespread presence in a variety of Melbourne households. Chapter 8 argued that the inter-generational nature of Steam usage found throughout my fieldwork not only impacted understandings of how Steam ‘should’ be used, but also frequently had a noticeable impact upon what constituted balanced Steam usage. Again, such notions of balanced were often framed around time ‘wasting’ on the Steam platform.

It is of significant note that most of the management strategies employed by participants revolved around removing the user from the site of play—such as logging out of the Steam platform or shutting down the computer. This choice of strategy is further complicated by the fact that the Steam platform itself has tools in place designed to allow users to engage in more balanced usage. The dissonance between
the management strategies employed by Steam users and the variety of strategies available highlights how Melbourne and wider Australian public discourse continues to frame new media technology usage as a facet of life requiring monitoring and limiting. This has the potential to be a future issue for how Australia engages with not only the Steam platform, but also videogames at large. Where this is most clearly seen is in childhood usage, where tension appears to exist between how children use Steam and how parents and social policy interpret and manage such usage.

The key contribution this thesis makes to the area of ‘excessive play’ is the recognition of the tension between desired usage and interpretations of balance. Looking forward, this tension is likely to continue. Although Australian government policy around ‘healthy screen usage’ is beginning to be reframed with greater emphasis on monitoring rather than restriction, the findings of this thesis indicate that the primary method of management within Melbourne households continues to be restriction. These findings stress the need for this policy shift, particularly in areas concerning youth and child usage.

Accordingly, a useful avenue for potential future research would be to track the ongoing changes around how Steam users monitor and manage their usage to maintain ‘balance’. Alternatively, a comparative analysis could be applied to examine perceptions of gaming habits and management strategies outside of Steam, such as on PlayStation Plus or Xbox Live. Similarly, a comparative study between videogame engagement and wider new media consumptions could yield valuable insight into how Australians involve and understand technology in their everyday lives. The critical component in all these areas of future research is an analysis that explores usage alongside interpretation—similar to the efforts of Chapter 8 to explore the interactions between Steam usage and its’ subsequent framing by participants as balanced, excessive, or problematic.

The second major area of academic discourse that the thesis has contributed to is identifications of the ways videogames and videogame technology can influence domestic spatial configurations. Such a contribution is closely aligned to the chosen research question and the thesis’ primary analysis of this area is found within Chapter 6. Chapter 6 focused around an exploration of Steam’s ‘place’ within a Melbourne
based household. The ‘placement’ of Steam and the devices used to access it was interpreted through the physical configurations of participant households and the ways in which the Steam platform influenced such spatial configurations. Chapter 6 used examples of participant practices and household Steam placement to highlight how such placement renegotiated the space of the home. It then related the physical context of the Steam platform to engagements with videogame play.

Chapter 6 analysed how the location of the computer and Steam can significantly impact how play is undertaken within the household. Chapter 6’s discussion contributes to ongoing academic interest of domestication theories and assemblages of play, providing a contribution to the evolving understandings of gameplay in the domestic context. In particular, Chapter 6’s focus on the contributing factors involved in domestic play through the Steam platform is in part a response to academic calls for greater analysis of the dialectic between player, place, and game (Taylor 2009).

By addressing physical assemblages of play within Melbourne homes, the thesis has helped unpack the complicated influences involved in spatial configuration through technology such as the Steam platform. This influence is the second major finding of Chapter 6. Through an analysis of case studies concerning changing Steam practices and new media usage over time, Chapter 6 highlighted how temporal shifts and domestic relocation can have a major impact upon the access and usage of videogames through platforms such as Steam. Through a discussion of young couples starting a family or those relocating in order to undertake new study, this contribution is seen in the thesis’s exploration of how periods of flux can influence a Steam user’s interactions with the platform.

Important to note is that Chapter 6’s analysis of spatial configurations also made clear the ways in which household physical spaces can be altered by engagement with the Steam platform. These two factors are heavily intertwined and cannot be entirely disentangled. The recognition of such entanglement again highlights the useful contributions the thesis has made to academic knowledge of the intersections involved in assemblages of play. To this extent, Chapter 6 sought to effectively detail the roles and positions of the Steam platform within the home by addressing each in context of
the other. Achieved through the thesis’ employment of ethnographic enquiry, this exercise provided a more complete picture of a Steam user’s domestic environment.

As Chapter 6 has shown, by designating access to Steam as a computer’s purpose and placing it accordingly, the Steam platform can significantly reconfigure the usage of space around the home. Similarly, a computer placed in a shared space or with a shared use often gives rise to household tensions around the purpose of a domestic area. Chapter 6 analysed how these contexts combine to form the nuanced relationships between the place of Steam, the user, and their domestic space. This chapter’s contribution to knowledge can best be detailed in its exploration of these nuanced relationships. Through examples such as the shifting location of the computer through which Steam is accessed, or the organisation of a Steam user’s library, this chapter has provided fresh insight into the meshing of new media devices into the home through its exploration of the Steam platform in Melbourne households.

Future research into the relationship between domestic space and digital engagement is a direction worth pursuing. Although there has already been significant academic interest in this area, further research would still be of value to both games and media studies. As seen in Chapter 6, periods of change are particularly striking. One interesting avenue for future research could be a focus on these periods of change in detail. A future research project examining how platforms such as Steam—or digital media in general—are engaged across the lifespan and periods of great change would be a useful place to begin. For example, research could focus on three major life events—such as starting school, moving out of home, and retiring—and examine how domestic use of Steam changes around these moments. However, such research need not focus entirely on the Steam platform, as it is likely that how a person engages with all new media is liable to significant change over time.

Chapter 5 also provided new insight into how domestic configurations are impacted by the Steam platform and subsequent videogame usage. Where Chapter 6 focused on spatial configurations, Chapter 5 explored the role Melbourne internet availability plays in gaming access and Steam usage habits across households. Examined primarily through the phenomenon of ‘LAN parties’, these roles were discussed
alongside the changing internet ecology of Melbourne as a result of the ongoing NBN rollout. Focusing around the two major ethnographic examples of Casey and Albert, the chapter analysed how domestic spaces can be re-configured for these LAN parties, further altering a user’s relationship to the home around the Steam platform. Therefore, Chapter 5 also contributes new knowledge to academic understandings of domestic videogame configurations by examining the crucial role internet access can perform in assemblages of play.

Chapter 5’s exploration highlights the ways in which LAN parties enable Steam users to reconfigure their domestic spaces to enjoy multiplayer games and socialise through Steam—without relying on the often sub-par internet connections of Melbourne. Chapter 5’s discussion of Melbourne internet connections is also relevant to the third body of knowledge this thesis contributes to—Australian internet practices.

Through a focus on how the rollout of the NBN has impacted Steam usage within Melbourne homes the thesis has contributed to academic discourses of domestic internet usage within Australia. This is the third discourse that this thesis contributes to and the area to which it offers the greatest amount of new knowledge. Such contribution is made through the thesis’ examination of the ongoing changes to Melbourne internet infrastructure and how these changes can impact Australian homes.

In light of the ongoing changes occurring to the ways in which Australians access the internet, the NBN related data of the thesis is useful not only to academic areas. Similar to the findings elucidated in Chapter 7’s discussion of temporal habits within Melbourne homes, analysis of how internet access influences domestic Steam usage within Melbourne is also of use to potential examinations of Australian internet policy and government usage data, such as the Digital Australia Report. In particular, the qualitative ethnographic findings of this thesis can provide useful context and texture to other more quantitative focused examinations of Australian domestic internet usage.

Another important aspect of the contribution made to academic knowledge of Australian domestic internet practices made by this thesis concerns Chapter 5’s
exploration of the practices employed to circumvent inadequate internet access. The ethnographic evidence of Chapter 5—gleaned from participant interviews and observations—allows for a better understanding of the relationships between members of Melbourne household’s and their internet connections. By viewing these relationships through the conduits of Steam and the personal computer, Chapter 5 was able to show the practices employed by participants experiencing frustrations with Melbourne’s current internet infrastructure. Despite the growing presence of faster internet connections, instability remains a crucial issue among my participants and the wider Melbourne internet landscape. The cases of engagement with Steam based LAN Parties detailed in Chapter 5 highlight the Melbourne (and Australian) desire for multiplayer interactions free from the frustrations of ‘lag’ and disconnections.

More importantly, these findings detail how participants dealt with these frustrations through the alteration of the internet and new media engagements. Such findings provide interesting academic insight into how domestic configurations are reshaped and renegotiated to afford new scenarios of Steam usage and videogame play. Crucially, the findings of Chapter 5 also show a clear disconnect between the forms of play desired by Melbourne Steam users and those available to them through the current NBN scheme. As these findings stress an imbalance between supply and demand, they may be of significant value not only within the academic area, but also to wider government bodies and social groups.

Further enquiry into this specific area of location is likely to involve how users connect their computer to the internet for online Steam gaming. Such research could be done with the same field site of Melbourne—though other Australian cities may provide their own interesting findings. One potential avenue for future research would be an analysis of forms of connection—such as wired versus wireless connection or the physical placing of a router in a certain location to better facilitate rapid internet connections and videogaming practices within households. The differing stability levels of these connections may alter how users approach Steam and other household media. Research into this area would be well poised to contribute further to Australian interpretations of, and engagement with, the internet.
Additionally, a potential examination of Australia-wide internet engagement would ask important questions around how the long download times on Australian connections might affect users’ decisions about which games to buy. While this thesis did examine how the digital distribution model of Steam affects accessibility to videogame content, it has not explored such accessibility through a comparative lens. One potential idea for such an approach could be a comparative analysis between Australian internet connections and purchasing habits. This analysis could then be contrasted alongside a second market, such as the United States.

On a longer temporal scale, it will be critical to observe how the ongoing rollout of the NBN affects Steam usage around Melbourne and Australia. Whether better online connections might alter the phenomenon of domestic space LAN parties and other non-internet connection based multiplayer experiences remains to be seen and is an interesting provocation for further research. How Australians understand the NBN in its own right is also a topic that will require significant future research. Public image issues continue to haunt the NBN. In particular, bandwidth and data limits have been shown by this thesis to be a major point of frustration for those who frequently engage in videogame practices. Perhaps this phenomenon will begin to change as a wider variety of NBN plans become available, but again further research is required from both academic and policy perspectives.

Regarding temporal examination, the ways in which Australian’s engage with the internet through Steam was also analysed throughout Chapter 7. The topic of time was explored through a detailed analysis of how the AEST time zone influences domestic Steam usage among Melbourne households. In the interactions between how the device of the computer, the platform of Steam, and the game of choice are used by a participant, the time of day for both player and platform can be of much importance. The ethnographic evidence of Chapter 7 indicated that participants often reshaped their daily habits around the Steam platform, occasionally attempting to reshape their own schedules to the ‘time’ of the Steam platform. While such reshaping may occur in other geographical regions, it is particularly noticeable in Melbourne (and other parts of Australia), where there is a significant time difference between local time and the globally popular times of play on the Steam platform.
Also entangled in these temporal relationships are the global contexts and habits of play for participants. Playing from Melbourne, many participants chose to play later at night and early in the morning. This is due to the most popular time for Steam based play being North American afternoons and evenings—times that correlate to less optimal periods for my Melbourne based participants. Chapter 7 sought to unpack this phenomenon, exploring how such practice influences domestic configurations and potential tension between household members. Through an analysis of the Steam usage of participants such as Margaret or Corey, Chapter 7 investigated how users reshape their temporal habits around Steam usage. Margaret’s periods of use were renegotiated around her Melbourne based social life, while Corey and his parents discussed the tension caused by his night-time playing habits. These examples were significant in that they helped contribute to ongoing debates around the impact in-home digital services such as the Steam platform can have upon the temporal routines of Melbourne based users.

However, these impacts come with their own limitations. A temporal reshaping of the domestic space around Steam usage was frequently understood as a negative practice, often creating tension amongst my participants. Chapter 7 sought to consider these tensions by examining the temporal impact of the Steam account. In doing so, Chapter 7 provided new insight into how the double articulations of new media devices and technology such as the Steam platform and household computer can influence how people categorise time periods of device usage within their domestic configurations.

In this regard, the place of computers and videogaming software in domestic life can be seen to be changing. For those engaging with the Steam platform, these changes manifest in both positive and negative ways. As modern conceptions of play become enmeshed with these everyday changes, the aspects of play we associate with our in-home devices have become an important area of consideration. Further influencing such consideration is the growing impact of internet connections upon access to videogame content, both single and multi-player. In the case of Melbourne homes, this thesis has shown that limited internet access can play a major role in reshaping domestic configurations among households engaging with the Steam platform.
The evidence this thesis has presented is by no means a complete picture of Australian new media usage—Playing with Steam concerns only Steam usage within the location of Melbourne. Research and interviews into other technologies or other areas would contribute new data and provide further insight into how usage of new media in Australian households might change over time. Of particular interest will be the increased uptake of the NBN over the next few years. I would encourage further ethnographic research into this area to build on the findings of this thesis. However, despite the need for future research, this thesis has produced useful data that helps to expand understandings of the roles new media digital distribution technology plays within domestic contexts.

It is to these three areas of balanced videogame usage, domestic reconfigurations through new media usage, and Australian domestic internet usage practices that this thesis has been able to generate new knowledge and contribute to academic discourse. The thesis has explored these areas through its ethnographic methods, enabling textured and granular insight into how the Steam platform influences the domestic configurations of Melbourne households. Through an application of existing theories around assemblages of play and the intersections between new media and domestic environments the thesis has made contributions to media studies, games studies, platform studies, and the digital ethnography discipline.

Furthermore, as digital games become increasingly present in domestic Melbourne households, this thesis will be a useful point of reference for future research. Serving as both a bellwether for the future of the NBN and an account of Melbourne domestic internet access between 2015 and 2017, this thesis will be of ongoing use to both academia and social policy groups. Ultimately, through its analysis of Steam practices in Melbourne households, the thesis has provided new and useful insight into the intersections between user, Steam platform, and the configurations of domestic households.
Reference List


Arrested Development 2003, television program, Fox, 2 November.


*Broad City 2014*, television program, Comedy Central, 22 January.


Bucher, T 2015, 'Networking, or what the social means in social media', *Social Media+ Society*, vol. 1, no. 1, pp. 1-2.


Butler, J 2017, 'Sydney Has The Second Most Unaffordable Housing In The World, Melbourne comes in at number six.', *Huffington Post*, viewed 12 June 2017,

Butts, A.M 1938, Scrabble, board game James Brunot.

Caillios, R 1961, Man, play, and games, University of Illinois Press, Chicago, IL.


Chucklefish 2016, Starbound, videogame, Chucklefish.


Conley, D 2009, Elsewhere, USA: How we got from the company man, family dinners, and the affluent society to the home office, BlackBerry moms, and economic anxiety, Knopf Doubleday Publishing Group, New York, NY.


Cygames 2016, Shadowverse, videogame, Cygames.


Days of Wonder 2005, Ticket to Ride, videogame, Days of Wonder.
de Souza e Silva, A 2006, 'From cyber to hybrid: Mobile technologies as interfaces of hybrid spaces', *Space and culture*, vol. 9, no. 3, pp. 261-278.


Durmer, J S & Dinges, D F 2005, 'Neurocognitive consequences of sleep deprivation', *Sleep in Neurological Practice*, vol. 25, no. 01, pp. 117-129.


From Software 2011, *Dark Souls*, videogame, Namco Bandai Games.

From Software 2016, *Dark Souls III*, videogame, Namco Bandai Games.


*Game of Thrones* 2011, television program, HBO, 17 April.


Goggin, G 2004, *Virtual nation: the Internet in Australia*, UNSW Press, Sydney, NSW.


Hi-Rez Studios, 2014 *Smite*, videogame, Hi-Rez Studios.


Hong, J 2012, 'The state of phishing attacks', *Communications of the ACM*, vol. 55, no. 1, pp. 74-81.


Ironclad Games 2008, Sins of a Solar Empire, videogame, Stardock.


Jakobsson, M & Myers, S 2006, Phishing and countermeasures: understanding the increasing problem of electronic identity theft, John Wiley Sons, Hoboken, NJ.


Jones, C M, Scholes, L, Johnson, D, Katsikitis, M & Carras, M C 2014, 'Videogames: Dispelling myths and tabloid headlines that videogames are bad', in Proceedings of the 28th International BCS Human Computer Interaction Conference on HCI 2014-Sand, Sea and


Kennedy, H W & Dovey, J 2007, 'Technicity: power and difference in game cultures', in Game In Action, Goteborg, Sweden, 13 June, viewed 9 September 2015, <http://eprints.uwe.ac.uk/93/>.


Key, E, & Kanaga, D 2013, Proteus, videogame, Ed Key and David Kanaga.


Sky-Holiday HCI, Southport, UK, 10 September, pp. 52-61, viewed 1 December 2017, <https://pdfs.semanticscholar.org/b13e/6b24cc554f4e31dec0e5216dd24af71de3de.pdf?_ga=2.175308258.1591125919.1524217827-1966908475.1524217827>.
King, D & Delfabbro, P 2010, 'Should Australia have an R 18+ classification for video games?', *Youth Studies Australia*, vol. 29, no. 1, pp. 9-17.


Klei Entertainment 2013, *Don’t Starve*, videogame, 505 Games.


Linden Lab 2013, *Second Life*, videogame, Linden Research Inc.


Meyer, T L 2011, *A study on trading scams in massively multiplayer online role-playing games and risk mitigation techniques*, Iowa State University, Ames, IA.


Nardi, B 2010, *My life as a night elf priest: An anthropological account of World of Warcraft*, University of Michigan Press, Ann Arbor, MA.


Nintendo 1996, Mario Kart 64, videogame, Nintendo.


Richardson, I & Hjorth, L 2017, 'Mobile media, domestic play and haptic ethnography', *New Media & Society*, vol. 19, no. 10, pp. 1653-1667.


Steam 2016a, *Steam*, software, Valve Corporation.

Steam 2016b, *Steam & Game Stats*, viewed 22 May 2016,

Steam 2016c, *Steam & Game Stats*, viewed 24 May 2016,
Steam 2016d, *Steam Download Stats*, viewed 4 September 2016,
<http://store.steampowered.com/stats/content/>.

Steam 2016e, *Steam Refunds*, viewed 4 September 2016,
<http://store.steampowered.com/steam_refunds/>.

Steam 2017a, *Browsing*, viewed 29 May 2017,
<http://store.steampowered.com/search/?category1=998>.

Steam 2017b, *Family View*, viewed 24 August 2017,

Steam 2017c, *Steam*, software, Valve Corporation.

Steam 2017d, *Steam & Game Stats*, viewed 18 April 2017,

Steam 2017e, *Trade Steam FAQ*, viewed 19 September 2017,

Steam 2017f, *Virtual Reality on Steam*, viewed 29 May 2017,
<http://store.steampowered.com/vr/>.

Steam 2018a, *Steam*, software, Valve Corporation.

Steam 2018b, *Steam & Game Stats*, viewed 3 Feb 2018,

Steam 2018c, *Steam Download Stats*, viewed 29 Jan 2018,
<http://store.steampowered.com/stats/content/>.


Tandy, C A 1999, 'Children’s Diminishing Play Space: a Study of Inter-generational Change in Children’s Use of their Neighbourhoods', *Australian geographical studies*, vol. 37, no. 2, pp. 154-164.


Valve Corporation 2000, *Counter Strike*, videogame, Sierra Entertainment.


Valve Corporation 2009, *Left 4 Dead 2*, videogame, Sierra Entertainment.


Valve Corporation 2012, *Counter Strike: Global Offensive*, videogame, Sierra Entertainment.


Appendix

Table timeline of Steam’s History

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Why it was done</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Beta of Steam released.</td>
<td>To allow Valve greater control over the management of their games.</td>
<td>This was the first instance of the platform.</td>
</tr>
<tr>
<td>2004</td>
<td>Half Life 2 Released.</td>
<td>It was the sequel to Valve’s first published game Half Life (1998).</td>
<td>This was the first game the required Steam to play.</td>
</tr>
<tr>
<td>2005</td>
<td>First third party game published on Steam.</td>
<td>To expand Steam’s economic viability.</td>
<td>This marked a shift for Steam from a piece of management software for Valve games to a more fully fledged ‘store’.</td>
</tr>
<tr>
<td>2006</td>
<td>Over 100 games available on Steam.</td>
<td>It was part of Steam’s growth as a digital distribution store.</td>
<td>Reaching the milestone indicated the potential for the ‘store’ aspect of Steam to be highly successful.</td>
</tr>
<tr>
<td>2007</td>
<td>Steam Community launched through the Steam client.</td>
<td>In order to allow users to interact with others through the platform, facilitating greater communication in relation to gaming.</td>
<td>This serves as a clear note of the growth of online multiplayer gaming and also highlights the place of videogames as ‘social’.</td>
</tr>
<tr>
<td>2008</td>
<td>Matchmaking and Steam Cloud launched.</td>
<td>Matchmaking was added to allow for easier access to multiplayer gaming, and the Steam Cloud allowed easier movement between accounts across different devices.</td>
<td>These additions cemented Steam as a modern multiplayer gaming platform by further raising accessibility to multiplayer gaming for users.</td>
</tr>
<tr>
<td>2009</td>
<td>Bargain categories for games added.</td>
<td>To allow users to find cheaper games easier.</td>
<td>This move expanded Steam’s space as a store as well as begin the phenomenon of ‘impulse buys’ on Steam.</td>
</tr>
<tr>
<td>2010</td>
<td>Mac version of Steam client launched, UI updated.</td>
<td>To expand Steam into new market areas and onto new devices.</td>
<td>By being available on more devices, Steam increased its presence in households, and the new UI makes the store easier to navigate.</td>
</tr>
<tr>
<td>2011</td>
<td>Over 1000 games available on Steam and the ‘recommendations’ category is added.</td>
<td>To allow users to navigate the large catalogue of games available on Steam.</td>
<td>The increased accessibility of the updated store reflects Steam’s hybrid position as both economic and social space.</td>
</tr>
<tr>
<td>2011</td>
<td>Steam Guard added.</td>
<td>To lower account fraud by having ‘two step authenticators’.</td>
<td>Through allowing their users to protect their accounts through their email (and later mobiles), Steam recognised the growing dangers of digital distribution.</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
<td>Why it was done</td>
<td>Importance</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2011</td>
<td>Steam Workshop added.</td>
<td>To allow user generated content to be managed through Steam.</td>
<td>This move highlighted Valve’s recognition of the social, creative and economic power of its users.</td>
</tr>
<tr>
<td>2012</td>
<td>Steam Greenlight launched.</td>
<td>To allow independent developers easier publishing through Steam.</td>
<td>This not only provided economic opportunities for Valve, but also helped the platform to continue to foster a positive relationship with its’ users.</td>
</tr>
<tr>
<td>2012</td>
<td>Steam mobile app and Marketplace launched.</td>
<td>The mobile app allowed users access to their accounts (and store) through their mobile. The Marketplace allowed users to trade and sell digital goods through Steam.</td>
<td>The addition of a mobile app made Steam almost always accessible for users, placing it as a sophisticated digital distribution platform. The Marketplace raised questions around the ownership and ethics of digital content.</td>
</tr>
<tr>
<td>2013</td>
<td>Linux version of Steam client launched.</td>
<td>To expand Steam into new market areas and onto new devices.</td>
<td>By being available on more devices, Steam increased its presence in households.</td>
</tr>
<tr>
<td>2013–2014</td>
<td>Family Sharing launched</td>
<td>This allowed parents better control of their children’s playing habits and made family play easier.</td>
<td>By allowing members of a family to ‘share’ access to a game, the platform made itself more welcoming to multi-person homes. Family view options also allowed control of visible content, furthering this move.</td>
</tr>
<tr>
<td>2014</td>
<td>Discovery update released</td>
<td>To better manage Steam’s now immense catalogue of games.</td>
<td>This move further cemented Steam as a hybrid platform by linking the opinions of its users to storage reviews.</td>
</tr>
<tr>
<td>2015</td>
<td>Beta versions of Steam hardware announced</td>
<td>To expand Steam into the living room and console market.</td>
<td>This highlights Valve’s attempts to grow Steam further beyond PC gaming.</td>
</tr>
<tr>
<td>2016</td>
<td>Steam VR released.</td>
<td>To expand the Steam store and community into the growing category of VR games.</td>
<td>This again highlights the expansion of the platform into new areas and potentially hints at the future directions of Steam and videogame content.</td>
</tr>
<tr>
<td>2017</td>
<td>Over 15000 games available on Steam and over 30000 total products.</td>
<td>It was part of Steam’s growth as a digital distribution store.</td>
<td>This highlights the incredible variety of content now available through Steam—a significant part of why it is the most dominant digital videogame distribution platform.</td>
</tr>
</tbody>
</table>
CONSENT FORM

For Persons Participating In Research Projects Involving Interviews, Questionnaires, Focus Groups or Disclosure of Personal Information

COLLEGE OF DSC
SCHOOL/CENTRE OF Media and Communications

Name of participant:

Project Title: Playing With Steam: An ethnographic enquiry into Melbourne household gaming

Name(s) of investigators: (1) Larissa Hjorth Phone:

(2) Will Balmford Phone:

1. I have read and understood the document explaining the project.
2. I agree to participate in the above project. Details of each project activity have been explained to me.
3. I give permission to the researcher (or his or her assistant) to interview me or ask me questions about my use of mobiles and games.
4. I give my permission to be audio taped and/or photographed Yes No
   (the images will be used to show scenarios of use and genres, we will ensure anonymity)
5. I give my permission for recorded images to be used in academic publications such as journal articles and book chapters Yes No
6. I understand that any data collected through the online survey and blog will be password protected, and remain anonymous if included in any project publication or report.
7. (If giving permission for a child to participate) I give permission for my child to participate in this project Yes No

I acknowledge that:

a) I have read the Plain Language Statement, and agree to the general purpose, methods and activities of the study.

b) I have been informed that I am free to withdraw from the project at any time and that if I do withdraw, all data I have provided will be returned to me or destroyed.

c) The project is for the purpose of research, and may not be of direct benefit to me. The privacy of the information I provide will be safeguarded. The personal information I provide will only be used where I have provided my consent.

d) The research data will be secure during and after the study. Any information that identifies me will not be used and my identity will remain anonymous. Images will include a reference to publication as an Appropriate Durable Record (ADR) or thesis in the RMIT Repository explaining that this is a publicly accessible online library of research papers.

Participant's Consent

Name: Date:

(273)
Participant's guardian (if under the age of 18 years)

Name: ___________________________ Date: ___________________________

(Participant guardian)

Participants should be given a photocopy of this consent form after it has been signed.

If you have any concerns about your participation in this project, which you do not wish to discuss with the researchers, then you can contact the Ethics Officer, Research Integrity, Governance and Systems, RMIT University, GPO Box 2476 VIC 3001. Tel: ___________ or email _________
Playing With Steam: An ethnographic enquiry into Melbourne household gaming

In-depth interviews and games sessions and video tours

Plain Language Statement.

Dear …………………

My name is Will Balmford

I am a PhD Candidate at RMIT University. I am undertaking research into the gaming habits of Australian households. The title of the research is Steam in the Household: An ethnographic study. Under the guidance of my supervisor, Professor Larissa Hjorth, this area will be explored through a range of research activities - examining how Personal Computer games and the Steam gaming platform are being used, played and entangling with everyday media practices in Australian households.

Introduction

The purpose of the research is academic and results will not be used for marketing or any other commercial purpose. Although the study is focused around games, those who play games a lot, a little, or not at all are invited to participate in the research as it is exploring how households are being affected by Steam and its games. The study will involve a range of activities and different ways of collecting data. As the research progresses, I may ask you to be involved in one or more of the following activities over the length of the study:

1. The Interview

If you agree to participate in this study, I will organize a time and place that is convenient for you to conduct the interview. The interview will take approximate one hour, and the conversation will be recorded for later analysis. Topics covered in the interview may include the following:

• How you have played games in the past?
• Do you still play them?
• How are games played in your household?
• Do you play games with other household members and does this have any effect on your relationships with them?
• How does gaming shape your household?

Every six months I will contact you again and ask to interview you, to see how your gaming habits and the habits of your household have changed over time.

2. ‘Games Sessions’.

You are invited to participate in a session of playing games with the researcher. These can be done in whatever way is easiest for you – over Steam or in person. This method is called a ‘game sessions’ or a ‘play session’. This exercise can happen during the scheduled interview if that suits participants.

3. Video tours

You are invited to collaborate with researchers in showing and recording a scene from your everyday life that you feel will be relevant to the study. This will involve a time commitment of a few hours, and you will have the option of reviewing and removing any footage. Video content will only be viewed by the researchers for the purposes of the study. This activity will be repeated each year.

Ceasing Participation
Your participation is entirely voluntary, you may choose not to participate in all or part of the study, and you may withdraw your participation at any time, whereupon any unprocessed data previously supplied will be returned to you.

**Your Privacy**

Subject to the limitations of the law, all information you provide will remain confidential. Information gathered in the interview will keep in locked cabinets and password protected computers, and will only be viewed by the researchers and their assistants. All published work that reports on the research will use pseudonyms to disguise the identity of the participants, however it is possible that people who know you well may be able to identify you from contextual information.

No personal information will be collected in the survey so none will be stored as data. Once we have completed our data collection and analysis, we will import the data we collect to the RMIT server where it will be stored securely for a period of five (5) years. Then the data will then be deleted and expunged.

**Who are the Researchers?**

The study is conducted by researchers at the RMIT University. Head Supervisor Larissa Hjorth is the lead researcher Will Balmford is the student researcher and PhD candidate. If you would like to be involved in the research, please contact Will Balmford. He can be reached at this email address - Alternatively you can reach him on

If you would like to speak to Professor Larissa Hjorth, please email here at – _

If you have any concerns about your participation in this project, which you do not wish to discuss with the researchers, then you can contact the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476, Melbourne 3001. Details of the complaints procedure are available at: www.rmit.edu.au/governance/complaints/research

Thank you for taking the time to read this information sheet
Playing With Steam: An ethnographic enquiry into Melbourne household gaming

In-depth interviews, games sessions and video tours
Plain Language Statement.

Dear …………………

My name is Will Balmford

I am a PhD Candidate at RMIT University. I am doing research into how Australian households play games. My research is called Steam in the Household: An ethnographic study. I am being supervised in this project by Professor Larissa Hjorth. The research involves talking to people, videoing them playing games and playing games with them.

This is only being done for research – it won’t be used or sold for commercial purpose. I am looking to talk to people (and their households) of all sorts – people who play lots of games, people who only play a few games and even people who don’t play any games. There are three parts to the research, and you can choose to do as little or as much as you like.

1. The Interview
If you would like to take part in the research, I will organise a time and place that is convenient for you and your parents to conduct the interview. The interview will take about 45 minutes and the conversation will be recorded by me so I can remember everything that we talked about. Your parents will be present during our talk to make sure you are ok with everything. Our talk will be very easy going, and we will discuss things like what sort of games you play and when you like to play them. Every six months I will contact you again and ask to talk again to see how you and your household might have changed how you are playing games.

2. ‘Games Sessions’.
This part of the research is you and me playing games together. We can play whatever you like, and we can do it in person or over Steam. Or if you’d rather you can just play a game and show me what you are doing. This type of research is called a ‘game sessions’ or a ‘play session’. We can even do this while we’re talking if you prefer.

3. Video tours
In this part of the research we will be filming you showing a scene from your life. It can be anything – the computer you use before school, the couch where you play games, whatever you would like. It will take a few hours to film, and we can do film it whenever suits you and your parents. Your parents will be there while we’re filming to make sure you are comfortable and you and your parents can look over it and decide if you want to get rid of any part of it. The only people looking at it will be me and my supervisor, and only for this research.

Ceasing Participation and Your Privacy
You taking part in this research is completely your choice and you can change your mind whenever you like.
All the information you give for this study will be kept completely confidential, and if any of it is used in writing, you will be given a fake name to help protect your identity. Information will kept in locked cabinets and password protected computers, and will only be viewed by the researchers. However it is possible that people who know you well may be able to identify you from your habits.
No personal information will be collected in the survey so none will be stored. Once we have completed the research, we will import the data we collect to the RMIT server where it will be stored securely for a period of five (5) years. Then the data will then be deleted.

Who are the Researchers?
The study is conducted by researchers at the RMIT University. Head Supervisor Larissa Hjorth is the lead researcher Will Balmford is the student researcher and PhD candidate. If you would like to be involved in the research, please contact Will Balmford. He can be reached at this email address - or can reach him on – . If you would like to speak to Professor Larissa Hjorth, please email her at
Thank you for taking the time to read this information sheet
Ethics letter of approval

Notice of Approval

Date: 20 May 2015
Project number: CHEAN A 0000019338-04/15
Project title: Steam in the Household: An Ethnographic Study
Risk classification: Low Risk
Investigator: Professor Larissa Hjorth and William Balmford

Approved:
From: 20 May 2015
To: 12 December 2018

I am pleased to advise that your application has been granted ethics approval by the Design and Social Context College Human Ethics Advisory Network as a sub-committee of the RMIT Human Research Ethics Committee (HREC).

Terms of approval:
1. Responsibilities of investigator
   It is the responsibility of the above investigator/s to ensure that all other investigators and staff on a project are aware of the terms of approval and to ensure that the project is conducted as approved by the CHEAN. Approval is only valid whilst the investigator/s holds a position at RMIT University.

2. Amendments
   Approval must be sought from the CHEAN to amend any aspect of a project including approved documents. To apply for an amendment please use the 'Request for Amendment Form' that is available on the RMIT website. Amendments must not be implemented without first gaining approval from CHEAN.

3. Adverse events
   You should notify HREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.

4. Participant Information and Consent Form (PICF)
   The PICF and any other material used to recruit and inform participants of the project must include the RMIT university logo. The PICF must contain a complaints clause including the project number.

5. Annual reports
   Continued approval of this project is dependent on the submission of an annual report. This form can be located online on the human research ethics web page on the RMIT website.

6. Final report
   A final report must be provided at the conclusion of the project. CHEAN must be notified if the project is discontinued before the expected date of completion.

7. Monitoring
   Projects may be subject to an audit or any other form of monitoring by HREC at any time.

8. Retention and storage of data
   The investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

In any future correspondence please quote the project number and project title.

On behalf of the DSC College Human Ethics Advisory Network I wish you well in your research.

Suzana Kovacevic
Research and Ethics Officer
College of Design and Social Context