

Self-expression, DIY skills acquisition
and connectivity:
Domain Grrls creating personal homepages
at the turn of the millennium

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A thesis submitted in fulfillment of the requirement for the Degree
of Doctor of Philosophy (PhD)

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Swinburne University

2016

Abstract

The fundamental topic this thesis addresses is:

Girls creating personal homepages whose technical and social achievements have gone unnoticed and unrecognised.

Extant research into homepages argues persuasively for them as sites for self-presentation and self-expression. Situated within the framework of media production, while also recognising the pioneers of cyberfeminism, this thesis further positions the Grrls' personal homepages as Do It Yourself (DIY) methods and artefacts of production. Through a virtual ethnographic study of Domain Grrls from the late 1990s and early 2000s, this research provides substantial insights into how traditionally devoiced people **crafted identity**, developed **technical skills**, and built **social networks and safe spaces**.

Homepages were both embodiments of personal creativity, and tacit sites for knowledge sharing. Grrls crafted identities which integrated externally verifiable demographic information to support their claims of authenticity, and sought to connect with people described as 'like me'; girls experiencing similar challenges to theirs, such as social isolation, mental illness, and loneliness. Simultaneously, they practised their technical skills as *bricoleurs*, studying the underlying computer code of other girls' homepages and copying desired stylistic elements into their homepages. Extending girlhood studies' concept of 'bedroom culture' to position the Internet as a 'glass bedroom' with complex intertwined notions of private, public and safe, this research argues that the Grrls' self-expression and skills acquisition together facilitated the establishment of social connectivity, and the creation of strong social networks. The virtual ethnographic approach uncovers the Grrls' practices to both protect and share their identity, and depicts a network of spaces – 'safe' to varying degrees – where young girls became prolific media producers, forged supportive social networks, and explored, crafted, and redefined their identities. This thesis demonstrates the importance of revisiting our shared

history of the Internet to understand how devoiced and deprivileged groups could create rich, sophisticated worlds of creativity and connection.

Acknowledgements

Over the many years of my enrolment, I was supported by my two endlessly patient, supportive and wise supervisors, Esther Milne and Darren Tofts. They offered guidance while continuously trusting and believing in my ability to overcome any challenge I met along the way. From reminiscing about the minutiae of HTML 4.0 tags, to pointing me towards agonism, camgirls, and counterpublics, they brought empathy and inspiration to our meetings, without which I could never have reached the end of this journey. I am forever grateful and in awe of the countless drafts they combed through without complaint, and the endless support and calmness they brought to our time together.

Also, the fellow PhD students who commiserated, collaborated and enthused with me. Zaana Howard, to whom I confidently identified 2012 as my year of submission, and who remained a pillar of support for the following four years. Iva Pauker, who lived through my own Domain Grrl years with me and was my first friend to become a PhD and share her experiences with me. Adam Muir, who encouraged me to submit my initial application and then guided me through the tough first years.

To my loving family, I will be forever indebted. Dave, with his absolute love and belief in me, and who would (in spite of his total absence of academic leanings) debate Habermas, postmodernism and Mouffe with me for hours in front of *Scrubs* and *Parks and Rec*. Emmitt, whose much welcomed arrival half-way through my enrolment proved to be both a challenge and the motivation I so sorely needed. My sister, Marcie Civins, who apparently was not scared off proof-reading even after my Masters. She went on to review every PhD word for nine years, chiding me for embarrassing grammatical errors, pointing out bizarre word choices, and congratulating me on particularly deft turns of phrase – and transforming my thesis in the process.

My parents, Zvi and Marian Civins, who were constantly frustrated by my hogging the landline during the 1990s, and yet thankfully continued to pay the ISP bills. My

father, who showed me Pegasus Mail in 1997, and to whom I responded 'why would I waste my time when I can just write a letter?'. My mother, the first person I'd call after a supervision meeting, and who resolutely believed in me no matter what. And my eternally inspiring grandmother, Fane Casan, whom I finally was able to tell, 'I'm a doctor now!'

Most importantly, the Grrls themselves, without whom this thesis would simply not exist. Those who participated in my research, who shared their stories and remembered the days long past. Those who created a world apart, full of social intricacies and coding wizardry. Those who first inspired me to create homepages, and tentatively find my way into the community. Jezebel, Velvetweb, Fuadmin, Blighterz, Starscream, Jujubee, and Justine. Names that have faded into the past, friends I will remember forever. And finally, I look forward to seeing the achievements of future generations of girls, who will always astound and inspire with what they are capable of.

Declaration

I declare that this thesis contains no material which has been accepted for the award of any other degree or diploma; and to the best of my knowledge this thesis contains no material previously published or written by another person except where due reference is made.

All conditions pertaining to ethics clearance were properly met. Evidence of ethics clearance is included in the appendices (see Appendix 7).

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Chapter 1 Introduction: thesis aims and overview

1.1 Introduction

Participation in the girl personal homepage movement was a multivalent act of creativity, self-expression, communication and connectivity. Domain Grrls were girls who created personal homepages during the late 1990s and early 2000s and built meaningful social relationships in the process. They created websites about themselves, their interests and lives, they visited each other's sites, gained inspiration for their own, and learnt webpage design and coding. As their confidence increased, they reached out to each other, initiating casual connections and developing long-lasting friendships. They created their websites on free homepage provider sites like Geocities, and progressed to purchasing their own domains where they created their homepages, shared space with other Grrls, and developed their own particular corners of the Internet. Domain Grrls owned and visited domains like heartsick.org, glitter-stars.net, electrosuicide.net, explodedarling.org, and deathbloom.org, naming and claiming their own spaces, critiquing and admiring each other's, and building a network of linked personal homepages.

This thesis documents the Domain Grrl experience, seeking to recognise the Grrls' achievements and bring their stories and histories to a broader audience, and to find a place for them in the existing history of the early Internet. This project's research question is:

How did girls utilise technology, present identity, and connect with each other, when creating personal homepages in the 1990s and early 2000s?

Underlying this question is a key motivation:

To discover and document the previously little-known history of girls in an early period of the Internet.

Girlhood researchers see Western girlhood as a time of governance, supervision and restrictions, rather than any idealised, untrammelled adolescent discovery of self and life purpose (Driscoll 2002; Harris 2004a; Kearney 2006; Mazzarella & Pecora 1999). Girlhood is a shifting concept; “[the] girl is an assemblage of social and cultural issues and questions rather than a field of physical facts” (Driscoll 2008, p. 13), which in turn emphasises “how unnatural, or, rather, how ‘constructed’ – artificial and fabricated – the nature of youth is” (Mitchell & Reid-Walsh 2008, p. xxvi). Girls could arguably be identified more by the externalised governance of youth rather than by a personal experience of age. By moving online, Grrls sought to create out of the networked ether a space of their own where they could publish their thoughts to peers, beyond the knowledge – and governance – of those in power.

They mapped out a domain within which they could experiment with representations of themselves, self-expression, and connections with other Grrls like them. In doing so, they also gained skills in Internet technologies, such as website programming and file management. These computing abilities allowed for new forms of media production, where Grrls created both the cultural and technological environment, and the artefacts they published within it. Grrls built a supportive social network of peers, gained the skills needed to pursue new career paths, and experienced the freedom of self-expression and experimentation without being simultaneously controlled, surveilled and directed to officially sanctioned methods of expression. In what follows I aim to capture this experience,

position it within frameworks of media production and girlhood, and present a cohesive story of a fascinating and valuable moment of early Internet history.

The Domain Grrls started using the Internet during its early days of mass popularity when standards of behaviour and technology were only just emerging. There may have been millions of websites and users (Google 2008; US Census Bureau 1999), but without automated social connectivity tools like Google and Facebook, each user started off roaming the net independently, wandering and coming upon people, communities, and new social experiments. The Grrls intuitively grasped the potential of this expansive space, and the possibility that there could be other such wandering Grrls, whom they hadn't found living close to them, but who might be discovered in this new site for communication and connection. Unregulated and unpoliced space appeared open for the taking through free homepage providers, where they could create a home and craft a presence representing themselves to any visitors who found them. Leaving behind the watchful view of their parents and teachers, law enforcement and religious leaders, social norms and cultural expectations, they believed they could define themselves however they wanted, and say whatever they wanted.

Domain Grrls were passionate about their sites, studying the craft of writing the necessary computer code, experimenting with designs, changing their self-presentation, and proudly displaying their art and poetry. They eagerly awaited strangers' visits, hoping that they might strike up a conversation via their guestbook or email address, and build a friendship. For these Grrls, personal homepages were more than a simple education in coding or writing; they symbolised a powerful combination of self-expression and connectivity. They could share their thoughts far beyond their existing social circles of friends and family. They could connect with anyone online, meeting strangers from next door or from halfway around the world. Through their homepage creation, Grrls could experience the promise of the Internet, connecting with people and exploring their identities with more freedom than available in their offline lives.

In the early days of the Internet, it was unlikely that Domain Grrls had many, or any, friends who were already online. There were not legions of hyper-connected, hyper-mobile teens with smartphones and tablets from whom to learn. Grrls needed to learn about the tools, technologies, and opportunities of the Internet as they went along, and if they decided they wanted to make a personal homepage, they would need to learn the basics of website publishing, too. They did so in an era where there was no broad, shared cultural and technological knowledge to rely upon; they hadn't grown up surrounded by Uniform Resource Locators (URLs) plastered on billboards, with cyber-bullying being discussed in the media, or playing games on their parents' smartphones at 5 years of age. Domain Grrls went beyond the basic personal homepage formats offered in template form by free personal homepage providers; they discovered the logic of the underlying Hypertext Markup Language code (HTML), and learnt to tweak and customise it by studying other sites' code and reading detailed how-to guides online. They took the time to go beyond simply publishing a page of information, and they became, essentially, geeks in the process.

As they surfed around the interconnected, linked sites, admiring designs and borrowing code, Domain Grrls also reached out and communicated with each other, leaving notes on guestbook webpages, emailing and instant messaging, and connecting with Grrls around the globe. They created social networks, from the rudimentary task of linking to another Grrl's site, and then actually building friendships, and then groups of friends, loosely connected by the technologies of the time, as well as phone calls and written letters. They frequently met up in person, sometimes became romantically involved, and built friendships that outlasted their homepages. Grrls experienced the thrill of exploring a world outside their daily lives, finding people who understood them, and the sensation of belonging to something larger than simply their own homepage. The friendships and relationships they built gave them the opportunities online to be social, gregarious, outspoken, or simply friendly, and feel confident, comfortable and secure in an "imagined community" (Anderson 2006).

This thesis documents qualitative, virtual ethnographic research conducted into the Domain Grrls and their remembered experiences of the era. It builds upon prior research into girls, media production, and personal homepages. It provides a valuable and hitherto absent perspective and analysis of the Grrls themselves, and the social networks which emerged from their personal homepages. This chapter outlines the background of the Domain Grrl experience, the motivation for undertaking the research, and the focus of the research. It also includes an overview of the chapters and structure of the thesis to help the reader navigate this document.

1.2 Why 'Domain Grrls'?

Domain Grrls sometimes bought their own URLs in the form of personal domains, giving rise to part of my appellation for them, Domain Grrls. I use 'Grrl' in 'Domain Grrl' to echo and pay homage to previous movements of girls who produced media and expanded their social networks, specifically the Do It Yourself (DIY) culture of Riot Grrrls who created alternative rock music and printed homemade zines within an ad hoc social network of support and knowledge sharing. Replacing the *i* in *girl* with one or two *r*'s transformed the word to reflect the feminist attitudes of such movements and how girls were in control of their creativity. I argue that the Domain Grrl experience continues this tradition of girls empowering themselves through media.

The meanings of the terms 'Riot Grrrl', and 'Grrrl' more specifically, have constantly shifted and been redefined to suit individual girls and groups, and their origins are variously attributed to different icons of girl movements. Early leading American musicians from all-female rock bands were some of the first to identify and name Riot Grrrl. 'Riot Grrrl' as a phrase appears to have been inspired by the band Bratmobile's co-founder Jen Smith declaration, after the 1991 race riots in Washington D.C., that "this summer's going to be a girl riot" (Anderson & Jenkins 2001). Bikini Kill band members Kathleen Hanna, Tobi Vail and Kathy Wilcox were both musicians and zinesters, and wrote the seminal 'Riot Grrrl Manifesto' in their

zine titled 'Bikini Kill' in 1991, which covered topics of feminism, punk rock, and the nascent girl movement, while Bratmobile's Allison Wolfe and Molly Neuman created zines 'Girl Germs' and 'Riot Grrrl', also in 1991. Neuman described their inspiration; "Tobi [Vail] coined the phrase "grrrl" like as a kind of joke in her fanzine. Like she had called the newest issue of Jigsaw an angry grrrl zine and spelled it with three r's so we were like, oh that's cool too" (1999).

Rosie Cross, founder of the geekgirl website, similarly enjoyed the evocative qualities of the third r; "I guess I've always liked the grrrowl in grrrl and certainly sometimes the best subtle subversions--intellectual subvertising--are created from people not aware of its origin or significance" (DeLoach 1996). Additionally, the democratic, decentralised nature of media production and creativity in this culture leads girls to feel empowered to define it for themselves – how 'grrrl' is derived from 'girl', and how it has changed in the process. Crystal Kile, creator of PopTart website, uses the alternate spelling to avoid people searching for 'girl' related pornography online; "[it] is to make it clear that we're not naked and waiting for a hot chat with you!" (DeLoach 1996). Riot Grrrl researcher Elke Zobl positions the evolution of the term as operating within intersections of various gender and sexuality related movements; "the three angry rrr's in 'grrrl' reflect the rebellious, young feminist reclamation of the word 'girl,' and indicate identification with the alternative feminist and queer youth community" (2004). Continuing and honouring the tradition of subversion, emotion and creativity in rewriting 'girl', I have named my research participants Domain Grrls, also alluding to their geek skills in creating their own domains on the Internet.

1.3 Significance of the research

1.3.1 Recognising the relevance of early Internet history

Since the early days of the Whole Earth 'Lectronic Link in the 1980s, the rise of Multi User Dungeons (MUDs) in the '90s, and even the surging popularity of Twitter after the turn of the millennium, the Internet has grown and changed extremely quickly.

Exponential increases in the numbers of users, webpages, mobile apps, and connected households are evidence of the increasing pervasiveness of the technologies and the opportunities they offer. Online history moves exceedingly quickly; websites disappear leaving no trace, unless archived by the Internet Wayback Machine (The Internet Archive 2015) or other similar databases. Accounts are abandoned, and community memberships lapse, sometimes losing all associated data and communication. In spite of the potential for in-depth record keeping that the data-focussed structure of the Internet offers, understanding the history of the Internet is not an easy task. The onus is on the researcher to sift through archives and transcripts, and to track down users who have myriad names and appellations by which they can be identified. Similarly, the dedicated Internet researcher must understand the historical context of any apparent 'new' online development.

The Internet has mutated and grown quickly, online social norms are still being written and rewritten, and histories are constantly lost, rediscovered, and reconceptualised. Theories of media archaeology challenge historical and sociological approaches to technology research, and encourage theorists of new and digital media to focus on the material and materialist nature of these technologies (Goddard 2014). Researching the affordances, tools and mechanisms of earlier Internet technologies (and, more broadly, the actual environment of the Internet) argues for appreciation and recognition, and maintaining these in the face of technological change. Calling on principles from media archaeology (Parikka 2012) and contextualised media research (Kearney 2014), this research challenges any purely teleological perspective. Teleological thinking argues that an end purpose can be intrinsically embedded in something's nature, and this framework would position early history only in relation to the later technology which evolved from it, and which prioritises newer forms in an inherently myopic orientation towards progress and an assumption of endless 'improvement'.

With the rise of social networking sites (SNSs) such as Facebook, and the highly structured publishing tools they offered which required little or no technical

knowledge, the idea of coding a website by hand to present oneself to the online world rapidly became outdated. Unsurprisingly, considering the constantly changing environment of the Internet, personal homepages fell by the wayside; “it was a web of amateurs soon to be washed away by dot.com ambitions, professional authoring tools and guidelines designed by usability experts” (Lialina 2005). In light of the large number of online technologies and communication behaviours that have risen and fallen online, there is a risk of hyperbole in anything more than simple nostalgia when looking back uncritically at one in particular. Yet the richness and depth of the history of the Domain Grrls deserves attention, to recognise and critically assess their tenacity and achievements, their discoveries – and creation – of a social world online, their ability to create, connect, grow and inspire others. This research investigates the Grrls’ technologies within an ethnographic framework that emphasises the Grrls’ personal experiences, and therefore does not invoke the most materialist of media archaeology principles. However, this research still seeks to recognise the material technologies which underpinned the culture the Domain Grrl personal homepages embodied, and the specific skills the Grrls built even if now they are obsolete or disregarded.

The knowledge of the technical and practical characteristics of this period is more than a recognition of materialist elements and associated behaviours; it enriches the narrative of the early Internet, and this can actually be beneficial insofar as it encourages respect and recognition of early achievements. As individuals, early users may be disappointed and angry at their disappearance from the history of a world where, as early adopters, they saw themselves as pioneers and creators. Broadening our view from the individual, the earlier online communities have likely fragmented, fractured and dispersed since their peak, and their members may not even be aware of the implications of their experience being disregarded and dismissed. Those who recall the early days of the Internet would lose a piece of their shared history they may not have even known existed. Researchers and cultural commentators would work from an incomplete understanding of those early days, particularly concerning the abilities and achievements of more marginalised or smaller groups of users. And in a disappointing repeat of the all-too-

frequent silencing of women's and girls' voices (Mitchell & Reid-Walsh 2010), the stories and experiences of the dominant male online leaders then would have further reason to be entrenched as *the* reality of those early days, a trend in media which continues (Alper 2016). The task of researching the Domain Grrl history is one of both documenting and honouring; preserving a history, and respecting those who actually created it. This thesis recalls and captures a moment in time, and ensures the voices of some girls, at least, are still heard.

An aim of this thesis is therefore to uncover, document and analyse a crucial period in Internet history, as experienced by the Domain Grrls. A connected aim is to recognise the achievements of the Grrls, who have largely escaped academic investigation (leading researchers into girls' homepages include Susannah Stern, Jacqueline Reid-Walsh, and Claudia Mitchell, as will be discussed in Chapter 4), while also considering the shortcomings of the era. The Domain Grrl experience exemplifies the many opportunities for learning, experimenting, socialising and self-discovery that the Internet has offered since its early evolution in the 1960s and 1970s. As such, this experience should be documented and analysed for the insights it can provide into the coming years of social and technological advancement. The Grrls' acts of experimentation and media production are grounded in a DIY culture that promotes the creator – the Internet user – over the corporations, institutions or technologies that often restrict engagement with dialogues and self-expression. This contrasts with corporate-driven social network models that followed, of social network sites, monetised user-generated content, and enforced models of identity exploration and management. Like the work of digital artist and theorist Olia Lialina (2005, 2007), this research will consider the material elements of the personal homepages which allowed for the Grrls' behaviours that are also a focus of this research.

1.3.2 Recognising Domain Grrls' roles as media producers

Media production by girls, those still in the education system, or without professional accreditation or mass media recognition, has often been ignored or

addressed solely as being constituted by acts of consumption which are consequently disregarded and disrespected (Kearney 2006; Strong 2011). This is particularly likely to occur where the conceptual matter being dealt with in the media product is traditionally one that is consumed, such as celebrities or TV shows (Scodari 2005). In spite of this, girls nonetheless do produce media artefacts, and in doing so can challenge the narratives presented to them of being passive consumers, and of living a socially approved girlhood.

Girls “often use the creative and communicative practices of media production to give voice to and work through” difficulties of oppression and lack of privilege (Kearney 2006, p. 13). In the arena of media production, girls have found the ability to create spaces “to escape to” (Zobl 2002) or “to be in the world” (Harris 2004b, p. 162), to “create their own space” (Cross 1996, p. 81), to experience “creativity and sociality” (Reid-Walsh & Mitchell 2004, p. 174), and to “speak” (Stern 1999, p. 37). These spaces are envisioned as being ‘safe’ (to varying degrees) in many fields of feminist and girlhood research; girls’ online behaviours and experiences (Harris 2004a; Kearney 2006; Reid-Walsh & Mitchell 2004; Stern 2002), earlier research into zine, Riot Grrrl and broader DIY culture (Bail 1996; Leonard 1998; Sinor 2005), and women’s use of the Internet (Reitsamer 2012; Star 2000; Tiernan 2002; Wakeford 2000). Girls’ acts of media production, specifically within safe spaces, offer them the chance to express themselves the way they want to.

In spite of this awareness in Girlhood Studies of the intersection of girls and media production, recognising the Domain Grrls story is hindered by the relative invisibility of the Grrls’ actual online activities, both at the time and in archived form. This is due to the inherent nature of the homepages, which directly enabled the creation of the Domain Grrl experience: that these homepages were safe spaces. Grrls were in control of the method, style, content and reconfiguring of their self-expression, although their sense of privacy could be violated by unwanted individuals. They learnt and built their skills in spaces where they felt distanced from such people. This safe space has had the unfortunate side effect of rendering invisible the rich DIY nature of the Grrls’ skills acquisition; these homepages went largely

unresearched, mentioned infrequently in mass media (Johnston 2000), and nostalgically remembered only by the Grrls themselves (Diaz 2009; *Internet Girl*Goddesses of the late 1990's*). Ultimately, though, Grrls were undergoing a complete process of skills acquisition and media production; from initial learning and exploration of fundamentals, through to confident creation and management of media artefacts, and sometimes into a role model and trend-setting position of authority within the community of practice.

1.3.3 Original contribution to knowledge

This thesis extends prior work by leading theorists and researchers, to address a crucial gap in the research by focusing primarily on the girls themselves who create personal homepages, and secondarily on the artefacts they created. Furthermore, this research engaged with the girls long after their time as personal homepage creators, which allowed for a consideration of how their lives had been affected by their media production. Nowhere have girls' roles, experiences and stories as media producers by creating personal homepages been researched and documented to this level in any formal capacity. Existing research was infrequent and dedicated solely to the media artefacts themselves, rarely engaging directly with the girls who created them, and not to the extent this research has achieved. These researchers and their findings paved the way for this research project to commence, and provided knowledge, inspiration and guidance. I will detail specifically the points of departure with existing research in depth in Chapter 4.

While Susannah Stern, the foremost researcher in girls' personal homepages, has focused on the creative output of girls in the forms of their homepages, and has delivered nuanced and thoughtful analyses of them, my research can enrich this further by situating these artefacts within the broader landscape of early Internet culture. Domain Grrls' homepages therefore were more than the acts of identification and self-presentation that homepages were so frequently positioned solely as in academic research (Chandler & Roberts-Young 1998; Miller 1995; Wynn & Katz 1997); they were also proof of the Grrls' involvement in early Internet

culture. Another aim of this research is therefore to investigate how the Grrls created their personal homepages within the broader context of this culture; how they acquired the necessary skills, what they created, and how they felt about it. This presents complementary insights into the materiality of the technologies the Grrls were engaging with and creating, and also their decisions, behaviours and practises when doing so, creating a multi-faceted portrayal of the Grrls as media producers.

1.3.4 The researcher's perspective on the importance of Domain Grrls

I chose this community to research as I identify as a member, and have a personal interest in seeing our history and experiences documented. When I was 17 years old and living in Australia, I idolised a 14 year old girl I had never met, whose full name I did not know, of whom I had never seen a photo, and who lived half way around the world in America. She ran a subversive, hilarious domain full of teen girl writing and posturing, publishing her own homepage and those of her online friends. She was sarcastic, intelligent, and very feminist, and I thought she was incredible. I decided to make my own homepage, and for a few years, my spare time online was spent finessing my HTML code, determined to create as stylish a site as other girls', and building friendships with girls from USA, Sweden, and England¹.

A decade later, as I watched the veneration of nascent social media and social networking technologies for their apparently revolutionary ability to connect people around the world, I became increasingly frustrated. Teenage girls had coded websites by hand when their friends were still relying on landline telephones, had created their own spaces for self-expression in a new public venue, and had found online the social acceptance and community they were denied in their existing social networks and activities. Our achievements would regrettably be totally erased by this single-minded focus on social technologies. I could deeply identify with the emotional implications of my communities being forgotten, and as a self-identified Domain Grrl, I felt very strongly about not losing our own history. It is more than

one's friendship group being deemed anachronistic or forgotten – it is a way of online life, a style of communication and interaction, a way of being human. I decided to honour the memory of what we did, to document our history and discover what we in fact achieved, in the form of this thesis. I will discuss further the implications of my participation in relation to method, in Chapter 2, and further information about my personal Domain Grrl experience can be found in Appendix 8.

1.4 The structure of the thesis

This thesis researches and analyses the Grrls' experiences, and does so within the broader context of the Internet of the time. Considering the scope and breadth of this online world, and the full picture required to truly understand and appreciate the Grrls' achievements, the necessary contextualising information is provided as appropriate in each chapter. The structure of this thesis therefore is designed to progressively familiarise the reader with this context through descriptive and analytical retrospectives of both practical and theoretical aspects, from online demographics, access technologies and computer code standards, through to theories of cyberfeminism, literature about personal homepages, and DIY practices of media production. Simultaneously, the thesis will also progressively reveal the Grrls themselves, through their own words, individually, as their experiences illustrate the topics being discussed, as well as dedicating a chapter to their practices and motivations which actually led to them participating in the Domain Grrl experience.

After this Introduction, Chapter 2, "Methodology and methods", describes the research framework and design which developed the project. The complexities of engaging with a virtual field, not geographically located, which had ended years prior, with a population scattered around the world and who could be reached only if they self-identified as members of a handful of online communities – these challenges are addressed in detail in Chapter 2. In addition, this chapter also considers the subtleties of being a researcher who was embedded in the field as a participant and not as a researcher, when the field existed, and therefore had prior

knowledge and experience as a self-identified Domain Grrl. This chapter establishes the three key themes which emerged from data analysis and then inform the structure of the findings chapters: self-expression, DIY skills acquisition and connectivity.

The next two chapters provide a strong foundation in both practical and theoretical aspects of the landscape the Domain Grrls operated within, to familiarise the reader with the broader context before introducing the Grrls and the research findings in detail. Chapter 3, "The Internet of the Domain Grrl era", discusses two key online movements, cyberfeminism and cyberutopianism, and their varying degrees of relevance to this research. It also describes the demographics of the Internet population that the Grrls were joining, and the difficulties inherent in Internet access technologies which the Grrls were using. Chapter 4, "Personal homepages and self-expression", reviews the extant literature regarding homepages, the key visible, material creation of the Grrls' participation in the Domain Grrl experience. It explains the relative paucity of literature, while also describing in detail the different research approaches, theoretical perspectives, and nuances, in each researcher's work. Chapter 4 also introduces the fundamental concept of self-expression, an underlying theme and outcome of the Grrls' creation of a website dedicated to themselves, and which becomes increasingly relevant as the thesis proceeds to analyse the Grrls' motivations for their different creative, communicatory and social behaviours.

Having established the context of this thesis and the methods of the research, the following four chapters present the findings and discussions. In a similar fashion to the larger thesis, they commence with describing the Grrls themselves, before progressing to finer details of the Grrls' experiences. Chapter 5, "Becoming Domain Grrls: motivation and self-expression", focuses on the first key theme of this thesis, the Grrls' self-expression through their homepages. It addresses the Grrls as actors and creators in the Domain Grrl era, their motivations for creating personal homepages and how they presented themselves online. It introduces some critical discussion about the concept of 'youth', and explains this project's perspective in

maintaining focus on the Grrls as people within that period of time, rather than assessing their experiences through a teleological lens of 'youth as a step on the way to adulthood'.

Chapter 6, "DIY skills acquisition: Domain Grrls as media producers", addresses the second key theme of DIY skills acquisition. It remains primarily focused on the Grrls as individuals, specifically how they engaged with the material environment of the Internet and its associated technologies, languages, tools and practices. This chapter contextualises the Grrls' learning practices within broader theories and research into youth and media production, and DIY, a particularly relevant philosophy of media production. After discussing the material nature of the media they produced, this chapter outlines some of the personal outcomes of having learnt about such new technologies; a sense of pride that pervades the Domain Grrl experience. The following chapter, Chapter 7, "Domain Grrl connectivity: building counterpublics in safe spaces", then expands on the broader, interpersonal outcomes of the Domain Grrl experience.

In its focus on the third key theme of connectivity, Chapter 7 introduces the concept of 'space', engaging with related theories of the public sphere, safe spaces, border spaces, and counterpublics. It analyses the social outcomes of the Grrls' online activities, and argues that these constituted the creation of safe spaces within which Grrls were able to express themselves in a manner designed to attract and connect with people 'like me'. This envisaged audience, and the audience which eventuated, was a public, discursively instantiated through the media artefact itself, the personal homepage. Furthermore, this public is argued to be a counterpublic, as it is peopled with a subordinate social group of girls, who were seeking a safe space where they could express themselves and connect with others; this chapter explains in detail how this is in fact a counterpublic. It further describes and considers the physical space which enabled this connectivity; the role of the bedroom and the home as a site for media production, and the various technological tools Grrls used to extend their social network beyond that physical space.

Chapter 8, “Complicated connectivity: privacy practices, collapsed contexts, and social hierarchies”, builds upon this and further extends this argument regarding the key theme of connectivity, by engaging with issues around privacy and publicity online. It describes and analyses the Grrls’ privacy practices, their experiences of exclusion in the Grrls’ social networks, and how they tried to manage the counterpublics which were being instantiated and maintained through their activities. This chapter also describes in detail the difficulties they experienced in doing so, when contexts of privacy and publicity collapsed, how the Grrls responded to this, and how it reverberated through their subsequent online activities. This chapter argues for a complex reading of the safe spaces created by the Grrls, recognising the shortcomings of the material and technical qualities of the Internet at the time.

The final chapter concludes this thesis by recapitulating the research conducted. Chapter 9, “Conclusion”, considers how the original stated aims of the thesis were addressed, and what the original contribution to knowledge has been. This chapter also provides recommendations for future research.

1.5 Chapter summary

This chapter has described the background to this research project, and detailed the motivation for conducting the research, and as such the research question being addressed. The chapter explained the significance of the research, while acknowledging my perspective as a self-identified member of the field. Relevance was established within two contexts: firstly, by positioning the Grrls as representing an early period of Internet culture which has been researched only briefly. Secondly, by arguing that their practices of media production and skills acquisition demonstrated significant self-driven desire to learn and participate in a nascent ‘geek’ culture, in particular as this occurred during a period of little guidance or standardised design. The following chapter defines the methodology and methods used in this research project to achieve this goal.

¹ Further information about my personal Domain Grrl experience can be seen in Appendix I.

Chapter 2 Methodology and methods

2.1 Introduction

2.1.1 Chapter outline

This chapter commences with an outline of the orientation of the project, followed by the methodological frameworks that inform the research design: ethnography and virtual ethnography specifically. The research design is then described, including the data collection methods, the data analysis method, and the detail of the iterative thematic coding process. Finally, this chapter addresses validity considerations, and considers the challenges inherent in this project.

2.1.2 Research question and framework

This research project set out to answer the following question:

How did girls utilise technology, present identity, and connect with each other, when creating personal homepages in the 1990s and early 2000s?

The philosophical framework which directed the epistemology of this project is interpretivism, which seeks to describe and interpret social phenomena, thoroughly and reflexively (Hammersley & Atkinson 1995). An interpretivist study is one which recognises and addresses the layers of social and cultural constructs and meanings which are embedded and enmeshed in human experience (Cho & Trent 2006). An

ethnographic methodology should deliver the ‘thick’ understanding Clifford Geertz (1973) argues is fundamental to truly understanding the full contextualised meaning including “hidden aspects” (Wittel 2000). A successful thick description is one in which the research process includes practices of reflexivity to attempt a degree of accuracy in results. Although the goals of this philosophy do not claim to include a definitive ‘truth’, they do include quality research which is defensible and stands up to the academic and ethical principle of validity (Lincoln & Guba 2000). These issues will be addressed throughout the remainder of this chapter.

2.1.3 Positioning this research

Aligning this research project to a comprehensive framework required addressing multiple challenges; the activities had occurred a decade ago, in a loose-knit undefined set of community-like online structures that had since disbanded, and where the resultant artefacts had mostly disappeared. There was no obvious match of a methodology to totally guide the entire research; each methodology came with its own expectations and restrictions on how to conduct research, and no single approach fulfilled all the needs of the project. There were no primary artefacts upon which to be performing historical analysis, no current fieldwork for ethnography, and no documents for textual analysis. Defining methodology and research design therefore required an ongoing negotiation with the framework which best supported the research.

This project brings into dialogue two fields of research: Internet studies and Girlhood studies. As a vast collection of topics and theories, the discipline of Internet studies presented a suitably, even overwhelmingly, wide-ranging set of research options and activities. Early research activities ranged from ethnography (Dibbell 1999; Reid 1996; Rheingold 1995; Turkle 1995), futurism (Dery 1996; Fisher 1997), and feminism (Kendall 1996; Plant 1996; Spender 1995), through textual analysis (Stern 1999; Wynn & Katz 1997), public policy (Facer et al. 2001; Norris 2001; Selwyn 2004) and literary theories (Landow 1997; Murray 1997). As a new field of study, researchers investigated the Internet and associated technologies

within many different disciplines, including their implications for theories of the body (Haraway 2000) and the mind (Turkle 1995), space (Wertheim 1999), public policy (Livingstone 2003), and autobiography (Kennedy 2003).

Girlhood studies research frequently utilised ethnography (Bortree 2005; Weekes 2004) or textual analysis (McRobbie 1991; Peirce 1993) to consider the lived experiences of girls, seeking to give voice to the girls themselves in some way. Originally focused on white, Western girlhoods, this research expanded to be more inclusive and consider intersections of race, class, disability and religion. Girlhood studies often focuses on cultural artefacts and activities ('Girlhood practices' 2009), as a rich entry point into how girls negotiate with dominant narratives about their lives, on any point of the consume-produce continuum. Both Internet studies and Girlhood studies presented an established history of research methods that were utilised in this project.

The framework for both research activities and the researcher's position was guided by virtual ethnography, within the interpretivist epistemology. The activities were conducted to align to ethnographic principles and ideals, even if not able to entirely fulfil an orthodox approach. By recognising my roles as a self-identifying member of the group I researched, though not a research participant, and as someone managing nostalgia and affinity for the topic and participants, I considered my position as a researcher both nestled deep within, and perched perspicaciously without, the field, to varying extents.

The methods for this project were a variation on virtual ethnography, as the main determining factor in structuring this qualitative research. The positioning of this project as virtual ethnography, or ethnography at all, was complex. How could this research be recognised as ethnography, which expects researcher embeddedness in a contemporary, identifiable field, not one a decade old and largely abandoned by its actors?

2.2 Research framework

2.2.1 Virtual ethnography

Virtual ethnography is, in itself, not an unquestioned discipline. Ethnography speaks to acts of fieldwork where contextualised meaning is discovered in people's activities, and traditionally these acts had been carried out in physically bounded fields (Beaulieu 2004). Ethnographic research generally requires "attendance" (Wittel 2000) on the part of the researcher, and the rapid growth and proliferation of digital technologies both expanded the potential sites of media activities, while encouraging digital ethnographers to focus attention on the affordances of the technologies to help discover meaning (Horst, Hjorth & Tacchi 2012). As the Internet has simultaneously arisen as a fascinating and dominating force in human behaviour, research has also moved online, investigating the usage of email, IRC, newsgroups, MUDs, forums, and other sites of communication. This has been a "contested terrain for ethnography" (Beaulieu 2004, p. 141) as the notion of a physically located, mappable space for culture and meaning cannot be neatly transposed to the de-centralised, dispersed technology and affordances of the Internet (Paech 2009). Yet the ensuing debates around the validity of the merging of 'virtual' and 'ethnography', with some strongly challenging the place of online research within the discipline of ethnography (Wittel 2000), and others questioning the validity of the division between 'online' and 'offline' life (Driscoll & Gregg 2010), engaged with and highlighted other ongoing negotiations of meaning within the discipline.

The physically bounded field was being recognised as a "political location" (Wittel 2000), which is "constituted and maintained through cultural definition and social strategies" (Hammersley & Atkinson 1995, p. 41). The traditional "spatial constructs of ethnographic research" (Leander & McKim 2003, p. 213) were being destabilised both by the ongoing maturation of the discipline, and the fascination researchers had to understand the users and usage of the Internet. Virtual ethnographer Christine Hine posited the destabilisation of the primary research structure of the

physical field, by the cultural field of the “technology text” (2000, p. 39), defending virtual ethnography “as a textual practice and as a lived craft”, not a thin attempt “unlikely to reveal context and complexity” (Wittel 2000). This is echoed by what researchers Steven Schneider and Kirsten Foot describe as “the potential for digital media productions to be simultaneously inscriptions of communicative action and structures for action” (2004, p. 6).

In light of the breadth of research being conducted into online behaviour, practices and meaning, and the ongoing embedding of the Internet into many aspects of people’s lives, the traditional focus on the physical site has been negotiated to maintain instead a need to define the boundaries of research as “collections of things that become intertwined” (Postill & Pink 2012, p. 127). As digital ethnographers Kevin Leander and Kelly McKim say:

this ‘unbounding’ of research sites from physical locations does not suggest that physical locations do not matter, but, rather, relationally speaking, that they do not serve as self-evident boundaries of research sites (2003, p. 214).

Furthermore, a virtual field is aligned conceptually, and even experientially, to the sense of being within a particular space, similar to a physical field. Positioning virtual fields as valid sites for ethnographic study argues for seeing them as places with “a sense of *worldness*” (Boellstorff et al. 2012, p. 7), extending upon the existing primacy of the physical field and expanding the field of ethnography itself.

All of this is to say that the lack of a physical site was not the largest hurdle to overcome in confirming my research as virtual ethnography. This argument had been mostly successfully resolved already, and as such also expanded the concept of a research site to weaken the demand for boundedness online; which in turn offered a framework for interpreting the outcomes of the Domain Grrl experience for the participants. My methodological approach investigated the behaviours of the participants as they created media artefacts, represented themselves, and built relationships, their motivations for doing so, and the resultant outcomes.

I considered the interstices between how they used the technology, why they used it, and how this manifested meanings which could transform their experience of power - where the materiality of the artefacts created produced a “sense of being acknowledged and finally respected” (Horst & Miller 2012, p. 106). Anthropologists Heather Horst and Daniel Miller argue that materiality – as a multi-faceted concept – should be addressed in digital studies, rather than be subsumed beneath an idea that virtual space is defined purely by “human intention” (2012, p. 103). They discuss four main types of materiality to support this; “the materiality of digital infrastructure and technology; the materiality of mediation; the materiality of digital content; and the materiality of digital contexts” (2012, p. 103). Within the third, then, Horst and Miller point out how digital content acts in conjunction with the self to materially alter the experience of power an individual can have, and in doing so can bring this acknowledgement and respect. The participants’ homepages were understood within broader contexts of the participants’ desires and hopes for themselves through the process of media production; that the content so produced would have a material impact on their lives.

As Hine points out, the Internet as an opportunity for research has two critically intertwined but distinct dimensions; “a discursively performed culture” and “a cultural artefact, the technology text” (2000, p. 39). An ethnographic methodology must examine both to deliver a sufficiently ‘thick’ understanding. Understanding ethnography as a study of meaning in behaviour provided a rich framework for interpreting and analysing layers of self-publication, self-presentation, connections with other girls, affordances of the technology, engagement with the technology, and engagement with the broader cultures of the Internet in general.

2.2.2 Defining, and participating within, my field

The most significant challenges for my research were to define the boundaries of the field I investigated, and recognise the role I played within it. The unavoidably historical nature of my project meant that many personal homepages had disappeared from the Internet, present sometimes only in a semi-archived form.

Webring lay fallow, guestbooks were silent, and the once popular activities and affordances I needed to investigate had been superseded and rendered irrelevant by successive (micro-) generations of social network sites and technologies. Ethnography traditionally expects researchers to be embedded within the field to experience it on multiple levels over time (Boellstorff et al. 2012; Lindlof & Shatzer 1998; Wittel 2000). This requirement has been challenged as embodying a colonial-esque, simultaneously *other*-ing, through its need for a clearly defined target culture, and homogenising tactic of standardisation, through its tacit dependence on an evenly experienced culture by any members (Couldry 2003). Even so, when considering the researcher's access to primary material, and closeness to the participants, my project did not meet these basic requirements.

As ethnographer Andreas Wittel (2000) qualifies, "[o]ne does not have to mystify or privilege participant observation, but its value for an understanding of social situations, everyday routines and embodied practices can hardly be underestimated". This was not a shortcoming of my research approach, as my field lay dormant; rather a requirement that I negotiate and qualify my use of the terms 'ethnography' and 'virtual ethnography' to describe my project, and to interrogate and define my role as a researcher. I argue that my methodology was framed and informed by the disciplines; that I was seeking the same contextualised meaning for a human-focused understanding of a defined people; and that my field could be defined and identified.

The field here was composed of girls who were creating personal homepages in the late 1990s and early 2000s, before the advent of blogs and SNSs. There was little research from the time to objectively identify this group, so I could not claim to simply be carrying on from someone else's research. For example, Stern's research focused on artefacts rather than creators, prominent girlhood and media production researcher Mary Celeste Kearney met only with female website creators aged in their early 20s, and even looking outside academic research, government departments of the time were not investigating Internet usage at such a granular level that would uncover specific sub-groups of girls creating homepages. The

Australian Bureau of Statistics 1998 report “Household use of information technology” did not even identify the gender of children in its survey data, and the USA’s 1997 report “Computer Use in the United States” only reported on a handful of children’s online activities broken down by gender, and didn’t further analyse results within either male or female participants (US Census Bureau 1999).

My own strong memories of this era were both an asset and a liability. My position as researcher drove me to distance myself carefully and appropriately when seeking to define my field of research, while recognising the lens of nostalgia that overlaid my recollections of the time, “[looking] in, looking back, looking forward” (Mitchell & Reid-Walsh 2013). Autoethnography was an option here, to enrich this research with the nuances of my own experience, to tell the story as a participant myself and to reflect on the meaning it held (and holds) within my own life. As I was considering and establishing my research methods, I prioritised the importance of proving the validity of the Domain Grrl experience without emphasising my own memories and increasing the subjectivity of my methods and of the project itself. After having located the participants and gathered my data, and in doing so resolving adequately the challenge of proving the existence of the field, I revisited the idea of an autoethnographic method but the challenge of integrating this retrospectively was considerable and I chose to continue focusing my attention on the participants themselves.

To identify the field, I had to demonstrate its existence not from my own experience. Internet archive sites provided access to view some websites from the Domain Grrl era, but they provide no categorisation of sites to identify those belonging to Domain Grrls, and I also could not know which sites were omitted. With no ‘objective’ researcher or database proving the existence of the Domain Grrl experience, I turned to virtual ethnography, which faces the same difficulties: “[t]he first problem virtual ethnography has to face is the validity of data on the Internet users” (Wittel 2000). Traditional requirements of engaging participants are undermined or threatened: “[f]rom whom are you obtaining consent?” (Paech

2009, p. 207). Like digital researcher Anne Beaulieu, I turned to the participants themselves, and “followed the actors’ lead” (2004, p. 142).

My research’s framing of the field was therefore derived not simply (and simplistically) from my own personal experience of the era, but from the new online spaces and groups where the Grrls congregated, set up in nostalgic remembrance of what my own, subjective memory claimed to be true. Ironically enough, these groups were using the new breed of online social connectivity tools, SNSs Myspace and Facebook and the journaling site LiveJournal. Domain Grrls had created groups open to the public, which were devoted to discussing the experience of Grrls creating personal homepages, where members could reminisce and reconnect. With no existing records of the time, no social network mapped out and no comprehensive list of domains, sites and website addresses, or contact details of the owners, I knew I could not proactively and directly reach out to all the Grrls who were involved: I had to encourage them to reach out to me. I therefore took the approach of posting public appeals for participants where I could be certain that Domain Grrls would find them, in these groups on these SNSs.

The Facebook and LiveJournal groups were both called “Oldschoolers”. The titles and descriptions of the groups used key terms and referred to seminal sites of the era, and generally evoked a nostalgic and communal feel.



Figure 1: Icon of Facebook group

“oh the good old days..... if the words delish, plastique, gemz or siren [*original domain names*] mean anything to you, join this group!” (Description of Facebook group “Oldschoolers”)



Figure 2: Icon of LiveJournal group

“Internet Girl*Goddesses of the late 1990’s” (Short description of LiveJournal group “oldschoolers”. For more descriptions of this group, see Appendix 2.)

I felt confident that these groups were appropriate places to search for participants, due to the clear and precise sense of relevant space, community and behaviour that they evoked. In 2007, when I first began planning my research, the main group, at LiveJournal, had over 300 members, over 400 posts, and over 1,000 comments. In 2009, when recruiting participants, the LiveJournal group still had over 300 users, and the Facebook group had 29. Unfortunately, at this same time, Myspace had already shut down the Groups functionality, and the space had been taken offline. Specifically in the LiveJournal group, there was an active, vociferous group of Grrls describing similar experiences, seeking to reconnect with old friends, and expressing joy at finding a new space. There struck me as being very little, if any, debate about what exactly was being discussed. There was a shared history and understanding that allowed members to join and immediately begin re-engaging with their nostalgia, rather than confirming whether their nostalgia was accurate. There was a sense of ‘coming home’. To quote the group’s description; “Join this community if you want to reunite with old friends and find out where the people whose sites you loved and worshipped years ago, are now!” (*oldschoolers - Profile*).

The participants self-identified as belonging to the Domain Grrls era, as they had already located and joined groups dedicated to it, identifying with the descriptions of the group and reading the posts contributed by fellow members. Years after their original experiences with personal homepages, the participants felt these groups

were still relevant to them, and that their experiences were still interesting, meaningful, and worth discussing further.

The original field was historical at this point, and was being identified by its members. The task of my research was to dive deeper into their remembered experiences, seek meaning in the field that emerged, and explore their framing of it. By identifying and connecting with participants based on their self-identification as group members, this methodology focuses on a specific group of Grrls. Participants were those who, years after their activities, could recall their memories, harboured some degree of nostalgia, and a desire to reconnect with other Grrls, as well as a willingness to discuss their experiences with a relative stranger.

Virtual ethnography expects the researcher to participate in the practice in some way, both as a researcher, with studied objectivity and perspicacity, and as a group member, with an embedded role, which would contextualise the meaning that the researcher would otherwise observe from a distance. I had been a fully engaged participant in the field at the time, creating, connecting and learning, without any objectivity, observing only as a component of experiencing, and obviously not acting in any role as a researcher. Years later, I commenced my research project armed with the framework and interpretative tools of virtual ethnography, yet without a live field to participate within.

A challenge for my research, and in particular the rigour and objectivity of my analysis, was to draw upon the memories of my own practices appropriately. They could add context to an understanding of the responses from participants, but must not serve as a mental framework for interpreting all data; they acted as a layer of context, but were no replacement for actual embeddedness. The divergence of my time within the field (yet not fieldwork) and my time as researcher did not discount my experience; as any other ethnographer, I had to establish myself “as able to know and speak about [my] object” (Beaulieu 2004, p. 152), and provide “[i]nformed observation, participation and interpretation” (Paech 2009, p. 196). Considering the shift in research methodologies and philosophies the Internet catalysed due to its spatial, temporal, and physical peculiarities and complexities, a

virtual ethnography project with challenging, fragmented research elements did not need to be an unsurpassable hurdle.

2.3 Research design

2.3.1 Data collection methods

2.3.1.1 Obtaining participants

During 2009 and 2010, requests for research participants were posted in the LiveJournal and Facebook groups, using key words 'domain', 'hosting', and 'cliques' to catch users' attention. The response rate was variable. As is fairly standard in SNS posting functionality, newer posts moved mine further down the page and out of view. I therefore posted multiple times in each community to maximise the likelihood that periodic visitors would read my request. Participants mostly contacted me within a short period after I posted in the group, and went on to complete the survey soon thereafter. Often Grrls who responded to my posts referred friends of theirs who they knew were active during this period, and there were both poetic and practical benefits to leveraging the social networks of Grrls who, I posited, built social connectivity and networks through their personal homepages. In total, 23 participants completed the survey; 21 of these did so between December 2009 and March 2010, one in September 2012, and one in May 2014. Participants were randomly assigned a pseudonym taken from a list of popular girls' names for babies in the USA during the early 1980s, the period during which, and location where, many of the participants were born.

2.3.1.2 Survey

Participants completed a 42 question survey about their Domain Grrl experience (see Appendix 5). The survey format was selected as an asynchronous, anonymous communication style which suited participants located around the world, and also a depersonalised format which encouraged participants to reflect and bring up memories from years earlier. The survey was completed anonymously, and

participants could provide their email address for further contact (19 chose to do so). The survey aimed to gather data for the layers of experience participants had with their homepages, from the central topic of themselves, through to the tools and environment they created with/in, the homepage they created, and the people who consumed the site and perhaps engaged with them. These layers represented the exploratory nature of ethnography, attempting to uncover how the participants viewed their experience from multiple perspectives (Hammersley & Atkinson 2007, p. 3). The goal was to maintain a broad view of the Domain Grrl experience, and not focus on one specific area such as technology or social connectivity. The survey was also structured to incrementally encourage the participants to open up about their story. It began with simpler questions about demography and the location of the computer/s they used, then focused on what they created, and only then prompted them to recollect and share memories of the social outcomes, and any other people and communities they connected with in the process.

The survey was presented in seven sections:

1. "About you": demographic, education, employment and computer proficiency
2. "Your life when you had your own website": living conditions, computer location and access
3. "Your website": process of creating the site, content, self-portrayal, community and communication tools
4. "Your audience": intended and actual audience, potential of unknown audience
5. "Your community": communities belonged to, consequences, different experiences for different genders
6. "Hosting": domain ownership and sharing
7. "The end result": overall short term and long term consequences of their experience

As part of my ongoing efforts to consciously recognise my own history and how it could have influenced my research approach, I sought to methodically identify,

define and recognise my own experience, and the data points within it, by answering the survey myself, in an attempt to be as honest about my own nostalgia and underlying attitude. I did not incorporate these data into my research. Unlike autoethnography which is both process and product (Ellis, Adams & Bochner 2011), the goal of this ethnography-inflected approach was not to treat myself as a participant, and generate product for analysis. Rather, this activity served to extricate from my own mind the nuances and emotions of my own narrative and understand it as its own story, which could be recognised, if not thoroughly isolated, and not actively included in my research.

2.3.1.3 Email correspondence

After I had completed my first analysis of the data, I identified gaps in them. The original survey did not adequately uncover the participants' motivation regarding certain decisions that emerged as interesting topics during analysis, such as how they selected their online name, pseudonym or handle, and what inspired them when creating a new site design. Some participants volunteered this information as they answered other questions, and I wanted to gather the same from the remaining participants. The original data also delivered some preliminary findings around how some participants presented facts about their lives that could identify them, such as their school name, and I sought to test and validate these findings with the other participants. In addition, the original survey focused on the participants' experiences when creating their personal homepages, and I now wanted to learn more about the end of their homepages, and beyond; why they continued, or stopped, and how they now felt about the Internet and their use of it. I therefore compiled an additional set of questions and emailed the original 19 participants who had provided their email addresses. Of these, eight responded, as many email addresses originally provided by the participants were no longer active. These eight subsequent email conversations provided an additional layer of data to integrate into the analysis process.

Email further provided an opportunity to request artefacts of the original homepages from the participants, however none were able to share these with me

due to a combination of factors. The computers they had used for creating their homepages were no longer owned or used by them, and they hadn't transferred the code from those computers' hard drives to their new machines. Additionally, the homepages themselves were mostly taken offline, either intentionally removed by the participants, or deleted by the host such as Geocities. When I searched for the homepages through online archive sites such as the Internet Wayback Machine I also found that there were no snapshots taken for almost all of them, possibly due to the relatively low visitor traffic they may have had when compared to more popular websites of the time. The one exception to this was Narcissistic.org, however as it used the more complicated online media coding language Flash, the site's rendition on the Machine was extremely garbled and unintelligible to anyone who wasn't already familiar with the site.

Video chats of 1-1.5 hours duration were conducted with two participants, initially planned to extract specific pieces of information about their experience. However, these conversations rapidly transformed into co-operative reminiscing and nostalgia, comparisons with SNSs, and generally talking as new friends about the Domain Grrl times and our lives since then. The data from these sessions were so imbued with the values of the researcher, so free-form and disjointed, that even accounting for the inherency of values in ethnographic research (Lincoln & Guba 2000), the data were ultimately assessed as being overly personal and subjective on the part of the researcher, and therefore rendered largely irrelevant.

As the video method of interviewing proved too casual and introduced such vagaries into the data quality, I chose email for all future conversations with participants. Further email conversations were then conducted with three other participants from the previous eight; those who indicated a willingness to continue with the research. Each email contained approximately six questions to reduce the participants' effort and increase their likelihood of responding. These questions were a mix: more open-ended questions designed to generate additional data to compare to existing data, and, specific questions tailored to the individual participant and designed to extend upon the data gathered already. An example of

the former is: 'Was there anything going on in your 'offline' life that motivated you to be more involved online?' An example of the latter is: 'You mention that friends and your mom found out about your site, and this caused you embarrassment. Can you explain what the consequences were, and how you dealt with this situation?'

The data received in these email exchanges were much richer and more focused than that gathered in the video interviews. The participants had adequate time to recall their experiences and craft their responses, and I was able to be targeted in my questioning, and revisit the extensive data gathered already before asking subsequent questions. These email exchanges provided substantial insights and rich data that successfully validated the data I had gathered already.

2.3.1.4 Data format

There is a sense of symmetry between the format of the data provided by the participants, and the format of the original media being researched. Both were written, digital, and displayed on computer screens. Although significant time had passed between each being created, there is on an emotional level, as a consumer considering both types of information, a consistency of sorts at work here.

Participants expressed themselves online in predominantly written format (as will be discussed in Chapter 6). To respect this, their quotes are presented verbatim, preserving their personal style, such as non-standard use of punctuation and capitalisation, and any artefacts of online culture such as emoticons and acronyms. All quotes included in this thesis are therefore replicated exactly as the participants wrote them, the use of 'sic' is therefore not employed.

2.3.2 Data analysis

2.3.2.1 Planning my approach

Responses to the survey were qualitatively analysed through a combination of elements of Grounded Theory Method (GTM). GTM provides tools for interpreting qualitative data which are quite unique in their field, and encourages researchers to allow the data to speak for themselves rather than force them into existing, perhaps

ill-fitting, theories (Glaser & Strauss 1967). This had always been a goal with my research; to provide a space for Grrls whose experiences deserve to be heard. GTM could be used to take an open-minded approach where no prior expectations were placed on the data, but I had already read sufficiently in this space (predominantly around theories of girlhood and media production), and discovered existing theories which also provided powerful tools for analysing the data. I therefore utilised elements of GTM to structure my methodology, while integrating concepts and frameworks from these existing theories. Including existing theoretical frameworks when coding and analysing data does not invalidate this project's methods from being a GTM-led approach; the goal of GTM is to foreground data and methodically approach analysis as a thorough exploration, not to enforce a set procedure of doing so (Hammersley & Atkinson 2007).

To analyse the participants' experiences, and make sense of what could be quite diverging stories of creation, connection and communication, unifying common themes, and points of difference needed to be identified. The survey structure was designed to elicit a wide range of information about the Domain Grrl experience. The resulting analysis needed to emergently uncover relationships, themes and categories in the data to ultimately produce an insightful description of the Domain Grrl experience, and to position it clearly within whichever theories were determined to be relevant. Initially, I did expect to uncover findings relevant to two initial themes I defined from my reading; 'content' (what the participants published) and 'social' (the social outcomes). I also planned to investigate how participants owned and used personal domains, and the cultural meaning and value associated with them, and this provided a third theme, 'domains'. Before discussing methodology further, I will explain fully what a 'domain' actually was.

Domains are the top-level URL of a website such as www.narcissistic.org, www.elbowglitter.com, www.aqua-blue.com, www.sweet-essence.net, www.eating-dynamite.org, or www.baby-groove.net (all actual Grrl-owned domains of the time). For Domain Grrls, owning a domain involved paying a recurring subscription fee for a dedicated amount of website hosting space on a company's server, and choosing

the name of the domain (e.g. www.narcissistic.org). This way, Grrls could dictate the entire URL rather than being assigned one by a free homepage provider, such as www.geocities.com/SoHo/Bohemian/4156/. The space would generally be significantly larger than that provided by a free homepage provider, storing more files, such as higher quality images, and multiple websites, so Grrls could offer space to other webpage owners who could then have a personalised URL such as www.narcissistic.org/antonia/. Many Grrls were offered hosting at some point, and most of the time, there was a social connection between Grrls who were hosted, and the Grrls who hosted them. Usually it was a friend who offered them space, or someone to whom a friend recommended them.

2.3.2.2 Initial open coding

As mentioned, my role as a researcher demonstrated a certain embeddedness, insofar as I self-identified as one of the girls I was seeking to research. My memories, and my hopes for the project, presented a strongly subjective perspective that would need to be recognised and mitigated throughout the project. Rather than seeking to depart from this perspective entirely to achieve a purely objective – and therefore unachievable (Hammersley & Atkinson 2007) – approach to the project, I aimed instead for a thorough coding and analysis process. The typical iterative approach of GTM was followed carefully, with repeated testing and realignment of codes – both the labels, and the data points within. Through this process, I constantly questioned my motivations for choosing terminology, and ensured I was applying the same logic and tests to all codes and not excluding those that reflected my own experience.

The first analysis of results was performed through open coding, where participant's response to each question was read, considered, and points of interest ('codes') were noted. This process involved viewing each response from two perspectives: *horizontally*, as part of one person's overall Domain Grrl experience, and *vertically*, as part of the total sum of all participants' experiences regarding that specific topic. The horizontal view was conducted first, to focus on each participant as an individual with their own story, and code their responses to each question in

relation to each other and the participant's own narrative. Where there appeared to be overlap between one participant's responses and the next, the same code names were used. After all participants' responses had been coded, an initial vertical sweep was conducted to begin the "constant comparative method" (Glaser & Strauss 1967), whereby code names were standardised, and obvious overlaps were rationalised. This step of creating the initial code names was performed using plain English, while being informed by the girlhood and media production theories read during my literature review.

After responses to all questions were coded in this initial, open, participant-specific approach, the codes were then iteratively reviewed on multiple levels: for the question; for the survey section; and for the entire data overall. Further to the basic alignment of terminology and analysis approach performed in the first open coding, this step involved an initial process of thematic coding. At this point I relied further on the girlhood and media production theories, and concepts they offered, such as 'girls at risk', 'safe space', and 'voice'. I performed iterative analysis on the codes, looking for relationships, commonalities, and conflicts, and progressively grouping related codes; codes which reinforced each other. Taking inspiration from GTM, I aimed for some saturation of codes, removing codes which did not relate to any others and which had only one or two participants. It was crucial not to become overly fixated on numerical aspects of the codes, as my data was qualitative and not intended to be statistically analysed. An absence of relationships from one infrequently used code to any other code was the deciding factor in identifying and removing these outlier codes, rather than relying solely on a count of participants.

2.3.2.3 Thematic coding

Once my codes were rationalised, aligned, and sufficiently saturated, I began deeper thematic coding, seeking broader relationships across codes within the original three themes of investigation, 'content', 'social' and 'domains'. I came to this process with an open mind, realizing that I created these themes early on in my research, and that they could be challenged by the data. Indeed, I found that 'domains' was not a particularly strong category, without rich data or many codes to

explore this behaviour (participants frequently relied on free homepage providers rather than girl-owned domains). I also discovered a category of codes that fit a new area: 'skills' related to how participants developed their abilities to actually create homepages. 'Domains' was relegated to being a sub-category, which would sit within either 'skills' or 'content', pending further analysis.

I also now discovered that my initial themes of 'content' and 'social' were placing constraints on my coding activity. 'Content' became too simplistic and descriptive in its scope, relating to only a small group of codes regarding the type of content, and not catalysing any deeper analysis and understanding about *why* participants published what they did. 'Social' rapidly became a catch-all for all points of interaction with other Grrls – which is a constant element of the personal homepages, as they were ultimately and fundamentally acts of communication between a Grrl and one or more publics. I therefore changed my language to reflect what I saw in the participants' responses, updating the themes to match the data, and drawing inspiration from the language used by the participants.

The scope of 'content' was expanded to be 'self-expression', encapsulating both what the participants published to express themselves (the original scope of 'content'), and what they were trying to achieve by doing so. 'Social' became 'community', as I sought to differentiate between the social goals participants tried to achieve by having their homepage, and the actual social outcomes. These outcomes appeared to be broader in scope than just one-on-one friendships. I also considered Benedict Anderson's concept of an 'imagined community' (2006), which argues for the virtuality of nationalism and other communities – "all communities larger than primordial villages of face-to-face contact (and perhaps even these) are imagined" (Anderson 2006, p. 6). I settled on 'community' as my working title for this area, changing to 'connectivity' once I had clarified precisely what it meant to the participants. Returning to the language of GTM, I had created three 'categories': self-expression, skills, and connectivity. The following table depicts a sample of the outcomes of this coding, with some sub-categories:

Categories	Sub-categories	Open codes
Self-expression	Psychological/emotional impact	Became more extroverted
		Emotional growth
		Gained friendships
		Pride in achievements
		Stayed in shell
	Acts of self-expression	Creating 'my space/site'
		Creative outlet
		Friend/family found out
Skills	Improved skills	Technical skills
		New hobby
		Design skills
		Artistic skills
		Writing skills
	Knowledge	Gained information
Connectivity	External social benefit	Access to a new social world
		Higher status in online circles
		Someone to talk to
		Social outlet
[Discarded]	Outlying codes, unsaturated	Time drain
		Gain weight
		Homework suffered

Table 1: Sample coding categories and outcome

A final theme was identified later during the writing up phase, as the concept of private/public emerged as a pervasive facet throughout all categories. The counterpublic (Warner 2002), as an evolution of the public sphere, explained the role of the audience in building connectivity, and the acts of self-expression. Skills acquisition and media production occurred in a public space where the participants' artefacts were publicly available from which other Grrls could learn. Additionally, breaches in privacy and their consequences destabilised any cyberutopian idealising of the Domain Grrl experience, and addressing them enriched and contextualised the three main categories.

2.3.2.4 Negotiating the original theories and themes

As I renamed and rescoped these categories, I discovered a need to move beyond my initial framework. Originally, I expected to structure my discussion of findings around my initial positioning of participants' homepages solely as acts of media production, but the categories that emerged expanded my thinking and offered new interpretations. These categories reflected the participants' experiences, as they were generated through GTM. As an ethnographic study, the analytical approach needed to elevate the participants' stories, and contextualise the meaning uncovered by use of the experiences of the field members, as well as the subjectivity of the field researcher. The boundaries of the field "should rather be conceptualised as 'political location'" (Wittel 2000), and that location was rich and meaningful only when the participants' experiences were prioritised. Therefore, I was confident in looking beyond the theories which I had already identified as being immensely valuable for thinking about the Domain Grrls era; to not be unduly constrained by them, which could have resulted in a very thin interpretation of data. I wanted to look beyond purely media production, using it to inform my coding activities, but ensuring I was not silencing the participants or discarding seemingly irrelevant though actually valuable codes.

I had some hesitation about this, as even if I could focus on letting the data 'speak' through the GTM method, media production theories had still informed my very method of gathering this data. As Beaulieu points out, "[a]n objective claim relies

on knowledge of objects, and the knowledge of objects is shaped by the kinds of claims one hopes to make" (2004, p. 140). The ethnographer becomes entangled in a seeming competition between an idealised objectivity, and the necessities of definition and boundedness. How could I feel comfortable challenging restrictions I felt were being imposed from theories of media production, if I was not challenging my own restrictions imposed by my own approach to my project? I was inspired by ethnographer Venessa Paech's direction that "[t]he clearest way to ameliorate [the risk to neutrality] is transparency and accounting in praxis and results" (2009, p. 199). Therefore, I decided to return to the raw data, and see if in fact my own assumptions had been challenged and overturned; if my entire approach was flexible, rather than only the parts that I wanted to be flexible.

On review, I found instances where this had happened. One was my expectation that domains would be found to be a meaningful personal space to the participants, replete with symbolic meaning and status, and a specific site of community. In fact, participants referred to domains only in passing and did not mention any inherent value in owning one; the homepage itself was the identified space. Domains also did not figure in participants' descriptions of building relationships and community. This was a disappointing experience for me as I had chosen my project's appellation 'Domain Grrls' due to my expectations, and to have them dashed meant I felt I lost the underlying meaning and power of this name. Yet I stayed true to this course and downgraded the 'domain' theme, even as it challenged my fundamental descriptor of the participants. Being able to see such instances of my letting the participants speak for themselves reinforced my decision to look beyond solely media production in my analysis of the data. This made me feel confident that media production would not be disproportionately 'penalised', and that I could continue to utilise it as one of the primary informing theories, if not the only one.

Another challenging transformation of how I approached analysis happened when engaging more with Jürgen Habermas and the concept of the public sphere (as will be discussed in Chapter 7). This led me to reconsider my use of the term 'community' when analysing the social connectivities that resulted from the Domain

Grrl experience, as a shorthand for an individual's social network of friends and acquaintances. Rather, these elements, moments and affordances of connectivity were occurring within a safe space, and it was this concept that spoke more strongly to the needs of girlhood. The safe space was more than just a community; it was a recasting of the public sphere as a powerful venue for engaging with a public, in particular a counterpublic. This transformed how I thought and wrote about the social outcomes of the participants' activities; it went beyond an individual's social network, to represent a way for participants to be public, engaged individuals with a rewarding experience of communication and self-expression. 'Community' was now superseded by 'public', with the idea of a beneficial social network still figuring largely in my analysis of the outcomes of public self-expression. Using this new term also helped me consider the tension between the concepts of public and private with a more nuanced concept of 'public', understanding that what was at stake was larger than a collection of individual relationships.

2.4 Discussion

2.4.1 Validity

Validity in qualitative research is not a formula whereby the correct methods will deliver a valid answer (Cho & Trent 2006; Hammersley 1991). Instead, it is a procedural aspect of the research project whereby the risks of embeddedness, subjectivity and interpretation are recognised, addressed and mitigated in an iterative fashion. Pioneers Yvonna Lincoln and Egon Guba (1985) originally proposed aligning this research to traditional criteria; credibility, transferability, dependability and confirmability. Leading ethnographer Martyn Hammersley argues that these are methods for assessing validity, rather than criteria themselves; he argues that "truth (or validity) and relevance" (1991, p. 68) should be the benchmark for assessing the quality of qualitative research, and ethnography specifically. Action-based and constructivist ethnographic research posits that the ultimate outcomes for the participants strongly reflect the quality of the research methodology (Lincoln &

Guba 2000). This depends on a contemporaneous ethnographic approach (where the field is still live and active as research outcomes are being produced) which this project does not follow. Returning to the notion of validity as a quality of the procedure, the reflexive process of coding followed in this project demonstrates an iterative and intentionally conscious approach to testing validity of the methods.

Meanwhile, more specific methods recommended as an approach to achieve confidence in validity for interpretivist, ethnographic research include “holistic processes, prolonged engagement, triangulation, and member checking” (Cho & Trent 2006, p. 329). This could be envisioned in the idealised project as extended engagement by the researcher in the field, gathering data from multiple situations, sources and perspectives, and iteratively returning to members for their perspective on the research findings to date. Additionally, the underlying principle of reflexivity challenges the researcher to identify the biases and assumptions they brought to the project, and aim for an emic perspective whereby they attempt to achieve an embedded, experiential perspective *within* the field (Manning 1997). I will now briefly outline the degree to which these criteria are met, and explain why they may not be.

This project could not rely on methods which require contemporaneous ethnographic activities, where the researcher’s task is to select which artefacts and processes to use for triangulation over an extended period of current engagement. A historical field with participants who frequently no longer had access to the tools they used to access the field (the original family or school computers) constrained the research from even obtaining primary artefacts of the original homepage designs and content.

A strict interpretation of member checking, where the participants are seen as arbiters of truth who should review and approve the research throughout the project, was not followed for this project. Even with an interpretive lens viewing members’ input as inherently subjective and deprioritising an idealised single ‘truth’ (Cho & Trent 2006), or even somehow mitigating the impact of the researcher-participant relationship on any request for a participant to review the researcher’s

work (Hammersley 1991), the factor of nostalgia in this project further destabilised the elevation of members' perspectives. Leading girlhood researcher Catherine Driscoll identified a similar influence of nostalgia in Erica Rand's research into how women remembered playing with Barbie as girls, noting that "[this] retrospective girlhood is presented as more responsible to girlhood than anything girls themselves might say" (2002, p. 169).

Additionally, in a dispersed field, where participants did not necessarily know each other or their experiences, asking members to check the research outcomes from a diverse group could have easily become counterproductive, infinitely regressive (Hammersley 1991), ineffective and ultimately potentially destructive if participants saw experiences which actually contradicted theirs. Therefore, in place of this sort of multi-modal field of activity and artefacts, the methods framework for this project utilised a variation of member checking and extended engagement. The participants were returned to multiple times to continue the discussion, ask additional questions, and test out the thoughts of the researcher, though not to actually review the research outcomes to date. This activity sought to partially triangulate the data captured, through multiple inputs from participants, and subsequently to defend the "adequacy of the evidence" which ultimately supported the validity of my claims (Hammersley 1991, p. 69).

2.4.2 Limitations

2.4.2.1 Duration of research

A significant challenge to this project's methods was the simple passage of time. When requesting participants, the LiveJournal community was relatively vibrant, with roughly daily posts. Over the coming years, as the analysis was conducted during part-time enrolment in the PhD program, the community slowly quietened, and LiveJournal itself became embroiled in sagas of ownership and policy (Andrew 2009; Dewey 2014), and the Domain Grrl era moved inexorably into the past. An initial rush of participants proved to be only short-term, and by the time follow-up emails were being sent out, they bounced from previously active email addresses.

An improved approach would have been one which conducted multiple data gathering activities (surveys, emails, and video/audio calls) within a short period of time to capitalise on the participants' enthusiasm. Additionally, original site designs were requested from participants during follow-up emails, and therefore suffered a much lower response rate, and in fact, no participants were able to comply. Including this request in the initial data gathering activities could have delivered more success, and provided artefacts for analysis.

Although coordinating multiple data gathering activities quickly could have been practically achievable, this approach would have suffered from a lack of insights gathered during the coding process. In addition, the coding process would have still taken some time, and any follow-up contact with participants would possibly have resulted in similarly lower response rates. As this project could not rely upon true embeddedness in the ethnographic sense, this introduced challenges and complexity both when framing the methodology, and carrying out the methods. Even in a different methodological framework, the same passage of time could easily have disrupted and complicated the successful process of methods and analysis.

2.4.2.2 Diversity of participants

Domain Grrls were predominantly white and American, as will be discussed more in Chapter 5. This was not intentional, yet the design of the research study did not include any strategies to ensure a more diverse spread of participants. The geographic spread of the Grrls is roughly representative of the Internet population of the time, yet there is also a clear lack of Black American Grrls and a near total absence of Latina or Hispanic American Grrls. In 1997 in America, 23% of white 3-17 year olds used the Internet at home, 13% of Black, and 16% of Hispanic (US Census Bureau 1999). Although there is a clear disparity and inequality here, it does not excuse the scarcity of Grrls of colour in this research, particularly as this project was designed to provide a space for disenfranchised voices. One possible explanation could be where research requests were posted: danah boyd, researcher into youth and social networking practices reports a movement of white young people to

Facebook (where requests were posted), and away from Myspace, around that time (2014). Although there was a girl homepage movement group on Myspace when I first planned to conduct this research, by the time requests were posted in late 2009, this group (and the entire Myspace 'Groups' function) had been removed. This is not to claim that all Domain Grrls of colour remained in Myspace and not even one joined Facebook, but to suggest that perhaps there was a similar preponderance of white Domain Grrls on Facebook.

Without having specifically considered and assessed the role of ethnicity in the makeup of Domain Grrl demographics and experiences when sourcing participants, this research can unfortunately not provide any related insights. Similarly, this research did not question participants about their sexuality or gender, and therefore is unable to contextualise the Grrls' activities online within any possible related motivations. This thesis therefore cannot alleviate the marginalisation of queer girls which may be argued to characterise some girlhood media production research (Brown & Thomas 2014). Future research into Domain Grrl experiences would enrich our understanding and build upon the findings of this thesis by taking an intersectional approach to understanding issues of privilege and include lenses of ethnicity, sexuality and gender to interpret and contextualise future findings.

2.5 Chapter summary

Working from an interpretivist viewpoint, and within a framework of virtual ethnography, this research project set out to answer the research question:

How did girls utilise technology, present identity, and connect with each other, when creating personal homepages in the 1990s and early 2000s?

The ethnographic approach, although qualified by inherent challenges of researching a historical era by locating participants, nonetheless framed and underscored the importance of letting the participants, the Grrls, speak for themselves. Virtual ethnography was a strong framework for designing the

research, recognising these challenges while arguing forcefully that ethnography was genuinely appropriate, particularly when seeking to foreground the Grrls themselves. Providing a space for Grrls to speak once more, this project relied upon a thorough, iterative GTM approach to data analysis to test and refine initial expectations of the researcher, and allow the Grrls, through the data, to have their say. Throughout this process, the researcher's position as a member of the field, and the potential for nostalgia, personal perspective and inherent subjectivity, were thoughtfully considered and addressed, mitigated and acknowledged wherever possible.

Having established the three key themes which frame this research in this chapter, the following chapter provides the broader cultural context for the Grrls' activities. It incorporates a critical description of the Internet of the Domain Grrl era, through a discussion of relevant online critical movements of the time, and a description of the demographic and technological landscape of the Internet itself.

Chapter 3

The Internet of the Domain Grrl era

3.1 Introduction

To fully appreciate the significance and achievements of the Domain Grrls, we need to understand the contexts in which they lived and produced their media. The Internet of the time, in the late 1990s and early 2000s, was a burgeoning social space, a challenging technological landscape, and an unevenly populated world. Grrls had to navigate these terrains to successfully produce media and build social networks, as will be argued in the following chapters. This chapter will therefore explore and describe the contemporary landscape of the Internet, its users, and online cultural movements during the Domain Grrls era. It will discuss in detail two key online movements which may appear relevant to this thesis – cyberfeminism and cyberutopianism – and demonstrate the degree to which this is actually the case. It will revisit the culture, demographics and access technology challenges which characterised the early years of the Internet. Before the following chapters progressively tell the story of the Grrls, this chapter recalls the Internet of a past era, in its infancy as a mass media space.

3.2 Online culture and movements

During the years of the Domain Grrl era and those leading up to it, people used the Internet with varying ideas, hopes and perspectives, and new norms of behaviours, technologies and ideas were formed. Academics and researchers saw the Internet

as a new virtual society (Heim 1998; Shields 1996), a site for communication (Levinson 1997; Murray 1997; Reid 1991), with implications for metaphysics, democracy, public space and equality (Lovink 2002; Rheingold 1995; Wark 2004; Wertheim 1999), as well as a new site for the self, with increased options for fluid identity exploration (Dery 1996; Heim 1998; Levinson 1997; Turkle 1995).

The nascent online cultures of the early Internet reflected the haphazard pattern of usage throughout the broader community. There was a strong contingent of 'early adopters' amongst the technicians and academics who worked directly with the technology. Their technical expertise encouraged a 'geek' perspective, a focus on technologies, and customising, extending, improving, and hacking them. This was particularly effective as these were still in early, relatively open formats, rather than being locked down through proprietary technology and business models (Barlow 1996; Ludlow 1996; Milberry & Anderson 2009). Anonymity online was seen as allowing experimentation and exploration which was both exciting and threatening, particularly where sexuality, gender or children were involved. As users collaboratively created a culture built upon the restrictions of comparatively simple communications and information technologies, they added a layer of social sophistication, sketching out codes of behaviour, such as Netiquette (Shea 1994).

Users' experiences of the online environment varied depending on who they interacted with and where they spent their time, but a dominant philosophy and ethos online was a mix of libertarianism, individualism, freedom of speech, and a guiding concept of exploration (Barlow 1996; Lessig 2004; Ludlow 1996). This cyberutopian movement positioned the Internet as a new, free frontier of pure, apolitical opportunity for anyone. Meanwhile, recognising the semi-revolutionary opportunities that a hacker ethos of endless tinkering and a customisable, extensible environment could offer (Wark 2004), politically active movements such as cyberpunk and cyberfeminism saw the potential of a new cultural and social space – for boundary-breaking technology, new forms of art, and opportunities to transcend and challenge traditional concepts of gender (Dery 1996; Haraway 2000; Plant 1996).

Although there were many other visions for and theories regarding the Internet and associated technologies, cyberfeminism and cyberutopianism are addressed in more detail here, due to their relevance to this research. Cyberfeminism, because of its direct engagement with the issues of gender and privilege which inform my research. Cyberutopianism, because it lays claim to the notion of the Internet as offering new spaces for enhanced social (and economic, psychological, and more) opportunities, which I posit the Domain Grrl experience actually *did* offer, albeit in a more nuanced and qualified fashion. It is important therefore to both acknowledge the foundation of cyberfeminism which speaks to the origin of this thesis, and point out how this research extends the cyberfeminist premise of resistance and revolution into a media production framework for understanding how the Domain Grrls – as young women – were able to find a type of freeing space online for self-expression. It is also important to identify the significant shortcomings in cyberutopianism which undermine its potential role as a similar foundation for this thesis, and in doing so, to emphasise the gulf between cyberutopian notions of online space, and the findings of this thesis.

3.2.1 Cyberfeminism

Cyberfeminism was a diverse movement that considered the intersections of gender and technology, a “wave of thought, criticism, and art that emerged in the early 1990s” (Evans 2014) both analysing the landscape and participating within it. As advances in technology created new ways of constructing and viewing the body, mind and gender, cyberfeminism sought to articulate, challenge, subvert, and parody the attendant gendered discourses, figurations and power structures. These advances occurred within a broader landscape of postmodernity – which includes, in cyberfeminist theorist Rosi Braidotti’s words, the “historical situation of post-industrial societies after the decline of modernist hopes and tropes” as well as “a new and perversely fruitful alliance between technology and culture” (1996). This destabilised established stereotypes and constraints of traditional gender roles, while simultaneously leaving a susceptible vacancy where notions and visions of

these traditions could be reinscribed and reinforced, such as through plastic surgery and mass media. Cyberfeminists saw the opportunity to reconfigure the existing trope of the female body, and to inscribe or recognise aspects of femininity in the new, emergent technological (traditionally male) world of the Internet. The Internet could enable new practices of feminism through new theories of materiality; “a promising new wave of feminist practice that can contest technologically complex territories and chart new ground for women” (Everett 2004, p. 1281).

Cyberfeminism demonstrates a broad range of theory and practice reflecting the umbrella nature of feminism itself. Donna Haraway, writing on cyborgs, envisioned “the possibilities inherent in the breakdown of clean distinctions between organism and machine” (2000, p. 310-311), and theorised that the concept of the cyborg was not dualist in opposition to humanity, but a recasting of the technologised body which could transcend traditional gender essentialism. Sadie Plant traced the postmodern “multiplicitous and shifting complexity” (1997, p. 205) of identity through to a similar, discomfiting breakdown of even the surrounding contexts of identity itself, and positioned feminism in the age of information technology as comfortably situated in “the emergence of networks and contacts” (1996, p. 171). The artists VNS Matrix challenged the masculine domination of the new technologies, even as “the machines were mostly in service to the patriarchal overlords of commerce, science, educational institutions” (Virginia Barratt, quoted in Evans 2014). They used subversive and creative forms of media, from billboards to video games, “to investigate and decipher the narratives of domination and control which surround high technological culture, and explore the construction of social space, identity and sexuality in cyberspace” (VNS Matrix 1996, p. 74). The linking theme here is one of reconfiguration, even transcendence, of traditional forms of gender within newly shifting technologized cultural landscapes.

Cyberfeminism frequently tackled questions of identity and gender, grounded as it was in conceptions of gender, and engaged constantly with essentialist concepts such as a link between the feminine and emotion, domestication, and communication. These played out in creative arenas such as science fiction and

cyberpunk writing, where male authors such as William Gibson and Neal Stephenson wrote alongside female authors including Pat Cadigan and Kathy Acker. Art installations, the use of irony, and messages designed to be more accessible to those not already familiar with feminism (such as Jenny Holzer's political billboard message 'Protect me from what I want') were defiantly public methods of inserting cyberfeminist thinking into postmodern spaces of media and communication. Sometimes cyberfeminism drew upon – or relied upon – traditional/stereotyped castings of gender, such as women 'weaving the web', or "nattering on the net" (Spender 1995). Offshoots or branches specialised in or symbiotically engaged with particular intersections of gender and technology/media, such as geekgirls (Cross 1996) and riot grrrls (Driscoll 1999). These technologies/media were critically engaged with; cyberfeminists were negotiating with and cognisant of "their reliance on the systems they critique to produce and to articulate their communities and their politics" (Driscoll 1999, p. 188).

Critically for this thesis, cyberfeminism offers a wealth of theory and practice that could assist research into women's and girls' engagement with technology, and to critique the surrounding materiality and landscape, while simultaneously prioritising the role of gender in the achievements and practices of these people. However, while it was based upon an engagement with gender that pervaded every aspect of it, cyberfeminism did not frequently address issues of youth in specific detail. This is not to claim an innate deficiency in cyberfeminism. It was a nascent movement that grew rapidly, and became sophisticated in new models of technology which emerged from a variety of fields. However, when considering its relevance to this research into Domain Grrls, cyberfeminism only goes so far; it assists with interpreting the landscape and materiality of the time without ignoring the role gender played in the Internet's make-up.

Theories of media production, though, discussed in detail in Chapter 6, go further to analyse the Grrls' behaviours, and experiences, and to explicitly address the detailed nature of the homepages they created, as the media artefacts which are specifically relevant to a media production framework. Researchers such as Driscoll

and Sonia Livingstone have critically discussed youth culture, media consumption and production, and demonstrated how public policy and dominant media discourses can misunderstand and discredit young people's behaviours and media engagement, particularly around 'new' media forms and digital technology (Driscoll & Gregg 2008; Livingstone 2003). Cyberfeminism can assist in interpreting the Domain Grrl experience through the lenses of gender, technology and power. Yet it is through the concepts of media production theories that this research has been able to present a holistic and detailed description and analysis of the Grrls' behaviours. By centring this research on a base of the Grrls' roles as creators of media artefacts, this thesis is able to build a coherent story of creativity, learning, and creation, and can draw upon and contribute to a wealth of established research into young people, girls, and media. Cyberfeminism is a powerful and impressive collection of feminist research, theory, and practice, which engaged with multiple facets of technology in a much more sophisticated manner than the other significant online philosophy I will next address, cyberutopianism.

3.2.2 Cyberutopianism

Cyberutopianism emerged during early online culture in a form of quasi-libertarianism which visualised the Internet as a land of opportunity, a new frontier (Ludlow 1996). The vision of an Internet of pure ideas, which could bring humanity closer to the 'singularity' which would transcend the messy problems of the physical realm, was founded in an optimistic ideal of the Internet as a brand new place unsullied by offline complications (Dery 1996; Kurzweil 1999). With only text to rely on in early forms of online communication such as chat and email lists, users would "enter without privilege or prejudice accorded by race, economic power, military force, or station of birth" (Barlow 1996).

Online activist John Perry Barlow's iconic and bombastic "Declaration for the Independence of Cyberspace" (1996) is emblematic of this cyberutopian perspective. This short essay, published online, was replete with metaphors depicting the online space as its own nation or political entity that could

conceivably rise up against the outdated, spent political engagement models of the offline world. Indeed, the Internet in the 1990s developed a kind of self-reflexivity, with users enthusiastically debating the boundaries and potential of the new technological and cultural experiment they were helping create (Dery 1996; Dibbell 1999; Ludlow 1996; Negroponte 1995; Rheingold 1995; Spender 1995; Turkle 1995). William Gibson's seminal cyberpunk novel *Neuromancer* pre-emptively encapsulated this sense of conscious participation and negotiation when he described his vision of pixelated virtual reality as "a consensual hallucination" (1995, p. 67). As this hallucination of the Internet grew, it rapidly became its own world, powerfully defined in opposition to what became known as 'IRL' (in real life), or even ironically or derogatorily, as 'meatspace'. This term had apocryphal origins, variously attributed to Barlow and Gibson as their writings promoted the mental world of cyberspace over the pedestrian and constricting life of the flesh.

A shared online linguistics of vocabulary and standards, such as Netiquette's rule about using all capital letters to denote shouting (Shea 1994) or acronyms like ROFLMAO ('rolling on the floor laughing my ass off') that spread from bulletin boards in the 1990s to popular culture in the 2010s (Citizen 2012; Crystal 2004; Silk 2013), was still in its earliest stages. There was a certain amount of novelty and opportunity which could allow some transformation of social and communicative behaviours. But what such early cyberutopians failed to realise was that the offline and online were irrevocably linked, if distinguishable at all; the online dependent on and directed by the offline, and that Internet users were unable to simply 'leave behind' the physical (boyd 2014; Kolko, Nakamura & Rodman 2000).

Cyberutopianism was slow to recognise issues of representation and privilege, and resistant to the challenges of actively building equality and opportunity, preferring instead a laissez-faire, libertarian-flavoured philosophy of unimpeded development, typified by the Electronic Frontier Foundation and *Wired* magazine (Hand & Sandywell 2002). Meanwhile, outspoken early adopters, generally male, became de facto voices for the disparate community of Internet users, such as Barlow, and early Whole Earth eElectronic Link (WELL) user Howard Rheingold with his early

books *Virtual Reality* (1991) and *The Virtual Community* (1995). Geek culture rapidly transformed from the stereotyped 'nerds in the basement' image into a trend-setting part of popular culture, with IT entrepreneurs and visionaries becoming increasingly visible in the media. John Brockman's book *Digerati*, from 1997, is an exemplar of this narrow focus; of the 36 tech industry mavens he interviewed, only five were female. And Paula Borsook reported a pervasive trend of gender inequality in iconic, ostensibly progressive, technology culture magazine *Wired's* offices and publishing habits (1996).

This emergent geek culture still largely ignored how the online culture replicated offline social fault-lines rather than creating a substantially transformed new world. As new technologies, affordances and activities emerged, the dynamics of this philosophy allowed for both contesting and reinscribing the existing norms users brought with them. The flexibility of self-presentation online lent itself to exploration, and challenging, of gender constructs (Dibbell 1999; Kendall 1996; McRae 1996; Turkle 1995), while male conversational styles could impede women's participation in online communities and groups (Herring 1996, 1999). Although the Internet lacked established, visible social infrastructures, and in spite of the promise of such a brand new world, it in fact inherited many of the social and political concepts, biases and discrimination extant in the offline world (Brail 1996; Kolko, Nakamura & Rodman 2000; Sutton 1996).

For girls and women online, geek culture and a majority male population created an environment that, while not always actively hostile to women, was not attuned to issues of sexism and stereotypes, and discrimination and harassment. This manifested in various forms. Aggressive online communication behaviours (e.g. 'flaming') emerged which have been argued to favour a typically male communication style (Sutton 1996). Female characters in MUDs experienced more harassment than male characters (Kendall 1996). In the IT industry, too, female-only spaces emerged online for mentoring and learning (Camp 1996). Stephanie Brail (1996) experienced extreme online harassment that spilled over into the offline world, as a result of her arguing about topics of technology on a traditionally male-

dominated IT mailing list, and even physical sexual assault was translated into the online through text-based attacks and avatar hijacking (Dibbell 1999). This was no temporary state of the early Internet, either:

being a woman online in 2014 comes with the same caveats and anxieties that have always accompanied being female in meatspace. Fears of being silenced, threatened, or bullied are as real in the digital realm as IRL (Evans 2014).

As Grrls first visited the Internet, they seemed largely unaware of this political positioning and the roles their gender and youth could play in impeding or empowering them online. They created their homepages in the hope of finding supportive new friends, and joined online social groups they found intriguing and enticing, and they consumed and published content online within this context. However, as will be discussed in following chapters, Grrls perceived a need to maintain some degree of anonymity and protect their identities while online, and frequently wanted to protect their online activities from their existing friends and family. The simplicity and openness of the Internet technologies did complicate how Grrls were able to negotiate the latter of these needs. The new frontier analogy is actually apt here, as not only were Grrls actively homesteading their own spaces, their homepages were publicly available for anyone to see – both the audiences they were hoping for, and, existing family and friends they wished to avoid by expressing themselves online. This will be discussed in more depth in the upcoming chapters about the spaces Grrls were creating.

Having now addressed two key theories/philosophies influencing or responding to the online culture of the Domain Grrl era, I will now describe and discuss in detail the material and demographic landscape of the Internet that the Grrls encountered, and the challenges they faced to even access the Internet at all. This will serve to paint a picture of the online world at the time, which will remain relevant throughout this thesis.

3.3 Internet landscape: people and technology

When writing this thesis in 2016, with Internet technologies such as smartphones, tablets, and WiFi increasingly widespread, and Internet use becoming pervasive and ubiquitous in many Western countries, it is important to fully understand an environment that may now seem unlikely. While universal access is not yet a reality now (Ewing 2016), Internet use during the Domain Grrl era was characterised by significant technological and cultural constraints which created a specific context. It seems both antiquated and improbable that most households in privileged countries such as the USA and Australia could have *not* been online, and that Internet users would have to consciously decide whether to use the Internet at any point, and to have to be sitting at a desk to do so, tethered to a wired connection. Yet considering the barriers in place to actually getting online in the Domain Grrls' era, the demographics of the Internet user population of the time, and the methods and processes of accessing the Internet, bear some description and discussion.

3.3.1 Internet user demographics

The Internet was small during the Domain Grrl era compared to its size decades later, both in terms of population and virtual space. During an era of few connection points and high costs of access, with only an inchoate understanding of the Internet in the general population, Internet usage was patchy across Domain Grrls' countries, and most people did not use the Internet at all. Google estimates the World Wide Web totalled 26 million pages in 1998 (Google 2008), which, granted, only seems small when compared to 1 trillion in 2008 (Google 2008) and 60 trillion in 2014 (Google 2014). Use of the Internet was growing among the broader population, though from a low base. In 1997, 22% of Americans over the age of 18 had used the Internet in the past year (US Census Bureau 1999), and in 1998, 25% of Australians the same age (Australian Bureau of Statistics 1998b).

Use of both the Internet and computers was skewed slightly towards males and away from females. In the USA in 1997, 25% of men over 18 used the Internet,

compared to 20% of women (US Census Bureau 1999). Respectively, 29% of males over 18 compared to 24% of females were online in Australia between May 1997 and May 1998 (Australian Bureau of Statistics 1998a). For Australian males, 37% of those over 5 years of age used a home computer at least once a week, and 14% daily, compared to 32% and 8% (Australian Bureau of Statistics 1998a). Higher income households were also more likely to be represented online, as they could actually purchase the new technology required to connect. In the USA in 1997, 47% of households with income over \$US75,000 were online, compared to 9% for incomes under \$US25,000 (US Census Bureau 1999). In Australia in 1998, 36% of households with incomes of at least \$AUD66,000 had Internet access, compared to 4% for incomes under \$AUD14,000 (Australian Bureau of Statistics 1998a).

Although they made up less of the population than adults (US Census Bureau 2001), young people of the Domain Grrl age were more likely to be online. In the USA in 1997, 37% of 12-17 year olds had used the Internet, compared to 22% of 18+ (US Census Bureau 1999). The presence of computers and Internet connections in the USA education system may have played a role in getting young people online, as the location of their Internet use was more often a computer at school (67%) than a computer at home (48%) (US Census Bureau 1999). For those aged over 18, the trend was slightly reversed; 11% accessed at work and 14% at home (US Census Bureau 1999). In Australia in 1998, 17% of 15-17 year olds had used a computer at least weekly and used the Internet from home, compared to 13% of 18-24 year olds, 12% of 25-39, and 10% of 40-54 (Australian Bureau of Statistics 1998a).

3.3.2 Barriers to accessing tools and technologies

In Australia in 1998, when most Domain Grrls had created their homepages, roughly 17% of households had a modem (Australian Bureau of Statistics 1998b), and in the USA, only 26% of households had Internet access (US Census Bureau 2005). Domain Grrls' homes belonged to these subsets of connected households, with at least one computer in every home, and all Grrls using a computer at home to create their homepages. The typical scenario was using a shared computer in the family home,

frequently in a more public space, such as the kitchen. Only four had their own computers, in their own bedrooms. This was always the computer they used for their homepage, and these Grrls sometimes cited privacy or security concerns as part of their motivation for creating at home. However, regardless of where the computer was located at home, some Grrls felt that home was still safer than the alternative: school. In general, home was the default location for working on homepages, and scarcely any Grrls chose to work on their sites at school – and then they did so only if they felt there were no other options.

Following up from simply being lucky enough to have a computer at home, Grrls also had to cope with slow connection speeds. The typical connection was dial-up with a fastest possible speed of 56.6 kilobits per second (kbps). Residential broadband wasn't even available until 1996 in the USA (US Census Bureau 2005). And the 17% of households connected in Australia in February 1996 used dial-up modems, with a maximum possible speed of 56.6 kilobits per second (kbps), compared to a minimum broadband speed of 256kbps (Australian Bureau of Statistics 1998a). For comparison, in 2014, AT&T advertised a fibre optic Internet connection at 6Mbps for \$US34.95 per month (AT&T 2014) and in Australia, the Internet service provider (ISP) Optus was offering National Broadband Network plans of 12 Megabits per second (Mbps) from \$AUD70 per month (Optus 2014). In the late 1990s, uploading new files for a personal homepage could take minutes, rather than seconds. Domain Grrls struggled with slow Internet connections, and difficulties with the dial-up connections were cited as hampering their ability to work on their homepages just as frequently as parents setting restrictions or limiting access as punishment.

In 1998, computers were not online continuously; connecting to the Internet on dial up involved a manual task of running a program to dial the phone number of the ISP. Users had to make the conscious decision to connect to the Internet each time, and, in Australia at least, usually paid a phone call connection fee each time too. Although households could install separate phone lines to be dedicated solely to Internet access, in most Domain Grrl homes, dial-up connections were shared with

home phones, meaning Grrls could only go online if nobody in their family was using or needed to use the telephone; “dial-up hah it tied up the phone!” (Ellen, survey, 2010). Plus, with only one computer in many houses, some Grrls had to share with siblings, which meant having less time to work on their homepages; “there wasn’t enough time between 4 kids” (Brigitte, survey, 2010).

In Australia, connection plans were often restricted by time and/or download allowances; for example, during ISP America OnLine’s membership drives when they blanketed the suburbs with free installation CDs, users were provided a free trial of 50 hours to use within a month. Some ISPs would automatically disconnect a user after a set amount of time (e.g. 2, 4 or 8 hours)¹. This would inherently create a sense of urgency when being online; there was a limited amount of time or a limited amount of webpages and emails to be consumed, and excess costs could be substantial, particularly for regional or rural households if they could connect only through urban ISPs. Domain Grrls struggled to get access at home when their family had chosen expensive access rates or access on a plan with only a small number of online hours, although over time their families moved onto more expensive or better provisioned plans. ISPs’ operations and restrictions directly affected how Grrls were able to work on their homepages.

Some Grrls in the USA even mentioned the American version of AOL causing issues with access, due to cost, session duration limits, congestion, or the limited view of the Internet it provided through its proprietary browser. Participant Anna, a self-described “alien”, first used the Internet when nine, and made her first homepage at 12. Living in suburban USA, she used her online activities as an escape from a lonely and troubled adolescence, looking for people who could understand her. For her, the Internet needed to function as a channel to genuinely alternative information and social circles, compared to her offline life. AOL’s limited access was a particular disappointment to her when she recalled her Domain Grrl experience; “I think I had enough access for someone my age but AOL blocked us from the Internet for so long. It would have been nice if we were all exposed to the actual Internet a lot earlier than we were” (Anna, survey, 2010).

With restrictions on time or data, the Internet was not as embedded in daily life as it is in an era of mobile broadband and low data costs. The devices being used to access the Internet also ensured that being online was a specific, relatively isolated activity. Most users of the Internet would only be able to connect from a laptop or desktop computer. Although laptops provided a more mobile computing experience, they did not deliver the same lightweight, wireless, instantaneous connectivity that a smartphone does. No Domain Grrl reported having a laptop, and even if they had, this would not have materially changed how they worked on their homepages, as they could not easily have opened a laptop, connected to the Internet, and updated their webpage while in a typical social environment with friends.

As a result, using the Internet was a sedentary activity within specific locations - on a computer close to a connection point. With the high cost of personal computers, there was not a surfeit of opportunities to connect; roughly three quarters of the Grrls had access to only one computer at home. Using the Internet required a certain determination and dedication, a willingness to compete with siblings and classmates for access time, and the ability to hide the screen's contents from parents and teachers when necessary. Grrls were faced with substantial challenges to simply access the Internet at all, before even dealing with the technical tasks of learning how to code HTML and create a personal homepage.

Compared to the raft of technical challenges, parents posed a much smaller hurdle to Grrls getting online. Although the computers the Grrls used were frequently family computers, their parents mostly did not try to control their access, generally being permissive and allowing the Grrls to use the Internet as much as they wanted. Only the parents of Ellen, Amber and Diana forbade Internet access as a punishment. Ellen, creating her first homepage at 11 years of age and first domain at 13, was more casual in her Domain Grrl experience. She played with coding and graphics editing, and enjoyed social aspects and seeking popularity, but never pursued closer friendships online or off. She was less concerned by parentally

imposed punishments; “When I would get in trouble they’d take my keyboard away so I couldn’t use the computer hah” (Ellen, survey, 2010).

Amber and Diana, who both heavily relied upon the social networks of supportive friends they had established online, had different views. Amber suffered as she felt her life in “small town America” (Amber, email correspondence, 2014) was particularly suffocating. She was online for three years before creating her first homepage at Geocities at age 16, which her school friends found. They mocked her when they discovered her homepage, which was emotionally crushing for her, and drove her to move her homepage and create new ones to try to escape. Her Domain Grrl social life, however, flourished as she found the supportive strangers she was looking for, and made best friends who she was still in contact with over 10 years later. A group of those friends once flew interstate to meet in person, with the friendships growing stronger. These social benefits she experienced, in spite of the harassment from existing friends and family, were so important to her that having her access restricted “was a terrible punishment” (Amber, survey, 2010).

Diana grew up in a tech-obsessed household, with telephone and LAN cables traversing the home, and she played text-based adventure games in DOS before she even learned to type. She was an instant fan of the Internet from the moment she first used it when 11 years old, and created her first homepage a year later. Her parents presumably understood the allure and opportunities these technologies offered Diana, and were quite astute in using access restrictions as punishment; “My parents once punished me by banning me from the computer for a week. It was torment” (Diana, survey, 2010). Particularly when compared to the moral panic surrounding SNS use by young people, and parental fears about sexual predators, privacy, sexting, and the longevity of the content their children publish (boyd 2014; Driscoll & Gregg 2008), the Domain Grrls’ parents were notably relaxed.

No other Grrls mentioned parentally imposed punishment; Nadia and Danielle recalled their parents expressing discomfort with their Internet use but never actually acting on these concerns. Initially going online in Australia when 14 years old, Nadia created her first of many websites in the same year. She published

beauty sites, fansites with her own fan fiction, and personal homepages. Her prolific activities online may have initially worried her parents, as they “complained about me using chat and playing games” (Nadia, survey, 2010), but they may have relaxed once they retrospectively suspected that her enjoyment of creating homepages foreshadowed a successful career in web design.

Danielle first went online when 12, and created her homepage a year later. On the family Gateway brand computer in the kitchen, she quickly fell in love with coding and designing her homepage, redesigning it at least 25 times over the years. In such a public location within the house, her frequent online activities drew her parents’ attention; “[they] told me all the time that I was on the computer too much and that I would ruin my eyesight” (Danielle, survey, 2010). Overall, many Grrls had enough access, or as they recalled, an excess; Diana noted that “[at] the time, I probably thought that I had enough access; looking back, I think that I had too much” (Diana, survey, 2010). The most common issues reported with accessing the Internet were practical or technical, rather than familial.

In later years, as Internet use became more prevalent in the broader community and knowledge (and fear) of the Internet grew, parents were encouraged to monitor, police, and participate in their children’s online activities. The spectres of Internet addiction, online predators, and cyber bullying were increasingly prominent during the 2000s, and as children were seen as the ‘net generation’, their propensity to participate and suffer as a consequence was a serious risk that parents were encouraged to manage (Facer 2012; Marwick 2008; Thiel-Stern 2009). Yet during the Domain Grrl era, the comparatively lower profile of the Internet in the media, particularly as a potential site of harm for children and young people, may have contributed to a relative lack of concern amongst parents regarding the Domain Grrls’ activities.

3.4 Chapter summary

This chapter addresses relevant emerging cultural and critical movements which sought to make sense of Internet technologies and the world they were creating, during the Domain Grrl era. Cyberfeminism provides invaluable critical grounding in the theoretical and practical intersections of gender and technology, with a rich tradition of the combination of embeddedness and transformation which also characterises the Grrls' experience of media production. The lack of any particular focus on youth, though, positioned cyberfeminism as more a contributing theory to this research rather than a key theory. Meanwhile, cyberutopianism's idealism about a decontextualised Internet, coupled with its refusal to address the harassment and inequality present in the actual Internet, compromises the relevancy it may have had through its championing of early Internet technologies and behaviours such as personal homepage creation.

This chapter also recalls an Internet of an earlier era in the late 1990s and early 2000s, marked by slow connection speeds and only a relatively small percentage of the population online. It demonstrates that the Domain Grrls were exploring this world even though it was not widely used, and was in fact dominated by male users, and in spite of online cultures which didn't proactively consider the needs of young people online. The Grrls were accessing the Internet, using the requisite technologies, engaging with other users, creating homepages, learning the skills to do so, and becoming fluent in aspects of online culture and behaviours, without having clear guidelines and social expectations of how – or why – to do any of this. This reaffirms the significance of their experiences, which will be discussed in greater detail in the upcoming chapters about the findings of this research. The following chapter continues to illustrate the background to the Domain Grrl experience by reviewing the literature regarding personal homepages and self-expression, to contextualise the Grrls' experiences within it.

¹ When broadband plans arrived in Australia in 2000, there was a mix of unlimited speed plans, and speed caps of between 256kbps and 512kbps, so ISPs needed to simply raise caps on time or data to rein in their costs.

Chapter 4 Personal homepages and self-expression

4.1 Introduction

This chapter defines fundamental concepts used in this thesis: personal homepages and self-expression. For the former, it reviews the extant literature and demonstrates how it has addressed personal homepages, as acts of media production and sites for negotiating concepts of identity, publicity, privacy and connectivity. The existing body of research is quite small, and therefore some pieces of research which directly address issues of self-expression and Internet users' motivations, have been reviewed individually and in depth, and particular attention paid to the even smaller amount of research dedicated to girls' personal homepages. While there are alignments between these pieces and the current research project, there are also significant differences that allow this thesis to make a unique contribution, which is also discussed herein. This chapter also provides an overview and definition for a key concept that underpins this entire thesis; self-expression. I position the act and meaning of self-expression as a fundamental driver, goal and activity present through personal homepage activities. These two topics together provide the framework for understanding the findings and discussions presented in the following chapters.

4.2 Personal homepages as sites for self-expression

As the offline world was still discovering the Internet during the late 1990s, users learnt online literacy skills, and developed their comprehension of the Internet as a space, a new world, a virtual arena, as they explored and experimented. Certainly the early culture of the Internet during its expansion beyond the scientific community, in the 1990s, supported a certain degree of play and manipulation. Digital technologies which challenged traditionally incontrovertible strictures of location, physicality and visibility, such as avatars, ‘handles’, and asynchronous communication, supported, if not tacitly encouraged, a flexibility around identity and self-presentation. Girls traversing the adolescent tasks of identity exploration and formation could use these technologies to simplify activities around ‘trying on’ different aspects of identity. As leading youth and media researcher Sonia Livingstone explains, children were

visible to the peer group more than to adult surveillance, an exciting yet relatively safe opportunity to conduct the social psychological task of adolescence – to construct, experiment with and present a reflexive project of the self in a social context (2008, p. 396).

Personal homepages were one of the affordances of the early Internet that supported such behaviour. They played a formative role in the development of online self-presentation standards, as an early forerunner to personal profiles on SNSs like Facebook. Personal homepages were a set of interconnected webpages (though sometimes only one page), where an Internet user published information somehow related to themselves. This information covered a wide range of topics, depending on each user, and where the homepage was published (e.g. an employer’s website or Geocities): autobiography, family, pets, hobbies, interests, business, travels, friends, photographs, poetry, and short stories, to name a few. Authors often included elements which connected their homepage to the greater Internet and to their audience, such as ‘Links’ pages containing hyperlinks to other

websites or homepages of interest, guestbooks where visitors could leave a comment, and email addresses by which visitors could contact them. During the earlier years of the popular Internet, when use had expanded beyond the military and academic origins of the original networks, creating a homepage was widespread enough online for Geocities to be the third most popular website in 1998 (Bump 2010).

Domain Grrls grasped the potential of homepages being more than simply a dry recitation of demographics or Curriculum Vitae; Grrls harnessed the rudimentary technologies of the time to experiment with different forms of self-presentation. Homepages were particularly common as online publishing became easier with the improvements of early versions of HTML, and as the population of the Internet could no longer be assumed to come only from the scientific or academic communities. Eventually they were superseded by mass social networking tools, with increasingly sophisticated and accessible technologies, such as structured profiles, databases of cultural artefacts, and integrated instant messaging.

The Domain Grrl era of the late 1990s and early 2000s correlated with extreme growth in Internet use¹, and ended just as social media was experiencing its initial surge in popularity². As new SNSs offered tools to create an online presence that, unlike personal homepages, required only minimal prerequisite technical skills, they rapidly grew in popularity. Friendster reached three million registered users within three months of launch in 2002 (Rivlin 2006), and Facebook grew from 12 million users to 58 million from 2006 to 2007, and then to 145 million in 2008 - and ever upwards (Sedghi 2014). Meanwhile, Yahoo! had purchased Geocities, and ultimately discontinued the website and its entire collection of homepages in 2009. But previously, free personal homepage providers promoted the creation of a personal homepage as an opportunity to proclaim one's presence online. They offered users a unique URL and enough storage space to host many pages of text and a selection of supporting images to create a unique and personalised web presence. Providers would entice relatively inexperienced newcomers with a simplified approach to page creation, requiring no HTML skills, while also offering detailed customisation

and HTML editing to the more technically savvy users, who sometimes then progressed to managing their own domains. Personal homepages were a popular way to move beyond exploring and consuming to be active Internet users and producers.

4.3 Research into personal homepages

The Internet has been broadly and historically analysed by many researchers, and particularly early on, personal homepages were a rich source of research, representing the human side of the Internet in an accessible format, alongside other research into its different aspects. During the 1990s, the psychological implications of a new space for human interaction were documented and debated by psychotherapist and cyberculture researcher Sherry Turkle (1995), while Rheingold enthused over the potential for political change to be driven from this new venue of debate (1995). Elizabeth Reid performed pioneering research into how people communicated in IRC channels (1991), and the positioning of Internet as catalyst for dramatic change was promoted by information technology industry pioneers such as Nicholas Negroponte (1995) and Esther Dyson (1997).

During the peak popularity of personal homepages, researchers turned to them to try to understand how the burgeoning Internet was being used to extend, transform or subvert traditional offline cultural, social or communicative elements. The overall trend of personal homepages was interpreted predominantly as a presentation of self (Chandler & Roberts-Young 1998; Dominick 1999; Gustilo 2007; Hevern 2000; Killoran 2003; Miller 1995; Papacharissi 2002; Walker 2000; Wynn & Katz 1997). As authors of these homepages seek to communicate with their unknown audience, they provide a range of information about themselves. This is chosen to best represent the identity the author wishes to portray to their audience. The (assumed or evident) presence of the audience transforms this act of content creation into one of communication. Through publication, with conscious acknowledgement of the implied audience for whom the content is published, the content becomes a conduit for self-presentation, similar to the act of talking in a face-to-face

conversation. It is the notion of communication, then, which homepage researchers have focused upon, rather than the act of content creation, publication, editing, or manipulation.

Personal homepages were also analysed through theoretical frameworks of postmodernism, gender, feminism and queer theory (Driver 2004; Hevern 2000; Miller & Arnold 2000; Reid-Walsh & Mitchell 2004; Stern 1999, 2002, 2004). Other researchers came from different fields, such as linguistics (de Saint-Georges 1998), genre analysis (Dillon & Gushrowski 2000), Korean studies (Kim & Papacharissi 2003) and Filipino studies (Gustilo 2007). Some quantitative research sought to uncover patterns in content type and style, particularly early on as a form of coming to terms with this new form of communication (Bates & Lu 1997; Dillon & Gushrowski 2000; Groth 1998; Hevern 2000; Lau et al. 2004). Some considered the response to the homepages of research participants playing the role of the audience (Dillon & Gushrowski 2000; Sherman et al. 1999). Researchers extensively contemplated and interpreted the content they found on homepages, and some engaged directly with the homepage creators themselves (Chandler & Roberts-Young 1998; Groth 1998; Gustilo 2007; Hevern 2000; Kearney 2006; Papacharissi 2002; Sherman et al. 1999). Meanwhile, in the following years, the creators moved on to other online activities, abandoning or removing their old homepages, or watching while the machinery of the Internet deleted them entirely³, and creating blogs on sites such as LiveJournal and Blogger, and profiles on SNSs such as Friendster, Myspace, and Facebook. The following section aims to summarise the most relevant research that has been undertaken into homepages to date, research which views the homepage as a site of self-presentation, and assesses it as such.

4.3.1 Homepages as sites of self-presentation

Some researchers analysed a sample of homepages, investigating the content presented therein and analysing and categorising the efforts of the authors to ascertain whether the homepages could be said to be self-presentation. One of the earliest pieces available discussing homepages, Hugh Miller's article "The

Presentation of Self in Electronic Life: Goffman on the Internet" (1995) utilised Erving Goffman's theories regarding identity negotiation through self-presentation. Miller sampled and analysed a variety of homepages, and argued that although the websites demonstrated self-presentation on the authors' parts, it was a weak type of self-presentation. As the homepages allowed for significant self-presentation but dramatically less of the ongoing adjustments which face-to-face interactions contain, he concluded that the self-presentation was the simpler, less rich form of 'embodiment', a static type of statement, rather than 'interaction'.

Miller categorised the homepages into general types of self-presentation, and argued that the selves presented were not substantially different from those presented in offline interactions; the medium of the Internet and computer did not significantly change the underlying methodology or nuances of self-presentation. Drawing on his psychology background, Miller argued that the forms of self-presentation available online are not rich enough to stand alone from other supporting forms of communication, such as conversations, but did acknowledge that as the world of the Internet developed, creating fully-fledged frames of reference, online self-presentation methods would similarly become enriched and more meaningful. Miller's research set the tone for research to come, framing the relevance of homepages through self-presentation, and utilising Goffman's theories to underpin this approach.

In 1997, when research into identity and communication online often focused on the concept of the multiple self, and the potential for a new rendition of self online, Eleanor Wynn and James E Katz sought to challenge these presumptions in their article "Hyperbole over Cyberspace: Self-Presentation and Social Boundaries in Internet Home Pages and Discourse". They strongly challenged cybercultural theorists who claimed the Internet overcame dominant, constraining theories of the self as unitary. Rather, they identified multiple theories of the self from different areas of social sciences and humanities which had already been arguing for a more flexible, multi-faceted notion of 'self'. Yet they also disagreed with a positioning of the 'self' as a constructed, political entity, seeing it as more essential and embedded

psychologically, and that the management of that self, rather than the nature of the self, is where flexibility was most apparent. Through their analysis of a set of homepages, they argued that rather than pursuing a postmodern multiplicity and instability, authors used their homepages to “build context for a diverse but unified identity” (1997, p. 310), tying together the disparate threads of their lives. Wynn and Katz therefore interpreted acts of self-presentation on homepages as a conscious act of integration, one that acknowledges the unknown audience by presenting a variety of information, rather than trying to predict and provide precisely the information for which that audience is searching.

For Wynn and Katz, the authenticity of the content presented on homepages is crucial, where authenticity is a thorough and diligent representation of the total sum of the author’s identity. They addressed the possibility of a homepage which presents only specific aspects of the author’s identity, which may clash with other online representations (such as a profile page on their university’s or employer’s website compared to a profile on a website dedicated to video gaming). They did so by positioning this as a boundary management task, but they were dismissive of the opportunity for users to explore different aspects of identity, using their self-presentation online to ‘try on’ multiple, varying, even contradictory, senses of their self.

Underlying Wynn and Katz’s approach was a theory of the ‘self’ as being defined by the one person whose ‘self’ it is; that there is a singular person, a singular identity, and though it has many aspects, these do not ultimately enable any destabilisation or fragmentation of the self. They discussed issues of social and political privilege and power only within the context of boundary management. Considering they described female personal homepage creators’ photos as being “attractive”, “stunning” (1997, p. 320), and “come hither” (1997, p. 323), without any reflection on the relevance or meaning of these terms (and without even mentioning whether a male creator included a photo), it’s questionable whether they could have sensitively and rigorously addressed issues of self-presentation, privilege, or boundaries in any context. Wynn and Katz’s approach aimed to prove the fallacy of

the concept of flexibility and mutability in the 'self' being unique to the Internet, rather than investigating the different natures of online self-presentation.

Therefore, they approached the content of homepages less thoroughly than Miller did, describing the content of just three homepages, in three printed pages of discussion, and viewing them in isolation from the other forms of online and offline communication Miller deemed relevant.

For their article "The Construction of Identity in the Personal Homepages of Adolescents" (1998), Daniel Chandler and Dilwyn Roberts-Young interviewed 26 Welsh teenage homepage authors, focusing on the concept of self-presentation by which they categorised the genre of homepages. Chandler wrote separately about personal homepages, in the same year (1998), addressing the same topics as this article did, and including some *ad hoc* notes from email interviews with some homepage authors. His article aligned to the co-authored paper in its positioning of homepages, and considering the very close publication dates of the two, they are addressed here together.

Chandler and Roberts-Young investigated aspects of the form, function and style of homepages, supporting their categorising of the websites with their discovery that descriptions of the author were a consistent presence on each homepage. Beyond these semi-autobiographical pieces of information, they found media drawn from a variety of cultural materials, which they interpreted by utilising Lévi-Strauss' concept of the handyman *bricoleur*, "in our own time [...] still someone who works with his hands and uses devious means compared to those of a craftsman" (1966 [1962], p. 11). The *bricolage* which the homepage authors participated in is sometimes publicly acknowledged. In both articles, Chandler and Roberts-Young saw the assumption of aspects of the material's identity inherent in *bricolage* within the carefully crafted 'Links' pages providing access to other websites with which the author wants to be associated.

The authors' continual updating of their homepages, changing design and content to reflect their changing self, appeared to Chandler and Roberts-Young as a constant adjustment of self-presentation methods and messages. Concurrent with these acts

of self-expression was an ongoing negotiation of the boundary between public and private, as authors identified their ideal audience while acknowledging that others may read their content – though sometimes simultaneously they were writing only for themselves. Chandler and Roberts-Young's research viewed self-presentation both in the content of the homepages and in the practical reality of the constant update, where they understood the adjustment of the online self to reflect the offline self.

Joseph R Dominick's analysis of homepages, "Who Do You Think You Are? Personal Home Pages and Self-Presentation on the World Wide Web" (1999), focused on the content of the homepage, and questioned why different authors provided different types of content for their audience to view. He viewed homepage authors as strictly producers rather than consumers, performing acts of interpersonal self-representation in a new sphere of communication. Dominick's research investigated the similarity of methods of self-representation used on homepages to those used in offline day-to-day life. Dominick reflected the common approach that promoted the Internet as a new, apolitical arena of information, rather than consciously and specifically acknowledging issues of privilege, politics and access which actually persisted in the online space. His research therefore sought to distinguish between online and offline life and communication, supporting the almost evangelistic view of the Internet as a new, revolutionary space, positioned beyond existing economic, political and gendered constraints in offline life (Ludlow 1996; Negroponte 1995; Rheingold 1995).

Dominick analysed a random sampling of 500 homepages drawn from the Yahoo! directory, identifying gender of the creator either by specific information provided (presumably, for example, a statement like 'I am a mother'), or by inferring from the homepage's content. He provides no examples or further detail around this process, or how much it relied on stereotypes or the individual coder's knowledge and opinions. He reported that 87% were written by males, and from the female homepages analysed, female authors were more likely to contain creative content produced by themselves. He concluded that homepages were "a domain of males"

(1999, p. 650), but did argue that female homepage creators shared more personal details, presenting biographical information, details of their romantic relationships and families, and “expressions of opinion” (1999, p. 656). Dominick also discovered that authors linked to other websites and other people’s homepages. He argued that this creation of a rudimentary online personal network indicated “[t]hese authors use their web pages to foster and to maintain supportive relationships with other people” (1999, p. 655). This personal network also directly informed each author’s self-presentation, providing the social aspects of online communication. Dominick’s approach discovered self-presentation in the content of the homepages, and is one of the first pieces of research to distinguish between female and male homepage authors in a substantive manner.

In her article, Katherine Walker considered both the content of homepages and the authors’ motivation for creating them, reviewing hundreds of homepages and surveying their authors, and viewing homepages primarily as identity statements, regardless of the stated intention of the author. She identified three main types of homepages based on the content displayed: purely demographic; a life narrative; and, interest-related. This was not a strict categorisation, though, with many homepages containing a mix of information, and therefore an implicit mix of identities, revealing “different aspects of the author’s personality” (2000, p. 105).

Further to the publication of identity-affirming content, Walker also found that homepages include tools to facilitate interaction and feedback, such as guestbooks, which she felt authors used to receive approval for the identity they expressed through their homepage. Walker acknowledged that her positioning of homepages as fundamentally identity statements was drawn from her own perception, rather than the creators’ intention. Indeed, authors expressed three main reasons for their homepages: to make new friends, which Walker characterises as “intrinsic” (2000, p. 106), or to connect with existing friends or to centralise information, both characterised as “extrinsic” (2000, p. 107).

The author tailored their homepage content to the audience they anticipated would visit their site; less basic information was published for existing friends, as they were

expected to know it already, whereas more information was published for strangers with presumably no knowledge. Walker found that this latter group was very aware of how they could appear to their audience, and often expressed anxiety about who their audience may include, whereas for the former group, “[b]ecause they had not *intended* to reveal identity, they assumed that they had not revealed identity” (author’s emphasis, 2000, p. 109). Those publishing for strangers were more likely to explore multiple identities, picturing multiple potential audiences, and were more likely to see the Internet as a home, a place, and to visit other people’s homepages, rather than seeing it as simply a communication or storage medium.

Similar to the researchers before her, Zizi Papacharissi’s review of personal homepages (2002) considered them as a site of self-presentation. This research considered both the content and design of the homepages, and the motivations of the authors, obtained through surveys. Papacharissi analysed the content of pages, the interactivity promoted through the style of the pages, and the quality of the design itself. Like Walker, she found that feedback mechanisms were popular: specifically, guestbooks, email links, and counters. Papacharissi’s research was unique in how it investigated the relationship between the range of free homepage providers and the range in style and content of homepages. For example:

[t]he most creative pages or sites were more likely to reside under Geocities or personal domains [... while] AOL and MSN pages tended to be more expressive, which meant that the author spent more time with a more textual, rather than hypertextual, description of him/herself (2002, p. 656).

Although users of a certain maturity in abilities may have migrated to a certain provider, Papacharissi also proposed a correlation between the sophistication (or lack thereof) of different webpage creation tools provided by the providers, and the level of design and layout sophistication of the homepages themselves. Webpage creation tools offered users page layout and colour templates to place their content within, so that they would not need to view and edit the actual HTML code. As will be discussed in Chapter 6, Domain Grrls rapidly outgrew these tools, and instead

designed the layout, colours, styles, and interactivity of their homepages by coding the HTML. Ultimately, “home page providers inadvertently style self-presentation online, providing rules, suggestions, and ideas for how this information game can be played” (2002, p. 657). Papacharissi concluded by advocating further research into how aspects of homepage authors’ personality, cultural context, and technical skills influenced their homepage creation, particularly in the intersection of the individual with the corporate, in the form of the homepage providers’ user tools and interfaces.

4.3.2 Homepages of specific groups of people

Vincent Hevern (2000) looked at two specific groups of people creating personal homepages; disabled people, and gay men. He chose these two groups as having indicative experiences in Western society as ‘others’ – marginalised, oppressed people. He expected to see a degree of dialogical engagement with their alterity or otherness in the content of their homepages, and their motivation for creating them. He analysed the content of their pages in detail to clarify precisely what elements were being used in the act of self-presentation, and interviewed the authors themselves to analyse their experiences of alterity. Hevern found that these homepages included some content elements unique to their author groups, specifically coming out stories for the gay men, and a disability or illness story for the disabled people.

For these two groups, homepages demonstrated a nuanced engagement by the authors with their otherness, and their selves. Hevern found that homepages presented a range of benefits and opportunities in allowing for very conscious and even experimental self-presentation, participation in a more enjoyable and comfortable world than their offline one, and opportunities to engage with the broader communities of people and politics relating to being gay or disabled. For example, gay men currently processing their experience of coming out would be able to “exercise significant control over what they revealed about themselves” (Hevern 2000), and in doing so, protect themselves during what can be a fraught life

experience. For Hevern, personal homepages behaved as a site for a dialogical engagement with the self which improved the quality of life for people whose 'otherness' would position them as less privileged in Western society.

Researching queer girls' homepages, Susan Driver discovered a similar role that they played for their authors, who "[made] use of the Internet as a realm to try out, play with, and perform their identities and desires through provisional combinations of images, words, and narratives" (Driver 2004, p. 111). Driver situated the creation of the homepages, by 15-21 year old queer girls, within the continuum of DIY media production, and referencing Harris' work regarding border spaces. Within these spaces, queer girls were able to "contest static one-dimensional hetero/homo ways of thinking" (Driver 2004, p. 112), through content which was political, opinionated and passionate. They expressed anger, sexual orientation, gender, and a resistance to simplistic labelling of themselves. The selves they presented frequently changed, sometimes to explicitly challenge the audience's assumptions, and an "indeterminacy of identity is at the forefront of many homepages" (Driver 2004, p. 113). Driver was less concerned about the frequency and distribution of specific content elements on homepages, and more interested in (and appreciative of) the demonstrated motivation and ability to find a voice online. Interestingly, these girls sometimes assumed a conversational tone as they find their voice, speaking directly to the audience, challenging their assumptions, and clearly asserting the identity that they felt affinity with, whatever it may have been.

Let's play a game.

When you look at me what do you see?

Go on tell me I dare you.

Black

Brown (Driver 2004, p. 115)

Driver is especially rewarding to read in comparison with many of the other pieces of research as she directly engages with the published content within frameworks of media production and queer theory, which credit the young authors with political awareness, personal needs and media literacy. These homepages and their authors

are strongly contextualised and respected by Driver, and in doing so, she encourages an understanding of homepages as being powerful, transformative tools of personal growth and development.

Kearney (2006) researched a group of girls in a similar age range to the Domain Grrls, who also published websites, but not personal homepages. Their websites related to zine distributions which they maintained, and so while they followed very similar paths to becoming media producers, they differed from the Grrls in their motivation for publishing what they did. Kearney's research is notable for discussing how girls became website creators, with similar learning styles as those of the Grrls I discuss in Chapter 6. Connectivity also played a strong role in driving girls' involvement, such as being a member of the zine community by helping it grow. As the girls' websites were still online during the period of Kearney's research, she was able to analyse the details of the layout, imagery, typography, content, and website structure, which further enriched her research by presenting the clear evidence of the skills acquisition and social networking her subjects had undertaken. Even though the girls' websites were not personal homepages, their methods of learning and the tools they utilised to create and maintain their homepages, and the social outcomes of their online activity, reflect those of the Domain Grrls, and reinforce the potential for website creation to benefit and enrich the lives of girls.

4.3.3 Homepages as a purely theoretical construct

Other authors approached homepages as a predominantly theoretical construct, discussing the potential of the site without sampling actual homepages for in-depth analysis. Writing when use of the Internet was rapidly increasing, Thomas Erickson (1996) discussed the emerging trend of homepages, which he viewed as a crucial development in what was, at the time, just one Internet technology of many: the World Wide Web. He argued that on a homepage, the author created their identity using "huge amounts of detailed information", rather than "consumer goods". Authors subsequently experienced conflict when trying to decide what was too personal, or too identifying for inclusion, an experience Erickson noted was shared

by employees and employers creating collaborative space and personal profiles within that space. The “intimacy” which Erickson saw as catalysing the conflict between author and audience is a representation of the blurring between public and private that was noted by other authors writing about homepages, such as Chandler and Roberts-Young. Erickson’s predominant realisation in this piece is to view homepages as a venue of personal information, through which self-presentation occurs.

John B Killoran’s perspective on homepages was that they offered the opportunity for “ordinary people” to position themselves as “media producers” (2003, p. 66) rather than simply consumers. He thereby focused on the publishing functionality of the homepage, seeing self-presentation as the end, and creativity – which effectively recreated the offline life – as the means. His article presciently envisaged homepages as a form of “autobiographical branding” (2003, p. 67), and he was therefore disappointed at the lack of a genuinely informational approach taken by homepage authors, accusing them of neglecting “authentic selfhood” to publish instead “pre-fabricated poses” (2003, p. 69). Killoran’s approach is similar to Dominick’s work in analysing the content of homepages, but does not display the latter’s appreciation for the subtleties of self-presentation methods and styles, focusing instead on the content and his expectations for “personal content” (2003, p. 68).

Killoran, writing in 2003, was unknowingly bridging the earlier Internet era, and that dominated by social media. In this latter era, self-publication online in its latest embodiment as social networking website profiles, has become the “professional and civic necessity” Killoran pictured (2003, p. 67), and content is required to be ‘authentic’ and autobiographical. His disquiet with the content of homepages at the time of his writing suggests that he foresaw the time where an online personal representation without autobiographical, authentic content would in fact be a kind of social failing. He therefore, even unintentionally, judged the homepages of 2003 and earlier, by these standards.

'Authenticity' here, similar to Wynn and Katz's approach, reflects not an adherence to the internal state of being which an individual confirms as their identity, their self, but an adherence to the external, societal characteristics of the practical, more physical aspects of life. 'Authentic' content is thereby identified by its externally verifiable, demographic facts – educational and employment history, marital status, political affiliations, pet ownership. Content whose veracity can only be proved or claimed by the author themselves is harder to prove 'true', and for Killoran, it could therefore not claim to be as 'authentic' as these details of life which were visible to another person. Killoran's narrow view precluded an appreciation for homepages as being a valid and meaningful part of the online ecosystem of information, communication and networking.

4.4 Research into girls' personal homepages

Researchers who investigated homepages belonging specifically to girls were an even smaller group: Stern, Reid-Walsh, and Mitchell. They shared the same premise that homepages were sites of self-presentation, and rather than only contemplating why the homepages were created, they investigated the actual content that girls published on these pages. These researchers also analysed how the experience of creating a homepage interacted with and reflected the larger experience of adolescence, specifically concerning the motivations for creating a homepage. This project extends the groundbreaking writing of previous researchers. It responds to their exhortations by uncovering the motivations of the girls in their media production. Girlhood researchers Pamela Takayoshi, Emily Huot and Meghan Huot (1999), along with Stern (2008), wished to see girls' perspectives on their media production foregrounded in research. Kearney wanted a more nuanced, historical research approach where feminist scholars questioned their own assumptions about girls (2006). Girlhood researcher Dawn Currie hoped for a focus on the social and cultural scaffolding and privileges which enabled girls to participate as media producers ('Girls' studies forum and book review' 2008).

Of the three authors who investigated girls' personal homepages, Stern has been the most prolific, publishing some of the earliest research. She analysed the content of these pages, the girls' purposes in writing them, and the benefits the girls could experience by being authors and publishers of their own homepages. Her article "Adolescent Girls' Expression on Web Home Pages: Spirited, Sombre and Self-Conscious Sites" (1999) situated homepages as a venue of self-presentation, where, she argued, "authors strategically select the information they present on their home pages to construct a public persona" (1999, p. 23). Her analysis of the content of the homepages sought to provide a framework for understanding why girls would write homepages, and in doing so, classified the homepages into three categories: spirited, sombre and self-conscious. Stern determined that homepages from all categories demonstrated the authors using their sites for self-expression, even to express a variety of selves in some cases.

The public nature of the homepage problematised the validity of a genuine 'self' expression, and Stern saw an aspect of performance in the authoring of content, as the girls "make decisions that affect how their page will look and what their audience will learn about them" (1999, p. 24). Yet most important is how the homepage acted as a site for the "self-expression [which] is critical for girls' healthy development" (1999, p. 22). Stern therefore analysed the success of homepages in providing this space, seeing in the growing popularity of girls' homepages, support for "the notion that the web may present a new and much-needed forum for girls' 'safe' self-expression" (1999, p. 23), and concluding that girls' personal homepages were clear examples of spaces for self-expression.

Writing "Virtually Speaking: Girls' Self-Disclosure on the WWW" in 2002, Stern researched the content, style and method of presentation of a sample of girls' homepages. Focusing on the act of authorship, she argued that creating a homepage was, in itself, a crucial opportunity for girls struggling with losing their 'voice' during the teenage years. She reiterated that homepages allowed and encouraged self-disclosure and self-expression, and this time looked beyond the boundaries of the individual homepage. Homepages facilitated more than the act of

speaking, Stern argued, providing a venue for self-expression where publishing identifying content could connect girls “to a diverse, global neighbourhood” (2002, p. 228). Indeed, Stern reported girls aligning to specific cultural or attitudinal movements through their use of cliques and web rings. In her 2004 article “Expressions of Identity Online: Prominent Features and Gender Differences in Adolescents’ World Wide Web Home Pages”, Stern performed statistical analysis on the content and style of boys’ and girls’ homepages. She again pointed out the networking function of the homepages, noting that feedback mechanisms such as guestbooks were included more by girls than by boys.

Reviewing these three articles demonstrates that Stern’s focus lay not in determining whether homepages were sites of girls’ self-presentation, but in why the act of self-presentation was particularly important for girls, during the adolescent experience, and why the ability to connect with the larger Internet population was similarly important during these years. To perform solely the former task would be a similar study as that of Wynn and Katz, which assessed the homepages against a set of requirements for self-presentation, and which provided few insights into why the format itself was chosen. After all, self-presentation can be performed in a variety of settings – in person, online, in text, in images, on a phone, through body language – and these individuals chose homepages. Stern considered the general influences and motivations in girls’ lives, and theorised why self-presentation, homepages and the online audience were so enticing to the girls.

This approach also encourages the researcher to try to understand the choices made by the girls, rather than simply to determine whether self-presentation was occurring. Self-presentation can be researched as a standalone activity which is beneficial for psychological development during the adolescent years (Buhrmester & Prager 1995). An integrative approach that regards both the act of self-presentation and the communicative, social nature of the act characterises Stern’s research, and elevates her teenage subjects to the ranks of media creators and publishers. The act of publication thereby becomes a significant act of

communication and establishing a network, rather than an inherent and unimportant by-product of self-presentation.

Stern's 2008 article "Producing Sites, Exploring Identities: Youth Online Authorship" progressed beyond an analysis of the form of the homepage, and beyond only girls' homepages to encompass those of 'young people'. She advocated moving away from an externally imposed system of interpretation when researching young people's content online. She argued instead in favour of integrating knowledge of the motivations of young people in their acts of self-expression online, and in doing so, including different approaches to identity and adolescence. The importance of feedback from the community when negotiating self-creation during adolescence means that writing online for an audience "can provide important opportunities for managing the complex situations and shifting self-expectations that characterize adolescence" (Stern 2008, p. 97). Stern argued that young people are aware of the performative nature of identity creation online, and they therefore constantly negotiate the subtleties of conducting a personal activity in a public space. In fact, young authors have a nuanced concept of their audience – the anonymous mass audience is mostly dismissed, and their actual, active audience is conceived of as those who they know have visited, and those they have asked to visit.

Stern theorises main reasons why young people created homepages, such as self-reflection, emotional expression, and documenting personal growth. She investigated this last reason, seeing homepages "as visual artefacts of the self-evolution that young authors endure as they grow older" (Stern 2008, p. 112), and arguing that the changeability of the personal site, especially in the adolescent experience, reflects the ongoing adjustment experience of identity itself.

Importantly, the distinction identified by earlier generations of Internet users and theorists, such as the cyberutopians discussed in Chapter 3, between an offline, 'real' life and an online, 'experimental' life seems less relevant. 'Online' is not seen as a mostly separate, distinct venue for certain forms of experimentation, but has rather been reconfigured as simply another arena for experimentation with the self. The online experience is as valid and 'real' as the offline for the new generation,

rather than being dismissed as an experience for a few computer nerds: the different medium where it is experienced is irrelevant.

The notion of such a space is, however, still relevant: young people's homepages are "protected spaces for reconfiguring actual, possible, and ideal selves in various arrangements, all of which are central to their self-image" (Stern 2008, p. 108), which "provide young people with some of the only opportunities to voice themselves in a media environment heavily dominated by adults and corporate interests" (Stern 2008, p. 104). In this article, Stern performs an in-depth analysis of why young people create homepages, and interrogates the concepts of private, public, reality, and fantasy, to understand the nuances of the purposes and desires of the homepage authors.

In "Girls' Web Sites: A Virtual 'Room of One's Own'?", Reid-Walsh and Mitchell (2004) discussed girls' homepages, intentionally echoing Virginia Woolf's essay *A Room of One's Own* in both terminology and logic. They argued that girls directly benefited from the opportunity to create homepages, as this formed "a separate, private, and safe space", "semiprivate places of creativity and sociality" (2004, p. 174). Girls were able to present themselves in methods and styles of their choosing, communicate with other Internet users, and negotiate the increasingly blurred boundaries of public and private. As I will discuss in Chapter 6, just as the personal bedroom has been envisaged as a physical and theoretical space of identity, self-expression and self-representation, the homepage functions as "an idealized space for the girls" (Reid-Walsh & Mitchell 2004, p. 175). As a site of "virtual bedroom culture" (Reid-Walsh & Mitchell 2004, p. 174), it allowed self-presentation according to their own preferences and desires.

Reid-Walsh and Mitchell argued that by creating content "partly for their own pleasure", and yet simultaneously "[projecting] themselves in the domain of the Net" (2004, p. 175), girls were creating "a kind of contradictory space" (2004, p. 181). This space challenged the masculinised and aggressively individualistic culture of frontiers and debate, allowing public participation in the wider Internet community while remaining under the control of the author. Reid-Walsh and

Mitchell argued that this situated, yet idealised existence of the homepage rendered it a Foucauldian “heterotopia” (2004, p. 178), a real yet oppositional place of contention and idealisation. Reid-Walsh and Mitchell’s research thereby positions girls’ homepages as a defined and crucial place for expression, resistance, and experimentation, again, moving beyond the question of self-presentation to understand the socio-political needs that underwrote the authors’ decisions to create homepages.

4.5 Self-expression

Self-expression is the term used in this thesis to encapsulate the personal motivations, media production practices and resulting published content, which together described Grrls’ behaviour in presenting themselves as people online. As young people, Grrls were performing acts of self-expression to explore their identity, ideas and opinions, and when online, they were doing so for an audience, and using tools and materials with imbued cultural meaning. This section therefore discusses in more detail what exactly ‘self-expression’ means, how such acts could play out through self-publication online, and briefly, in preparation for the following chapters, how Grrls went about performing these acts online. The discussion situates self-expression within a critical framework of youth, which will be expanded upon in Chapter 5. Crucially, it acknowledges the socially constructed concept of adolescent self-development, while also recognising girls’ behaviours as they do explore similarly socially constructed types of identities. The concept of ‘self-expression’ speaks to girls’ engagement with nuanced, constrictive, and complex representations of girlhood and other cultural narratives, while focusing on the girls’ roles as producers and creators in how they chose to explore their identities and embody them online.

Self-expression activities allow an individual to communicate their internal thoughts about their identity, self, opinions, and beliefs; “the presentation of personal information to another or others” (Stern 2002, p. 229). This is a dynamic, constantly evolving topic of communication, and, as such, the act of self-expression is an

ongoing exploration and transformation of identity (Kearney 2006), as the producer can create, destroy, archive, renew and refresh self-presentations as desired. Acts of self-expression are inherently mediated through the format chosen, and therefore the self being expressed is also being constructed, within that format and possibly working with the embedded cultural meaning of that format. Self-expression can be spoken, written, performed, worn, recorded or displayed, and in each of these methods, the individual may select a format appropriate to their cultural milieu (e.g. modifications to a school uniform) and construct their self through their particular actions (e.g. selecting a piece of jewellery which aligns the wearer to a subcultural movement). The very method itself can be laden with inherent cultural meaning, such as secular music in an orthodox religious society. Self-expression therefore combines intentional choices situated within a cultural framework, as well as a sense of self which is mediated and constructed, as well as expressed. It may be visible, as in the case of an assembled outfit of clothing (Pomerantz 2006), or audible, such as grunge music performance (Difference 1996) or speaking a certain dialect, and may result in an artefact, such as a piece of fan fiction (Scodari 2005), a remix of popular culture (Ivashkevich & Wolfgang 2015), a personal journal, or an online profile (boyd & Heer 2006). The act may be transient or relatively permanent, and may have an intended lifespan.

Through a combination of acts of self-expression over time, young people may explore alternative narratives that may challenge, conflict with, or align to those presented by the external world. A girl expressing herself can address, assume and interact with different aspects of herself, those she is more certain of and those she has begun exploring. In the process, her thoughts, fears and hopes of who she is, whom she wishes to be, who she was, may be transformed into some sort of artefact such as music, art, writing, or performance, and negotiate or inherit the further cultural meaning of that format. Once so embodied, these artefacts can be consumed – by the creator and/or by a wider audience, immediately or over time; and depending on their material nature, may also be revisited, changed, or discarded (Kearney 2006). This relationship of a creator to her creation positions the artefact as a representation of the self which she can then consider and

contemplate; does she wish to retain this view of this self, to change it, promote it or discard it entirely?

This task of progressively uncovering, analysing, and integrating her own perspectives of herself is fundamental to a girl's navigation of the terrain of self-discovery (Stern 2008). As she finds a new opportunity to grow – such as being attracted to a specific subculture, or uncovering an artistic talent within, or building religious or political beliefs – she needs a way to experiment with it, and decide for herself whether to keep it, and if so, how to do so within her social and familial environment, which may disapprove (Szucs 2013).

Self-expression in spaces of media production can reflect and embody girls' identity explorations. The personal politics enacted through identifying with cultural tropes and symbolism, at odds with the discourses enforced by institutional elements in their wider society, means that girls' "'authority' to create and control the meaning of [their representation] is an unruly act par excellence" (Rowe 1990, p. 410). The act of claiming authorship and in doing so reinforces the legitimacy and power of a text; the 'self' in self-expression positions that which is being spoken as the act of a real person with real world implications. Stern sees girls claiming this right to have a voice in their creation of personal webpages, as they are aware of their own need for a space dedicated to self-expression (1999, 2002, 2004, 2008). Livingstone (2008) sees both boys and girls using the online space to work through the construction and testing of their self in a context where other people also engage with that self. Girlhood and media researchers Sandra Weber and Claudia Mitchell (2008) believe this identity is strengthened further by the reflexivity that the Internet encourages through the persistence of the media being created.

The absence of pre-defined structure around page layout, site structure, and content type offered Grrls flexibility and control over their homepages, through which Grrls could define, contemplate and redefine their selves, using the creativity and media they were exploring. Simultaneously, Grrls were being inspired by existing design decisions made by other Grrls, following design trends and finding opportunities for social connectivity by how they chose to depict themselves online.

Stern repeatedly argued that by creating personal homepages girls were able to develop and exercise their voices online by having a space where they could decide what to publish, and how to display it (1999, 2002, 2004). "Presentation of identity on a home page, much like presentation of identity in face-to-face interaction, is inescapable" (Walker 2000, p. 111), and the self Grrls were displaying and expressing integrated all aspects of their homepage.

As this thesis demonstrates, creating their own homepage meant the Grrls were staking out a personal space that they could dedicate to themselves. Grrls defined themselves, described themselves, showed what they could do and make, and expressed their thoughts, beliefs, and the issues they were facing. They did this using a range of tools, choosing different media and content types for different purposes. They added specific types of information relating to their lives so that visitors could recognise that the author – a teenaged girl – was like them, and therefore their website could be worth visiting.

Collectively, then, the decisions they made about what to do with their homepages as creative production of media artefacts, how to style them and what to publish on them, which design trends to align with and which other Grrls' homepages to echo in their own, would help them 'give' the specific self they wanted to be online. This is similar to Lena Karlsson's blogging subjects for whom the "choice of page design, organization, navigation, archive/no archive, and interactive tools is very much part of the autobiographical performance" (2003, p. 223). This content would also – like any other form of self-presentation enacted for an audience – implicitly 'give off' a sense of self that the public would interpret and comprehend within their own frameworks of identity and media. Grrls decided what to publish and how to publish it mostly in an attempt to connect to certain people; as will be argued in Chapter 7, the internal logic of their approach to their homepages was demonstrably connected to their hopes for their social networks. Their acts of self-expression therefore were part of reaching out to these people; they frequently designed their homepages to demonstrate their membership (aspirational or actual) within a community, while also creating them for intrinsic, personal reasons.

As is discussed more in Chapter 5, the content they chose to publish, either written or visual artwork, helped them express themselves – who they were, but also how they were feeling, what they were thinking, and what they wanted to communicate to their audience. All this identity work and self-expression was conducted both through the content the Grrl published (e.g. a poem) and the homepage she created to contain this content. As an output of media production, then, the homepage itself is considered an artefact, as a collection of elements of design, style, layout, integration, content and communication. It was also a site where individual artefacts were published – specifically poetry, journaling, ‘rants’, short stories, photography, drawing, and cartoons. As the Grrl herself changed, she was able to also demonstrate these changes through the content and design of her site, although predominantly she did so due to improving skills and confidence in design, rather than specifically to inform her public of a change in herself. They were spaces where Grrls could reach out to an online public, producing media to attract the kinds of people for whom they were searching.

Considering the online role-playing, email aliases and identity play of the Domain Grrls era Internet, and particularly within the exploratory and experimental context of adolescence, I originally expected to find that Grrls would take advantage of this environment to craft entirely new personae from the ground up, experimenting with age, gender, or other fundamental aspects of their lives. Instead, I found that they frequently grounded their online personae in their offline lives, framing themselves mostly within their real life context as girls attending a school in a certain town or city. As will be discussed, the audience the Grrls were writing for was widely agreed to be ‘people like me’; people of the same gender and age, and therefore expected to inherently understand the Grrls’ lives, struggles, hopes and disappointments.

4.6 Chapter summary

This chapter has provided a comprehensive overview of existing research into personal homepages, and specifically personal homepages created by girls. It has

also presented overviews of self-expression, a key concept underpinning this research project. As a literature review, this chapter has highlighted key contributions of previous researchers, in particular Stern. She thoroughly and intelligently researched the content of teenage girls' homepages during the period they were actually published and available online (1999, 2002, 2004) - although she did not converse with the girls themselves. Other researchers similarly focused on the artefacts and not on the creators; but they also acknowledged this shortcoming and encouraged future researchers to expand their focus to include the creators, and in doing so to increase academia's recognition of their achievements. By addressing the artefacts through the lens of the Grrls' motivations, desires and hopes in their media production, this research prioritises the voice of the Grrls to understand and interpret their activity. The next chapter introduces the reader to the Grrls themselves; an overview of them as young people, as Internet users, and how they presented themselves online.

¹ Recording growth from 26% (National Telecommunications and Information Administration 2000) to 50% (National Telecommunications and Information Administration 2002) of American households connecting to the Internet between 1998 and 2001

² In early 2003, the major blogging platform Blogger was a sufficiently desirable investment opportunity to be acquired by Google (*Blogger (service)* n.d.). In 2003, the popular teenager-oriented social media website MySpace was launched, and by 2006, was ranked the 7th most popular site in America (comScore 2006).

³ Such as when in 2009 Yahoo! deleted all homepages still present on Geocities, after having acquired the company in 1999 (Ostrow 2009).

Chapter 5 Becoming Domain Grrls: motivation and self-expression

5.1 Introduction

In this chapter I will present a broad overview of the Grrls, discussing the demographic similarities and differences amongst them, and moving on to describe and analyse how they presented themselves online, with regards to the key theme of self-expression. This chapter will lead off with a discussion about ‘youth’, a term which can constrain our thinking about young people, yet is clearly relevant to this thesis and requires addressing. By positioning young people as chronologically younger than adults, there is an implicit ‘lesser than’ status being assigned to them, a teleological perspective of youth being a step along the way to the important goal of ‘maturity’. As we discuss the Grrls, their demographics and life situation, it is important to contextualise this topic within the critical terrain I am mapping.

Having outlined the literature, this chapter, as the first results chapter of the thesis, discusses the Grrls as people – young people, students, living in their parents’ homes, and other such demographic aspects. This chapter discusses and analyses the Grrls’ initial motivations in creating their homepages, and how they portrayed themselves online, to explain how they began their experiences. Moving beyond the functional role of content as a method of self-expression, I also argue that Grrls were actively selecting content both creatively artistic and mundanely demographic, to try to intentionally craft, own and control how their life and self would be

understood by their audience. Pride, honesty, authenticity and hope motivated different Grrls in what they selected to publish.

The purpose of this approach is to foreground the Grrls themselves as the primary element in this research: the people, rather than the media artefacts they create. As I aim to allow their voices to be heard, I must first explain who they are. The following three results chapters will then focus on the other themes of DIY skills acquisition and connectivity.

5.2 Understanding youth

A brief accounting of the theoretical underpinnings of ‘youth’, and its Western framing as ‘adolescence’, follows here, to facilitate the ensuing discussion of self-expression. In Chapter 6, the intersection of youth and media production, as a specific type of self-expression, is explored further. This thesis seeks to move beyond interpreting content to understanding the Grrls’ motivations and achievements, which is enriched by appreciating the relative youth of the Grrls, but must not transform into a patronising or dismissive attitude towards the Grrls’ exploration and discoveries. A ‘progress’-based understanding of ‘youth’, as a stepping stone on a life journey towards adulthood, is a dominant theme in these Western, traditional, theories, and one that this thesis aims to avoid, in order to better respect the Grrls’ experiences, and their achievements not in comparison to adulthood, but within the context of youth itself. This section therefore finishes by explaining how the thesis positions the Grrls’ youth and how it aims to avoid such a perspective.

Late modern, Western, twentieth-century theories of youth and adolescence see the fundamental, defining characteristic of the adolescent years as the individual’s development and awareness of their identities (Driscoll 2002; Erikson 1993 [1950]; Kroger 1989; Palladino 1996; Stern 2008; Turkle 1984). According to these theories, young people move from the early, inchoate years of childhood through to years of increasing exploration and experimentation, trying out different forms and styles of

identity development which society and their peers suggests to them, and ones which they discover themselves. Erik H Erikson's landmark work in the 1950s demarcating and defining the life stages of Western society identified adolescence as the phase during which the individual created their identity, striving to address, integrate or discard the expectations and concepts from their childhood, family and society.

This act of synthesis, an ongoing, iterative process, would be a fundamentally personal experience, as the person sought to discover what they themselves wanted from life, and who they wished to become. "It is only when the adolescent is able to select some and discard others of these childhood identifications in accordance with his or her interests, talents, and values that *identity formation* occurs" (emphasis in original, Kroger 1989, p. 15). In this way, adolescence is depicted as a rite of passage transformation, at the end of which the individual has achieved a legal, modern status of majority, allowing them "entrance into the Enlightenment rhetoric of social contract" (Driscoll 2002, p. 48). A teleological perspective on adolescent identity work demands it be viewed and assessed through the lens of adulthood; how does this work prepare young people for transitioning out of adolescence? How does it turn them into who they will end up being? It discounts the experience of the young person, and what their goals at that time may have been, and instead applies an external expectation of how they should become adults, and whether their current identity work is presumed to assist in that.

Yet the progress of youth and ageing does carry with it an unavoidable experience of learning, gaining knowledge, and developing psychological maturity from the starting point of the early years of childhood. In addition, identity, as an ever-changing and ever-developing mix of elements that play multiple, varying roles in different scenarios, does by definition change over time too. Although Erikson portrays this as a teleological process, this precludes neither the possibility of a collection of constantly changing, rearranging and inter-related identity elements, nor the potential for identity work to continue after some assumed end of

adolescence. Additionally, the term 'adolescence', though a concept rooted in Western, modern and late modern characterisations of "universal trauma" (Driscoll 2002, p. 6), effectively serves to demarcate the ages and life stages of the Domain Grrls. This research uses the terms 'adolescence' and 'girlhood' to describe this period, inspired by and acknowledging Driscoll's powerful depiction:

[t]he girls I call 'adolescent' here are not necessarily teenagers and not exclusively young women either; rather, they are defined as in transition or in process relative to dominant ideas of Womanhood (2002, p. 6).

This research project recognises that many Domain Grrl activities occurred within a certain contested period of youth; activities that were not bound by chronology or teleology, but which nonetheless were positioned within the experience of girlhood, a genuine and unique context (Kearney 2009), while also a "social and cultural construct" ('Coming of age' 2008, p. v).

Adolescent identity exploration and self-expression, even when acknowledged as a challenging process, becomes more delicate a negotiation for girls navigating socially constructed and imposed notions of femininity and girlhood. Indeed, for girls it can become more true that "[t]echniques of relating to oneself as a subject of unique capacities worthy of respect run up against practices of relating to oneself as the target of *discipline, duty and docility*" (Rose 2000, p. 320, emphasis added). Yet even so, girls can explore socially constructed narratives of girlhood, be they of duty and docility, officially sanctioned 'speaking out', or genuine alternatives, by performing acts of self-expression - trying on identities and affiliations, and translating thoughts into an embodied representation such as text or imagery. This exploration can be inherently rewarding even if the identities are culturally constructed and externally imposed upon them. Analysis of self-expression (arguably not solely that of girls but of anyone likely to feel pressured to accept an externally defined identity) should therefore recognise space and opportunity for the individual to explore her needs and wishes; to relate to herself with respect, over time evolving her identity as suits her. The types of identity and cultural forces

will differ between girls, but the acts of self-expression which explore these options still offer increasing awareness of the role of the self and the cultural framework within which the individual operates.

5.3 The Domain Grrls: a snapshot

Understanding then that the Domain Grrls' youth does not in any way dilute, lessen or invalidate their experiences online, this section now presents an overview of the demographics of the Grrls. Domain Grrls were a disparate group of girls living around the world who created personal homepages in the late 1990s and early 2000s. The Grrls who participated in this research were linked demographically by their youth, predominantly white, Western ethnicity, and domestic and educational settings during their time managing personal homepages. Their experiences online varied, with different motivations, goals and personal styles, and aligned, particularly around how they learnt. The following table presents all Domain Grrls, their pseudonyms (assigned by me, based on popular girls' names given to babies in the USA during the Grrls' average birth year), their geographic location during their Domain Grrl experience, and the ages they first went online and first created a homepage.

Name	Country	Age first online	Age when creating first homepage
Amber	USA	13	16
Amy	USA	14	16
Anna	USA	9	12
Ashley	USA	12	14
Brigitte	Canada	12	15
Cassie	Scotland	5	12
Catherine	Hungary	13	15

Name	Country	Age first online	Age when creating first homepage
Danielle	USA	12	13
Diana	USA	11	12
Dorothy	USA	16	18
Ellen	USA	8	11
Emily	USA	13	15
Grace	UK	10	10
Isabel	USA	12	13
Jenny	USA	9	12
Karen	USA	14	15
Lizzie	USA	10	10
Lynne	USA	11	12
Mandy	USA	12	12
Nadia	Australia	14	14
Sarah	USA	15	17
Sally	USA	11	13
Tara	Norway	9	12

Table 2: Overview of Domain Grrl participants

First, Grrls were young, using new, emerging and rapidly developing technologies. Over half the Grrls (14 of 23) began using the Internet before they were even teenagers, and 20 were online by the time they were 14 years old. They usually took some time to acclimatise to and learn about the Internet before they first created a personal homepage, with 15 creating their site within two years of going online, and

another six doing so within three years. Fourteen of the Grrls published their first site by the age of 14, and 20 had done so by the age of 16. The average age of a Grrl first going online was 11 and a half years old, and when creating her own personal homepage, 13 and a half years old.

Most Grrls stopped maintaining their websites by the age of 21. This is not to say that homepages were nothing more than temporary outlets; rather, they were carefully maintained and updated over many years. Nine Grrls kept their sites alive for four to six years, and another nine for seven years or more. Grrls decided to create a homepage by the middle of their teen years, and once created, the homepage had a lifespan that proved its relevance and power.

Grrls lived in the Western world, with 17 of the 23 hailing from the United States of America, and the remainder from Europe, Australia and Canada. This generally reflects the overall geographic spread of the Internet population of the time, which was similarly weighted towards the USA, with 30.1% people using it in 1998, and English-speaking and Western countries more generally – 30.8% in Australia, 24.9% in Canada, 31.6% in New Zealand, compared to, for example, 14.5% in Hong Kong, 10.3% in Israel, and 2.9% in South Africa. Using Grrls' own terms to describe their ethnicity, there were: two Asian Americans, one Latina American, one Chinese Australian, one Jewish Hungarian, one White British, one White European, one American, one British, and the remaining 14 identified as either White or Caucasian – a breakdown which has been analysed further in Chapter 2.

Grrls were living at home with their families made up of one or two parents, and siblings, with whom they usually shared a family computer. Sally, Ashley and Ellen had their own dedicated computers, which they kept in their rooms, and they appreciated the privacy it offered them for their online activities. For Sally, this resulted in first going online at 11 years of age, and creating her homepage almost immediately thereafter. Ashley first used the Internet when 12, and created her homepage two years later, with a supportive mother who “encouraged” her to use the computer (Ashley, survey, 2010). In some cases, Grrls learnt about homepage

creation at school in classes, or used the school computers to work on their sites, though predominantly they used their family computers at home.

5.4 Motivation to create a homepage

As they discovered the world of personal homepages, Grrls were inspired to create their own sites. Grrls cited a wide range of reasons for deciding to create a personal homepage. Some wanted to have an outlet for artistic expression, feeling the appeal of having an audience for their creations, or simply enjoying the task of designing their pages, and manipulating code to display the website they envisioned. Self-expression was the aim of others. Lynne started using the Internet in her final year of primary school, at 11 years, and created her first homepage of many at 12. She initially used the Internet as a way to escape an otherwise homebound life:

From middle school through high school, I was your typical pseudo-intellectual rebel girl, parents still together, living with them and my younger sister. No job, doing decently in school, spending a lot of time at home because, well, it was harder to find a ride to fun places. That was the long peak of my online activity.
(Lynne, survey, 2010)

Her online activity rapidly grew as she discovered girl homepages and was drawn to the flexibility they offered. She enjoyed the technical challenges of manipulating code, as well as the expressive nature of writing political polemics:

I have never really been one to write anything too serious, and if anything I write is serious it is always shrouded in cryptics and detached, deeply private symbolism. Such is true now as it was then; my writing was hard to relate to in any more than an abstract, vague way. My parents couldn't be bothered to look into my interest in web/graphic design (still can't be bothered) so I used the opportunity to swear and rant about the same stuff that all my

rebel-grrl sisters did. Anti-feminist television! Age discrimination from the police! Peers listening to bad music! GRRR! But no one -- at least no one who disagreed -- cared to start a fight or flame war. (Lynne, survey, 2010)

Her page designs became more personal and less driven by trends as she became more confident in her coding, and grew more self-aware and willing to be true to a self that may not fit in with the girl communities. She was attracted to the flexibility and freedom of having her own publishing platform:

I decided I loved the flexibility, the depth and ambiguity offered by having your own site. There was no need to send the zine out; if anyone wanted to see what I had to say/show, they could come to me. (Lynne, survey, 2010)

Homepages were a publishing platform for some Grrls, an amplification tool as well as a venue for them to express themselves, to have an “outlet” (Anna and Cassie, survey, 2010). These Grrls created their homepage with the goal of reaching an audience (“[t]o be heard” and “to get my art out there” (Anna, survey, 2010)), or of avoiding one (“I wanted to write about what I thought and felt but didn’t want to hurt/offend anyone I knew” (Cassie, survey, 2010)). Living in Scotland with parents working in the telecommunications industry, Cassie was online at 5 years of age, though she created her first website when she was 12. As she worked on her homepage between the ages of 12 and 17, Cassie enjoyed having a separate space distinct from her everyday life and social networks, where she could publish content and see people’s reactions; “I just wanted to see if my thoughts/cartoons had any merit beyond what I gave them. And if people treated me differently if I was myself and said the things I felt and thought with conviction” (Cassie, survey, 2010). By creating a personal homepage, Grrls could designate a space within which they could find their voice, and if so desired, intentionally speak to other Internet users who were, like them, hoping for a response.

Four Grrls pointed out that making a website seemed easy, or was an accessible form of media. Sally felt that homepage creation could actually help her find the community she sought as “it seemed like websites had a low barrier to entry; all I had to do was write it & upload it and there you go” (Sally, survey, 2010). *Full House* fan Tara lived in Norway, and was first online at 9 years old. When she was 12, her family purchased a domain for personal email addresses, and she created her first website, a fan site for the television show *Full House*, on the hosting space provided. Tara also believed she could join the girl homepage “trend” easily enough as it didn’t require “any kind of formal training” (Tara, survey, 2010). Most of these Grrls noted that they aspired to become like the authors of pages that they admired, such as Isabel idolising www.swanky.org, and Lynne who was drawn to another Grrl’s website and “begged [her] for hosting”. They also felt HTML was easy enough to learn. Not only did they want to belong to a specific group of people they respected for being so talented and skilled, but also they were able to take action to try to prove their worth, by demonstrating the exact same talents and skills. They could decide they wanted to belong, and then develop their coding and design skills in the hope that they became ‘good enough’, and at no point did they need to ask for permission or teaching to do so.

Often they chose to create a website as an outwards-facing act, to align themselves with the girl homepage movement they saw online. The design and content of their homepages, based on what they had already seen on other Grrls’ websites, then represented their attempt to be a member of this social group. Sally, who sought acceptance and a sense of belonging (though found it on blogging site LiveJournal), decided to create her homepage at age 13 and publish poetry and a journal because “I wanted to make something that would look slick & remind me of the early 20s demographic I desperately wanted to be in” (Sally, survey, 2010). In addition, Tara, at 12, published pictures, recipes and “memes”, saying, “i wanted to join the trend of having a homepage with pictures online (it made you cool/professional)” (Tara, survey, 2010).

As will be discussed in Chapter 6, this desire to fit in influenced design and content decisions, and drove Grrls to improve their coding abilities. Grrls older than Tara and Sally felt similarly. Dorothy was comparatively late to the Internet, online at 16 and with a homepage at 18. She moved between multiple personal homepages, and enjoyed having a space for self-expression, and being able to play with the code and customise it as much as possible. She fell in line with design trends in girl communities for a while, and participated heavily in the community, joining cliques and webrings and applying for awards and reviews.

We were a big group, but I feel like we were smaller in ways, kind of more closely knit. A lot of us had similar things on our websites, participated in the same activities online. It was fun to be a part of cliques or elite cliques as it were for more recognition. There was definitely a lot of respect, because you could see that come through in people's designs or what sort of things they wrote about or provided on their websites. For example, artwork, sharing some of their writings, other people created resources like graphics or offered awards. People would also have their own forums, so it was fun to connect and meet with others through their site's forums and that was one way to be greater connected and chat about whatever was going on. It was tightly knit, even if you didn't know all the people hosted on so and so's domain, you felt like you were all a part of something pretty cool. We were making a place for ourselves, by ourselves, long before everyone flocked to blue social networking sites using the same templates and formats. (Dorothy, email correspondence, 2015)

More dispassionately, sometimes Grrls decided to create their homepages simply because having a website seemed “fun”, as stated by Dorothy, Lynne and Jenny (survey, 2010); Ashley even claimed to have created hers just because she was “bored” (Ashley, survey, 2010). Dorothy explains; “[h]onestly, it just became

something fun to do, and other media didn't have that same kind of appeal to me” (Dorothy, survey, 2010). Lynne points out

I always had fun making my site. I liked the challenges presented by the graphic/site design medium -- it was a fun geek exercise to try and figure out how to reproduce your artistic visions with programming and graphics. (Lynne, survey, 2010)

The fun was found in the act of creating the site, playing with HTML and seeing it come to life.

Online at nine and with a homepage at 12, Jenny created sites which were relatively simple, without much opinionated or typically teen angst content, not publishing “anything incredibly controversial” (Jenny, survey, 2010). Creating a site for an online fan club was “so much fun” (Jenny, survey, 2010) that she went on to create her personal homepage, and also one about Disneyworld, and one about her dog. As she built her skills, her sites progressively became more technically sophisticated, and she joined girl community webpage design forums and boards where she built friendships with other Grrls, who introduced her to new technologies and ideas. Here she describes the relationships between social engagement, technical skills, and social standing.

All teenage girls, led by older teenage girls who knew what they were doing. Everyone had the same subpages, the same cliques, we belonged to the same message boards. We knew who the queens were, who got the most comments, who knew the most tricks, where to go to get the latest codes, like the tagboards, to use on our sites. The most popular girls were the ones with the best design skills. It also helped a lot if you updated often and always returned comments. The closer the ages, the more the sites were similar. (Jenny, survey, 2010)

Interestingly, all the Grrls who were initially inspired by ‘fun’ also found that the skills gained during this period ultimately benefited their career and employment opportunities. The pleasure they gained from coding could grow into a longer-term passion for programming, computer science or information technology, and an ability to translate this into financial reward. These Grrls may have accidentally stumbled upon homepage creation, but it was a fortuitous discovery, as they experienced real joy from the act of coding; they found something that made them happy, and a possible career path too.

5.5 Practices of portraying the self through the homepage

As Grrls identified and expressed themselves online, they demonstrated both a sense of internal constancy and an appetite for flexibility. The selves they were creating were consciously constructed from selected content, and organically emergent from a combination of creativity and some sense of inherent identity. They integrated elements of their lives into their self-presentation on their personal homepages, and therefore this thesis departs from early cyberculture theories, outlined in Chapter 3, which explored a proposed dichotomy of identity between the theoretical offline singular and online multiple (Rheingold 1991; Turkle 1995), to uncover a complex interplay between the two.

These findings align with previous research into girls’ personal homepages, as described below, and add some layers of complexity around concepts of choice and the self. Not only does the content which Grrls selected and published generally play a role in self-expression, but the demographic content plays a more specific role. This content linked to a concept of honest or authentic self-portrayal, similar to the positioning in the research of Killoran (2003) and Wynn and Katz (1997). I argue here that the Grrls’ acts of self-expression demonstrate an identity owned, as well as created. Grrls controlled how the history of their life was depicted online, combining this information with the ongoing identity they crafted out of acts of creative self-expression. By representing themselves online, in a space separate

from their existing social and cultural networks, Grrls were able to exert some control and ownership over their identities, bringing them online and taking pride in or simply being honest about who they felt they truly were, online or off. The following sections address multiple facets of this integrating of online and off: naming themselves, naming their homepages, and including information about their lives.

5.5.1 Naming themselves with pseudonyms and real names

All Grrls experimented with how they named themselves; a fundamental element of self-expression. A signifier that would represent them throughout the Internet, not just on their personal homepages, the name they chose reflected an ongoing exploration of changing identity. This name was used to refer to themselves on their own homepages; to sign their comments in the guestbook on someone else's homepage; to participate in forums, chat rooms and bulletin boards; to send email to a mailing list; and to chat with friends online.

As Domain Grrls explored this quite early form of the Internet, there was no Facebook or Google to dictate naming standards to millions of users¹. Their self-selection of names contrasts strongly with SNS-era naming practices which are primarily driven by the hosting sites. In the 2010s, "[quite] often, teens respond to what they perceive to be the norms of a particular service" (boyd 2014, p. 38), such as the SNS standards which push users to use their legal name, or more anonymous sites such as Tumblr which encourage pseudonyms. Domain Grrls were free to decide whether to introduce themselves in this new landscape using the name given to them by their parents, or to give themselves an entirely new name, without worrying about breaching any terms and conditions of their hosting site. Choosing a name for one's self in the Grrls' Western cultures is a relatively rare occasion. When people's names change, it is frequently due to marriage – definitely not a change purely driven by personal taste and preference. For some it is driven by a transformative self-discovery relating to gender and sexuality. For many Grrls, this

would have likely been the first time this opportunity presented itself, on the scale the Internet offered.

They responded by experimenting; some used pseudonyms, most used their offline, 'real', proper name, or some variation thereof, and many tried using a mix of the two. With few clear role models, guidelines or standards to work within, and when faced with the prospect of abandoning the inherently personal and intrinsically self-referential concept of their own name, Grrls frequently chose to return to the referent of their self that had been their constant source of identification, if not identity. This distinction allows us to view Grrls' use of their names as more functional than intrinsically personal. Pierre Bourdieu believed the notion of an individual's life as being an isolated, linear progression of events is flawed, and saw a need instead to integrate our understanding of the individual within a more nuanced, networked, inter-dependent view of people and society. He saw the 'proper name' as playing a seductive yet effective role as such an isolated and definite identifier in a Western society which demands it, yet in a life which an individual would struggle to live in such a manner. "[T]he proper name [...] offers to the designated individual, beyond all biological or social changes, the nominal constant, the identity in the sense of self-identity, *constantia sibi*, required by the social order" (Bourdieu 2000, p. 302).

For Grrls, the use of their proper name provided a sense of internal identification, and a simplicity which let them focus their energy on the artefacts they could be constantly producing, updating, and through which they could express their changing selves over time. Ultimately, name choice was inherently personal, even if they returned to a name given to them by someone else. It was a process that could take months or years, as Grrls explored the concept of choosing a new name, and found a name that would remain meaningful.

As mentioned, most Grrls tried out two key ways of naming themselves: a variation of their given first name (e.g. the full name, or a nickname), and, a pseudonym they selected themselves. They sometimes used one for a while, and then switched to the other. For example, Jenny, who first went online when 9 years old, switched

from a pseudonym to her real name once she felt old enough to be safe online. Or, rarely, they would use both simultaneously – Cassie used one pseudonym on her Geocities personal homepage where she published her cartoons, and a different pseudonym for the site, hosted at free homepage provider Xanga, where she “vented” her “anger” (Cassie, survey, 2010). She ran these simultaneously for a while, and then ultimately focused on the Xanga site for five years. The vast majority of Grrls, though, reported using one name at a time.

The names they chose were split roughly equally between a real name and a pseudonym. For some Grrls, pseudonyms were a failed experiment, and they returned to using some variation on their real name. These Grrls sometimes felt pseudonyms were extra effort.

Mandy, online and creating her first homepage of many at 12 years of age, found they “never stuck” (Mandy, survey, 2010), although by using variations of her actual name, she may have made it easier for her offline school friends and acquaintances to find her homepage, which resulted in some embarrassment for her, as will be discussed in Chapter 8. Mandy’s friendships which emerged online frequently carried into other communication and socialising activities such as meeting in person and phone calls, suggesting that the illusion of a separate online identity provided by a pseudonym quickly became irrelevant for her.

I honestly am surprised I never got "catfished"² (at least not to my knowledge). Once I began exchanging actual letters (which usually included sending a photo) with some of my online friends, and eventually talking on the phone, that erased any doubts I might have had. We even joked among ourselves that one of us could be a creepy 40-year-old stalker dude... we certainly were aware of the risks, but I think the aforementioned focus on "honesty" in the community helped us feel confident that we were not putting ourselves in a bad situation. (Mandy, email correspondence, 2015)

Nadia was “fed up” with pseudonyms (Nadia, survey, 2010). Over time, she became more interested in the technical aspects of her homepage, and that interest was strong enough to lead her to ultimately become a professional web designer, suggesting an increasing comfort in the intertwining interdependencies between her online website design activities and her offline life.

Some Grrls who scarcely or never used pseudonyms seemed similarly disenchanted with the prospect; Lynne initially tried to name herself in an effort to fit in with the culture of the girl homepages she frequented. She ultimately abandoned any attempt to mimic that culture, as she was “not that person” (Lynne, survey, 2010); “I used my nickname. It was easier than coming up with a flowery, poetic pseudonym, and safer AND more fun than using my real name” (Lynne, survey, 2010).

Tara, predominantly active in fandom, tried to find a pseudonym to use, but “failed at finding one that I thought fit me” (Tara, email correspondence, 2014). Grrls who chose not to use pseudonyms seemed to view them as a hurdle to enjoying their experience with personal homepages and socialising online, rather than any kind of freeing tool of anonymity and assumed identities.

Those Grrls who used pseudonyms had different motivations behind their name selection. Some drew inspiration for their names from popular culture. By substituting a perhaps seemingly meaningless name given by parents, with a name derived from something which helped them process the challenges thrown up by adolescence – a song, a book, a character, a game – Grrls were able to express some alignment to, appreciation for, or simply fandom-style adoration of, this cultural artefact. By naming themselves after this element, they were embodying within their online presence the characteristics of this artefact that they liked. Online and with a website at 10 years of age, Grace was a UK fan of the television show *Buffy the Vampire Slayer*. She and Jenny, who also originally hailed from fandom, based theirs on TV characters: from *Sliders* and *Buffy the Vampire Slayer*, respectively, while Sally referenced a video game (which she did not identify). Mandy and Amber both derived theirs from books (which they also did not identify), and Amber

pointed out the aspirational nature of her selection; “She was pretty and strong, qualities I wished to see in myself” (Amber, email correspondence, 2014).

Other Grrls chose pseudonyms to experiment with presenting themselves as different from their offline lives. Nadia chose an “uncommon” name from a game she was creating with a friend (Nadia, email correspondence, 2014). She had not heard the name before in her geographic community, which she characterised by its ethnic mix; the pseudonym she selected offered her a way to position herself external to that community:

[it] was based on a character I created in a game with a friend. I don't remember where I heard that name, but I think it was the first 'uncommon' sounding name I ever heard - where I grew up, everyone had standard English, Chinese or Malay names. (Nadia, email correspondence, 2014)

Later she chose a name from a manga story she was creating. As Anna sought to make an impact and “reach out” to others like her, she chose a name she now considers “pretentious” (Anna, survey, 2010). “This is kind of embarrassing but my first name was :“tears” only I wrote it really pretentious like: t e a r s” (Anna, survey, 2010). Over time she switched to using a variation on her real name, noting amusedly that people still felt it was some kind of pseudonym. Only Diana specifically identified using multiple pseudonyms as a way to explore identity, saying she would rename herself as she moved to a new homepage, “reinventing” herself in the process (Diana, survey, 2010).

As much as I wanted to hide my website from people I knew in real life, the pseudonym grew less out of privacy concerns and more out of a desire to reinvent myself, and to uniquely identify myself in the online community that I participated in. It was like having a stage name. I took on a new name when I joined the domain that hosted me, and when I decided to leave, I left that name behind and took on another name. (Diana, survey, 2010)

While pseudonyms were assumed and experimented with in the context of both personal safety and exploring alternative identities, the use of the given name offered an underlying consistency from offline to online. The fact that through this process they considered measures of privacy and anonymity, such as never using their last name, as will be discussed in Chapter 8, reinforces the negotiation the Grrls undertook, as they drew upon their lives while also trying to protect them. Offering unfettered access to identify and connect with them, to anyone visiting their site or anyone they may speak to online, was too threatening, and so this negotiation was fundamental to their being able to experiment with identities encapsulated in names, while enjoying the continuity of their own protected identity.

5.5.1.1 The role of the homepage name

Websites typically have a name, selected by the creator and displayed at the top of the main page (as demonstrated in Figure 3).

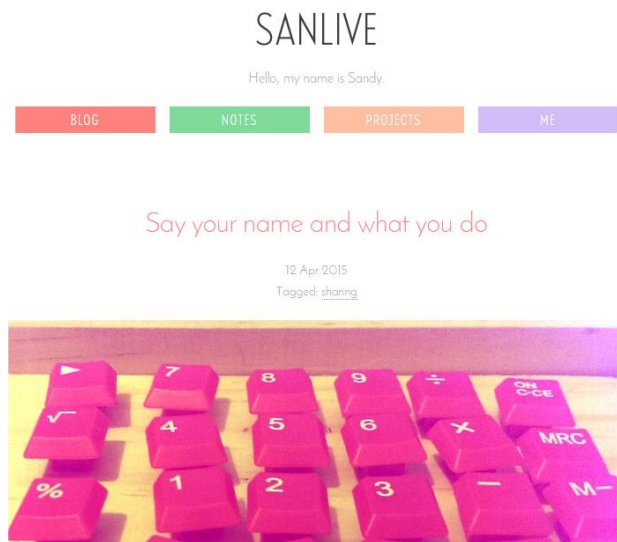


Figure 3: Example of personal homepage with the name "Sanlive" at the top of the page

They also have a URL, which may be partially or totally assigned by a free homepage provider (e.g. www.geocities.com/Paris/Left/13433, where the user chose the Paris and Left categories, and Geocities assigned a number), or, when the creator owned the domain, crafted by them (e.g. www.naomispage.org). If a Grrl bought a domain,

she may choose to use the same name for both, or, they could be different if she preferred – such as www.naomicivins.com, “Naomi’s Homepage”; or even www.naomicivins.com, “Domain Grrls through the ages”. Grrls could create whatever site name they wanted, and could change it whenever they wanted, as it was just text within the main page’s HTML, and could even be removed entirely if so desired, without breaking the HTML or crashing a site. Choosing a domain name was bound by some technical constraints around what characters could be used – for example, there could be no apostrophe, space or exclamation mark. Nevertheless, Grrls could use any words they wanted in the domain name; any combination of letters and numbers was allowed.

Naming a homepage and choosing whichever elements of the URL they could, were therefore personal, creative decisions; ways to label the site and sum up how the author wanted her audience – which could include search engines, webrings, and directory sites – to view her homepage. Grrls therefore chose a homepage name that they felt in some way reflected who they were, and/or what a visitor could expect to find on the site. They titled their homepages using words and phrases that evoked something relevant to them, were similar to their sense of self, or alluded to a cultural artefact they enjoyed – or they simply reiterated the personal nature of their site by naming it after themselves.

The most common reason for choosing a specific site name is that in some way, it reflected the author herself; through displaying a personal preference, personal quality, or simply as an identifier of the author – her name. Similar to the process of selecting a name for themselves online, for these Grrls interested in referring to their selves, half simply chose a site name that was built around their own online name or pseudonym, e.g. “[name’s] World”, “[name’s] haven”, “[name’s] corner”. In doing this, they both marked it as their own, while also creating a sense of space within which their homepage resided. Others chose names that reflected their personality. These Grrls called out a specific style or attitude which they identified with in some way, and to which they felt their site title alluded.

Isabel, who created her homepage at age 13, spent her time in web design and teen girl communities, and felt that as a girl, “it was important to know that other people were out there who felt like you” (Isabel, survey, 2009). She used her URL to reinforce a depiction of her experience of girlhood to visitors to her site, to help connect with those who felt similarly; her URL included the word ‘bitter’, referring to her “notorious bitter attitude toward a lot of things as a teenager” (Isabel, survey, 2009). Amber created her first website at 16, within a specific sub-directory at Geocities that she felt was “romantic” (Amber, survey, 2010). Lynne’s site referred to a character on a Disneyland ride, and which she felt was “implicitly violent and edgy” (Lynne, survey, 2010). Jenny chose the word ‘silver’ to include in her domain name because it was “girly” and “geeky” (Jenny, survey, 2010).

When choosing a site name with some personal relevance, Grrls were identifying their homepage as being intrinsically part of their self-expression online; their personal homepages were precisely that – *personal* in the topics they addressed. Grrls were often managing more than one site: their personal homepages, and sites devoted to fandom, their pets, or their family. By labelling their personal homepage with a name directly inspired by their selves, Grrls were marking this piece of online space as belonging to them, and relating solely to them.

Similar to choosing a pseudonym, when choosing a name for their homepage, Grrls would reference cultural elements to which they felt some connection. Even if their personal name was based their given name, they may still go to popular culture for their homepage name. Some such citations included:

- song titles; “[it] came from the title of one of my favorite Radiohead songs of the same name” (Isabel, survey, 2009)
- TV shows; “it was a play on the old 90’s cartoon” (Dorothy, survey, 2010)
- video games; “i was into Dance Dance Revolution music at the time”, (Nadia, survey, 2010), and
- movie characters; “[it] was the nickname given to Dot in *A Bug’s Life*”, (Lynne, survey, 2010).

Through this process they selected symbols which they particularly liked, or found meaningful.

Online cultural standards and status could also play a role. Geocities would present a variety of potential URLs that a user could choose from; Amber selected one of her Geocities URL for the cultural cachet of having an address that indicated she started using Geocities early, rather than as a late adopter.

The original GeoCities site had “neighborhoods” for your site, where you could choose the domain and address. For example, the movie site was www.GeoCities.com/Hollywood/2345. This was a big deal because it was a great number and it was also in the Hollywood base neighborhood, not the Hollywood Hills neighborhood that came later. (Amber, survey, 2010)

Lizzie created her first homepage at 11, a year after first using the Internet. Already interested in having personal creative projects such as writing stories, it seemed a natural progression for her to move online. Beginning with a simple personal homepage, she soon honed her skills and began making more design-oriented sites that functioned as creative outlets. With her alignment to creativity and design, Lizzie was attracted to Geocities by its offer of a poetic, evocative URL; “I selected Geocities because the URLs had cool cities on them, like you could be in the ‘enchanted forest’” (Lizzie, survey, 2014).

Dorothy purchased a domain with the top level country code domain of .nu, which actually represented the small island country Nieu. This code was released in 1997, and was an opportunity for domain owners to differentiate their sites from the legions of .com, .org and .net websites already published. “I had to hop on the .nu bandwagon. It sounded trendy, awesome, kind of sci-fi” (Dorothy, survey, 2010). They were also prestigious due to cost; “Nu domain names were coveted because of their price”, and she notes that “a lot of the choices [of domain names] made were based on trends” (Dorothy, survey, 2010). These Grrls were aligning their sites with

online culture that resonated with them, and which they wished to integrate into their online self-presentation.

Interestingly, some Grrls did not even mention the name of their site. The site's name itself seems to be less important for some Grrls, even though they recalled and discussed in detail other aspects of their personal homepage experience. It is possible that they did not even name their site, although the majority of Grrls did. Some of these Grrls who didn't provide their site name report frequently moving their site between different hosts – both free and friends' domains, so perhaps they forgot the names in the haze of constant relocation (although other Grrls who moved their sites around *could* recall the site names). Diana, one of these Grrls, goes to great length to describe how she would assume and cast off different identities as she moved through communities and different phases in her online experience, but she did not once mention the name of her sites. Other Grrls were quite brief in their questionnaire responses, and perhaps this gap in answers simply reflected gaps in memory. A similar finding about the relative lack of importance of the domains themselves is addressed in Chapter 2.

5.5.2 Creating authenticity through publishing personal information

In face-to-face interactions, people's extra-linguistic behaviours 'give off' a portrayal of self even as they attempt to 'give' a specific impression through their speech and conscious behaviours (Goffman 1959). Similarly, a personal homepage was the embodiment of what a Grrl actively intended to communicate about herself to her online public, as well as a collection of implicit and inherent signifiers of who she was. As Miller points out, "people will construct expressive resources out of whatever facilities are available" (1995, p. 3-4). 'Giving' of self-presentation, through content and design decisions, represents the conscious actions and thoughts of the Grrls. This section discusses how Grrls utilised these expressive resources to go about 'giving' a presentation of their self, through the decisions they made about their websites, and the media artefacts they created in the process.

When choosing the content to publish on their homepages, Grrls carefully curated their selection, incorporating elements that would reinforce the identity they wished to present. To portray themselves online, to an audience they presumed and hoped would be full of strangers who did not know who they were (as will be discussed in Chapter 7), Grrls were less interested in producing an entirely new persona, or presenting only aspects of their selves that were stifled offline. Rather, they decided to include some objectively true ‘facts’ about who they were, day-to-day, to ‘give’ specific concepts about themselves, and to present themselves as being in some way genuine, or authentic, rather than pretending to be someone else entirely. Meanwhile, they would continue to ‘give off’ impressions of themselves through their ongoing creation and curation of expressive, creative content.

The creative content they published also contributed to a sense of authenticity online, as Grrls often attributed the online experience with a powerful sense of freedom to experiment and express themselves. The idea of being somehow true, accurate or honest about how the self was portrayed through the homepage, is a recurring theme with some of the Grrls. They referred to concepts of authenticity in how they expressed themselves – that the content they published, the media they produced, reflected who they felt they were. Lizzie struggled with this over time as she tried on what she termed “personas”:

I was always pretty honest but over time tried to be more arty and cool. In my late teens and college years, I tried to be witty and funny more than arty and deep and I'd say that's the persona I project now in online endeavors. (Lizzie, survey, 2014)

Cassie was able to express her anger, and publish content that “tended to be anything that I didn’t feel I could talk about to anyone” (Cassie, survey, 2010). By maintaining this degree of authenticity, they could meet a need to be honest as mentioned by some Grrls, to fulfil a desire to be true to themselves, and portray this self successfully to their audience.

In an era where the boundaries and opportunities presented by anonymity and multiple, flexible identities could be explored online (Dibbell 1999; Turkle 1995), Domain Grrls presented an online identity which integrated elements of their offline lives. Often they included one or two pieces of personal information, such as address, school, age, photos, physical description, or phone number. Quite a few also presented some sort of condensed historical, demographic description of themselves, in the form of what many called a biography or autobiography, and continued including this type of content (even though the information included may have been updated) regardless of how their site otherwise changed over time.

Grrls expected their audience would understand who they were by consuming what they published. The autobiographical approach here is one that seeks to make sense of the events of a Grrl's life; events which, at that point in their lives, were a mix of their own choices, and the results of the decisions of their parents. Grrls were concerned therefore "to give meaning, to rationalize" (Bourdieu 2000, p. 300); to create a narrative that would be most effective in their undertaking in media production for an audience. I infer that the role of this factual content was to maintain some sort of honesty in how they conducted themselves online, and to therefore be perceived as being more trustworthy; so these strangers would believe that the Grrls were who they said they were. Akane Kanai's research into self-branding and belonging in youthful femininities on SNS Tumblr finds similar behaviours of sharing and describing images and other artefacts in a consistent fashion across multiple users; "showing one's specific knowledge of shared experience demonstrates an affective authenticity of connection and belonging" (2015).

Personal information such as their school name or a description of how they looked therefore played a role in performing authenticity to an audience, by demonstrating they were who they claimed to be – they could be held accountable to how they described themselves, and they were in some way proving their identity. By publishing their school name, they were saying that they were currently a high school or college student, which readers could assume placed them within certain

age ranges, and would help their audience decide whether they were 'like them'. Far from being a random fact published as a space-filler, the school or college name played a real role in trying to attract the right audience and so build connections with potential friends. In the absence of spoken communication, where authenticity would be achieved by apparent spontaneity rather than conscious crafting of the self-portrayal (Davis 2012), authenticity here was embodied in the published content. The process of being authentic was performed by the Grrls with an audience in mind, and this will be expanded upon further in the discussion about creating a public through the audience of the personal homepage in Chapter 7; the public which Grrls were seeking was one which would value this sort of information.

Grrls walked a fine line to identify themselves online: to say declaratively that they were who they claimed to be, that they could be trusted and believed, while also protecting their privacy by staying sufficiently anonymous. The content they chose to use to achieve this varied, but the most popular was their school or college name. This information was verifiable, demographic, and, for Grrls who had spent most of their lives in some sort of educational institution, fundamental to their daily lives. At the same time, it was not specific to them alone; there was sufficient distance that for some Grrls, it could be published without threatening the online security they had carefully constructed; Sally, seeking a sense of community while protecting her identity, included "no identifying information at all besides the name of my school (but it's a common one, 'West')"

 (Sally, survey, 2010).

Online at 13, Emily wanted to create her first homepage, and when 15 years old, to publish something that could be seen anywhere around the world. She made friends that she could vent to, expressing herself and receiving ideas and advice, complaining about her life without worrying about repercussions; friends who could keep her "sane" (Emily, survey, 2010). Enjoying the sympathetic support offered by online friends, she nonetheless pursued security in her online activity. She published the name of her university, "but it was a huge university. when I was in HS [high school], no way!" (Emily, survey, 2010).

Similar to the act of publishing the school name, publishing a photo of herself played a role in positioning the author as a girl, of a certain age, to help her potential audience decide that she – and her homepage – was relevant to them, and worth connecting with, and even building a friendship with. Sarah, who was one of the oldest Grrls, online at 15 and creating her homepage at 17, used her homepage as a journal to share her thoughts, and included personal photos, as she felt this contributed to her portraying herself “pretty accurately” (Sarah, survey, 2010). This was effective in building strong friendships that were long-lasting (one friend even attended her wedding), although her family, school acquaintances and friends discovered her site over time and were angry with her about what they saw. As a result, she lost friendships and was no longer confident in expressing herself on her homepage, as will be discussed in more detail in Chapter 8. She moved to LiveJournal, but found it less rewarding as she did not interact with her friends there as much as she had with the friends from her Domain Grrl experience. For Ashley, the personal photos she published were part of her general approach of portraying herself “as honestly as possible” (Ashley, survey, 2010). Although less important than written content, visual artwork was a tool used by Grrls to express themselves, and even identify themselves to their audience, which some Grrls wanted to avoid. Mandy, Nadia and Emily did not include photos as part of general fears for their privacy.

When seeking to create a space for personal self-expression, Grrls were careful to ensure their homepage was most appropriate for delivering this. Although functionally a homepage did not conflict with this need, other content and design that a Grrl built up over time could ultimately create a space that was unsuitable for intensely personal content. The two most common types of writing published on Grrls’ personal homepages, both poetry and journal writing, were sometimes characterised as more personal content, and sometimes justified maintaining more than one site to ensure the right venue for this content. Running “dozens” of websites over time (Mandy, survey, 2010), Mandy describes the style and content of two of them; “Starburst was a colorful site with not as much personal information, and TCAN was a “darker,” more personal site with my journal and poems” (Mandy,

survey, 2010). Amber, who felt part of the community with strong friendships, also had two personal homepages, one with “personal poetry” (Amber, survey, 2010), and the other with a journal. Cassie also maintained two sites, one to share her cartoon drawings and the other to “vent” her anger in a journal where she wrote monthly or weekly (Cassie, survey, 2010).

Similarly, Grrls who maintained fandom sites published a mix of content created by them. This included fan fiction and fan art, which fulfilled their own desire to produce while consuming their fan topic, and share their resulting creations; and general information about the topic, which could be included to cater to fellow fans. A couple of the Grrls pointed out that they included less personal information on these sites than on their personal homepages, such as Tara; “i posted some pictures and had a short biography on my personal website but none on my full house page [the fandom site] in the beginning, it came later” (Tara, survey, 2010).

Where content on personal homepages was selected to convey a specific self-presentation, driven more from personal preference than from a conscious consideration of what the audience would want to see, fan site content was chosen for the needs of both the audience and the author. This aligns to research arguing that the role of fandom artefacts is to help instantiate and support the production and (primarily active) consumption behaviours of a community of equally engaged fans (Clerc 1996; Jenkins, Green & Jenkins 2006; Kearney 2006; Mazzarella 2005; Scodari 2005).

These findings also reflect somewhat Wynn and Katz’s research during the Domain Grrl era (1997), as discussed earlier in Chapter 3, which argued that personal homepage creators were integrating many disparate threads of identity into a unified presence for strangers to apprehend and comprehend. The acts of media production which created a homepage, and the artefacts the Grrls chose to publish on their pages, demonstrate that the Domain Grrl experience was more productive and transformative than solely integrative; Grrls were creating their content, and in doing so adding richness to the self they were defining as they went along. The adolescent experience of formative exploration and expression adds a layer of

discovery, reformation and reinterpretation that Wynn and Katz, who researched adults, did not address. Grrls created a foundation of verifiable (although usually not identifying) personal data upon which they then built a shifting, creative landscape of their interests, embodied in acts and artefacts of media production. These artefacts were changeable, whereas the demographic information was less variable. Between the two types of content, Grrls were able to actively and consciously integrate both emergent and seemingly fundamental aspects of their selves into an online presence that they hoped would attract the right people, and would be honest enough to convince those people that they were worth reading, visiting and knowing.

Theoretical constructions of the Internet-as-space implicitly suggest that using the Internet means moving from one place to another, and research into people's use of the Internet and behaviour online has shown that users bring beliefs, thoughts, ideas, hopes, desires, preferences, biases, fears and intentions with them (Consalvo & Paasonen 2002; Denner & Martinez 2010; Elias & Lemish 2009; Foster 1997; Grisso & Weiss 2005; Sohn 2008). Precisely what users actually bring speaks to their expectation of what the online space entails, and what is appropriate to bring with them. That the Grrls published this personal, demographic-style information so readily on their homepages suggests that they felt this was an appropriate site, and the information relevant to this space, though Grrls certainly were selective in what they chose to publish. They brought certain pieces of personal 'baggage' with them, in an online space where they felt comfortable doing so.

This is a point of distinction that previous homepage research has not investigated in detail: when young people created homepages, they may not have been trying to escape so much their offline *selves*, as their offline *social and cultural position and environment*. Some elements of their offline lives were part of the Grrls' selves, and these could therefore be brought with them into this new world. This was part of the self that they were expressing online; and this self was how they were trying to attract a new audience, a public of strangers, potential new friends. Their selves

were not entirely new. However, being able to decide exactly what to include in depicting their selves was a new opportunity.

Identifying and expressing the self in personal homepages was less the expected multiple-identity act of play, and more a practice in careful, protective selection of elements of offline lives to integrate into an online self. With each offline element, Grrls made it progressively more difficult for them to recast their online self as a new facet of a multiplicitous presence. This both aligns and conflicts with research carried out by Walker (2000), who found that personal homepage creators (of all ages and genders) who were seeking to meet new people, both included more of this type of identifying, demographic information, but also explored multiple identities. Grrls did participate in some exploratory behaviour through their acts of media production, for example testing out identities which they felt would win them social approval from other Grrls online, but overall they were clarifying who they were, who their selves were, and how they wanted to present this self online.

5.5.3 Exploring identities and authenticity over time

Over time, all Grrls changed some elements of their homepage. Publishing their homepage was only the first step in a journey of creativity and communication; as the homepages represented their selves online, they were treated as mutable and flexible. Youth theorist Kirsten Drotner points out the usefulness of digital content in identity formation and alteration; “[t]he tangible nature of many digital practices, mixing visuals, sound, and text, offer an important means to tackle matters of cultural identity, if only because they may be stored, shared, and reflected upon” (2008, p. 174). As Grrls continued with their sites mostly for four or more years, there were ample opportunities to change their sites; as they developed their technical and design skills, as new code and techniques emerged, and as their life situations changed.

Many Grrls changed some aspect of their site’s design, and often they changed the content, altering the style and layout, the sophistication and complexity of their code, and the words and images they chose for their self-presentation. As Grrls felt

they changed as people over time, they would also change how they presented themselves online, and as they created more content, this would be published on the site, with any necessary ensuing changes in design. Sites also changed as the Grrls' creative and technical skills improved and expanded, as they learnt to add different types of content and to display it differently. Grrls also changed their site in attempts to align to, or differ from, trends in different communities; aligning could be aspirational, to hopefully gain them respect for demonstrating appropriate design and content decisions, or could reflect feeling already being part of the community.

Often Grrls revisited their site layout and styles as they improved their design skills. Isabel was devoted to improving her design skills, which in turn improved or enhanced her site; "my design sense and ability to control my coding more and more helped my site to evolve as a visual piece" (Isabel, survey, 2009). Grrls' initial site designs were based on limited knowledge and understanding of coding and webpage design, and as they expanded their knowledge, they were able to control their own code more, and create new and more sophisticated designs.

This could encourage them to initially align their designs more with other Grrls' homepages. Dorothy felt strongly connected to the girl homepage communities, and her design skills and desire to align to trends grew together:

Eventually, I started looking at it from more of a design perspective. I also started getting trendy. Whatever trends were popular at the time with personal sites, I had a tendency to hop on the bandwagon. (Dorothy, survey, 2010)

And when she felt she had matured beyond the "teenyboppers" attracted to one of her sites, she started a new homepage which she hoped would be "more personal and grown up", which she began writing as a journal (Dorothy, survey, 2010). As Sally sought social acceptance in the girl homepage communities, she also changed her online voice over time to portray herself in the most appropriate way to make

friends. As she was most comfortable expressing herself through written content, “I preferred people got to know me through my writing” (Sally, survey, 2010).

When Lynne began her first homepage, she was drawn to the girl homepage communities she discovered. On earlier versions of her homepage, her design and content decisions had been motivated by wanting acceptance from these communities; “ambiguous, pseudopoetic, loaded with poignant-sounding song lyrics and unrelated graphics” (Lynne, survey, 2010). However, as she grew to love “the flexibility, the depth and ambiguity offered by having your own site” (Lynne, survey, 2010), and built her technical skills, she felt confident developing her own sense of design and self-presentation:

After I got my bearings a bit in design, and got comfortable with not “fitting in” as far as my online personality went, I started to do more fun, lighthearted layouts and themes. (Lynne, survey, 2010)

Over time she moved to a design which was closer to her own personal sense of identity; “I wasn’t trying to be beautiful or mysterious, just quirky and fun” (Lynne, survey, 2010):

When I first started, I was drawn in by the mystique of lots of Domain Grrl personalities -- passionate, dark, edgy, romantic, poetic, all of that. But I realized that I am not that person, and I couldn’t even fake it online to my satisfaction. Instead, I preferred to win friends/visitors over with my whimsy, with silly tongue-in-cheek and funny/sweet observations and photos. I wanted my life to be full of fun, so the life I portrayed online was just that. (Lynne, survey, 2010)

Diana tried using her “disgustingly bad” poetry as she “sought recognition” from the girl homepage community she aspired to belong to (Diana, survey, 2010), but while initially wholeheartedly throwing herself into the styles and social intricacies of her friendship group, she eventually shifted focus:

By early 1998, I dropped my fan interests and started placing greater time on designing my website layout and creating original content in my own voice - short stories, and disgustingly bad poetry. Around this time, I started taking on a pseudonym, and started becoming active in the teen girl domain craze/ online community. I sought recognition. By 1999, I wanted to leave it all behind, because although I tried to become more personal and truer to my voice, I felt like a fake and a follower in the midst of petty online drama. I left my host and the drama/issues that surrounded it and moved back to a free host, and changed my online pseudonym. To me, it meant being a little truer to myself. Eventually I also made conscious efforts to limit my online time and go on with the real life. Unfortunately, this meant that I also lost touch with the few online friendships that I had cultivated in the previous couple years. (Diana, survey, 2010)

She then moved to journaling at dedicated providers such as Diaryland, which she positioned as a record of day-to-day life, ranging “from the mundane to the somewhat inspired” (Diana, survey, 2010).

Skill development by necessity took time, and other Grrls had similar experiences of this overlapping productively with increasing confidence in self-expression and exploration. Anna’s homepage was “about creating a new culture that went against the fluffier websites of the girl domain land. Bringing a new tornado through the scene” (Anna, survey, 2010). This entailed experimenting with different code to make her homepage really stand out:

I started using tables to make the websites more complex and doing more esoteric things to the links when you clicked over them. I was open for trying anything new and always trying to create new territory. (Anna, survey, 2010)

For Anna, expanding her coding skills meant simultaneously discovering new and potentially more effective and powerful ways to develop her voice while also expanding connectivity and community around her site.

A few Grrls also updated their sites to reflect changes in their lives over the years, as they grew from mostly their early teens when first creating their sites, to late teens and early twenties by the end. Their sites were the embodiment of their personalities and lives, and as these changed, they changed their sites too. Ashley felt that she could express herself “much more freely” online:

[I] portrayed myself as honestly as possible. personal current photographs were frequently available, as well as information about my home life and how i was performing in school, and “art work” in the form of writing and photography. (Ashley, survey, 2010)

Her homepage demonstrated that “it changed as i grew older and my personality and interests changed. always highlighted my current ‘self’” (Ashley, survey, 2010). Mandy changed the design of her site too, though maintained similar content types (although she would update the content over time, such as new journal entries):

Being a teenager, it usually just depended on my mood.
Sometimes a multicolor theme, sometimes black and white,
sometimes a “retro” feel. Content was almost always a journal plus
poems/short stories/lyrics. (Mandy, survey, 2010)

Nadia, who created and maintained many different websites on different topics, “paid more attention to the design” as she began working on the most personal of her sites, where she published “poetry, hand-coded blog/journal type site, about-me stuff” (Nadia, survey, 2010). Then, as she worked on the site that she began at the time she felt the Domain Grrls era was ending, where she hosted more web design oriented content (she ultimately built a career in web design), she developed “a style that was more personal to me” (Nadia, survey, 2010). Emily found a

network of supportive online friends by publishing her homepage, using it as “an outlet to vent” (Emily, survey, 2010) and finding people who could support her in these moments of strong self-expression. As a venue for self-expression, the “style changed drastically depending on my mood” (echoing Mandy), as well as her expertise (Emily, survey, 2010).

Some other Grrls identified a connection between their site updates, and their underlying goals for their homepages. Seeking recognition and acceptance but struggling to find it, Sally focused on her writing as she felt this would be a more effective way for her visitors to comprehend who she was, and so she published poetry and a journal, and over time reduced the size of her autobiography to encourage visitors to pay more attention to this creative content. Anna looked for understanding and support as she dealt with mental illness, and created her homepage to serve as an “outlet” (Anna, survey, 2010). In answer to a question about her motivation to create a personal homepage, Anna responded:

To get my art out there. My poems and rants. To be heard. To make a difference. To reach out. It was the only outlet I had. I didn't have access to other outlets but I knew I could always at least make a website. (Anna, survey, 2010)

She selected content to try to reach the “other kids like me with mental problems who wanted to take over the world” (Anna, survey, 2010). Then there were those who pursued a sense of authenticity in the content and design of their homepages. Isabel, focused on design, also shortened her “biography” while writing “more and more about my life”, and in doing so became “more honest about portraying myself” (Isabel, survey, 2009).

Emily’s homepage acted as a space for self-expression and a mechanism to find a crucial support network:

It gave me an outlet to talk to other people in similar situations and get more of an outsider’s perspective on issues in my own life

as well as an outlet to vent to w/out people I saw everyday getting angry about what I was saying. (Emily, survey, 2010)

She also tried to stay relatively anonymous online, publishing only personal information she felt would not identify her. Her homepage played a combined, complex role as a site for safe self-expression, a channel for receiving feedback, an opportunity to explore her emotions with less fear of repercussions, and an opportunity to connect with other people, while ultimately being protected from any unwanted intrusion into her offline life. Underpinning all of this is the role of the homepage as a site for her to depict herself and her life to an outside world; it “[gave] me a place to express myself and share my thoughts” (Emily, survey, 2010), which took the form of written content.

Dorothy changed the design of her homepage substantially over time, as she became more knowledgeable about web design, and ultimately chose to design her homepage around an underlying theme of the anime and video games that were her interests at the time. The content on her homepage also shifted, such as regarding her faith:

At first though, I made it very apparent that I was a Christian in all of my websites. This at the time was very important to me since I wanted to let people know how important Jesus is. Due to life circumstances however, I stopped doing this on my websites around 2003. I think a breakup with a guy I was dating changed my feelings towards Christianity. So, although I did mention my faith in a line on my sites, I no longer slapped it all over like chocolate frosting. (Dorothy, survey, 2010).

The changing role Dorothy’s spirituality played in her life was mediated and explored through her homepage; her site was a venue for her to promote her faith when it was central to her life, and then a place she could escape to when her faith was shaken in some way.

5.6 Chapter summary

This chapter has unpacked the concept of the Grrls being ‘young people’, discussing the meaning of ‘youth’ and how to approach this research without an overly teleological view of the Grrls’ activities. The Grrls were described in detail, their demographic similarities and differences identified. Finally, this chapter addressed the theme of self-expression, discussing how Grrls were motivated to create their homepages, and how they presented themselves online once there, through acts of naming, claiming authenticity, and also exploring identities over time. Key findings here related to how Grrls negotiated authenticity and creativity as they sought to claim an identity online which integrated selected qualities from their lives, such as their age. Grrls were exploring the potential of online identities not by assuming ‘fake’ identities to experiment with, not to escape their ‘offline’ identities, but to craft an online identity which contained only content from their life which they felt appropriate. The following chapters will discuss the complexities of the Grrls’ experiences of privacy, publicity, safe space, public space and connectivity, and whether they realised their hopes for their homepages. The next chapter specifically will address how Grrls developed the skills required to build and maintain their homepages over time, and how their learning practices contributed to the overall Domain Grrl experience.

¹ For more information about Facebook’s mandating of online identity construction, consult David Kirkpatrick’s biography of the company *The Facebook Effect* (2011), and consider the furore around the decision to remove drag queens’ pages (Albergotti 2014), as they could not be considered “authentic identities” (Facebook 2015), and then the disingenuous apology from the company’s Chief Product Officer, Chris Cox (2014). Some relevant research into pseudonymity on large SNSs such as Google and Facebook can be found in Moll (2014) and van der Nagel and Frith (2015).

² The term catfishing emerged in 2010 in the documentary *Catfish*, and is used colloquially to describe someone deceptively engaging with a person online for nefarious purposes (Frederick et al. 2014).

Chapter 6 DIY skills acquisition: Domain Grrls as media producers

6.1 Introduction

Domain Grrls needed to be literate in the tools and cultural framework of this new space to become competent, confident media producers in the relatively new and unformed social and cultural space of the Internet. This chapter will address the theme 'skills' which emerged from data analysis, discussing how Grrls learnt about personal homepage creation and how they built their technical skills. This chapter argues that the Domain Grrl experience demonstrated a DIY philosophy similar to those of Riot Grrrl and zine culture, both of which will be addressed in more detail in the following section of this chapter. This chapter will also consider the DIY nature of the Domain Grrl experience, and the decentralised, communal and reinforcing cycle of borrowing, learning and creativity that resulted. It will address in detail the learning practices of the Grrls, and the media artefacts they produced – the contents of their personal homepages. Finally, this chapter will address the culture of respect and technical expertise that emerged, which paves the way for the following chapter that discusses the social outcomes of their Domain Grrl experiences.

6.2 Historical perspective on youth media production

By working on their websites, Grrls learnt the technical intricacies of creating and publishing the necessary code, and discovered how to bring their vision of themselves and their identity to life online. Acquiring the necessary technical skills occurred through every act of media production, from initial familiarisation with the concept of a homepage, through to the ongoing maintenance of their own, and engagement with others'. Self-driven and largely self-taught, Grrls learnt about computer code, Internet technologies and website design through a learning style which, as will be argued in this chapter, was a variation of the DIY approach of the related cultural movement, Riot Grrrl. Through publishing their sites and negotiating feedback (or lack thereof) and social interactions, they understood the technical, social and cultural environments within which they were operating, comprehending the Internet as a site of engagement and interaction, where edgy content could be published, identity could be explored, and relationships could be formed. Grrls were proud of what they created, and what they achieved, and they built long-lasting technical skills that sometimes led to professional success in careers in graphic design, web design and development, and computer programming.

The act of creating the personal homepage therefore performed a dual function, similar to printed zines in the 1990s: as published texts that broadcast a collection of messages to an audience, and as nodes in a network of social connectedness and relationships (Kearney 2006; Sandler 2008). Existing research into media production provides valuable perspectives on how to interpret practices and elements of consumption, production, gender, identity and social connectivity, all of which appear throughout the Domain Grrls experience. What follows is a discussion of major areas of research into media production, particularly as relevant for girls.

6.2.1 Research from the 1970s to 2000s: an overview

During the emergence of youth studies in academia in the 1970s, research into the relationship between adolescents and media focussed on the experiences of males,

media artefacts and cultural production (Kearney 2006). Feminist researchers challenged this conflation of 'youth' and 'boys' (McRobbie 1980; McRobbie & Garber 1976), critiquing the inclination to dismiss the domestic and family spheres as feminine and irrelevant to youth, and to see girls as supporting figures in boys' experiences or to dismiss them as passive consumers residing only in the domestic sphere. From breakthrough feminist media researchers Angela McRobbie and Jenny Garber's article 1976 "Resistance Through Rituals" onwards, these researchers investigated the media artefacts presented to girls (Peirce 1993). They also considered how girls experienced and engaged with different types of media and media artefacts, though predominantly as consumers (Kearney 2007), and in more private, less public settings such as collaborative fan culture and personal journals in the bedroom (Cherland 1994; Griffiths 1988; Thompson 1994). Initial research proceeded from the existing assumptions surrounding girls and media – that they were primarily consumers, in contrast to the active, creative males participating in such DIY subcultures as punk – and therefore sought to critically interrogate the media artefacts that were being provided for their consumption (Kearney 2007).

The early years of this research developed the concept of 'bedroom culture' "as a space where the girl can exert some limited power over the arrangement of her physical environment" (Mitchell & Reid-Walsh 2002, p. 115). This premise reconfigured home-based media consumption previously seen as passive and unquestioning, into an active, social and cultural activity from which resistance to dominant tropes of childhood and girlhood was emerging. Researchers began by interrogating and analysing the artefacts being consumed as tools of cultural education and indoctrination. McRobbie's critical analysis of *Jackie*, a mainstream magazine targeted at teenage girls (1991), uncovered the discourses of femininity embedded within the text, primarily related to the pressure to establish a romantic relationship with a boy. Research then moved from investigation of the artefacts, to analysis of how girls negotiated their relationships with them, through direct research into girls' activities (Currie 1999; Thompson 1994; Weekes 2004). As Driscoll cautions, "[a] hierarchizing of girl culture according to an authenticity understood as individual production also infers that neither distribution nor

consumption is productive” (2002, p. 278). Furthermore, as productive activities outside the home were not easily available for girls, some investigation into home-based media production activities was underway, and the domestic sphere in which women and girls were more present was being reconsidered as a site of cultural creativity, negotiation and discussion. The relationships between girls and media acknowledged in academia had expanded beyond passive consumption, to active consumption and production.

As the terms of reference for research into girls and media broadened, different types of media engagement were investigated in greater depth (Kearney 2011). For example, fandom activities throughout the 20th century, such as creating hand-made fan magazines, writing alternative storylines for TV shows, and attending fan-organised events, were researched from a variety of angles (Scheiner 1990; Schrum 2000; Stokes 1999). Mid-century movie fandom has been analysed as both an opportunity for girls to experiment with behaviours of creativity and individualism (Garratt 1984), and as an indication of how even passionate and creative girls would still be constrained to exploring and communicating within the dominant trope of acceptable girlhood activities – home-based and essentially consumerist (Cohen 2003).

Internet-based fandom has also been investigated at length (Gregson 2005; Jenkins 2006; Mazzarella 2005; Scodari 2005; Villanueva 2006), particularly in the form of ‘fanfic’, fan-written fiction involving characters from media narratives such as *Harry Potter*, *Star Trek*, and *Buffy the Vampire Slayer*. This research addressed multiple facets: the production process, the artefacts the fans produced, and the social and cultural contexts and networks they operated within and created through their fandom behaviour. Benefits for fans were realised across these aspects, including: the community that emerged amongst fans interested in the same topic; the opportunities for debate and in-depth analysis of their topic of interest; and the ensuing sense of satisfaction from demonstration of expertise, gaining respect of fellow knowledgeable fans, and having their passion taken seriously.

6.2.2 Domain Grrl forerunners in the 1990s: Riot Grrrl and zines

Originating in the North-Western USA cultural scene of grunge music in the 1990s, the Riot Grrrl movement of zines and rock music left behind a cultural and material framework for girl media producers, which demonstrates the outcomes and benefits I argue that media production could offer Domain Grrls. This section describes the movement, its champions and philosophy, its artefacts and behaviours, to reaffirm and illustrate the role media production can play for girls.

Riot Grrrls produced media as amateurs, sharing and learning together as they played music, published zines, and created any other type of counter-cultural form of media. Identified and developed by feminist bands, musicians and amateur cultural producers in alternative cultural communities, Riot Grrrl built new, more political forms of media production and a supporting philosophy to empower and encourage those involved. It embodied a feminist ethos of grassroots girl self-empowerment in the music industry and associated cultural spaces. This built upon the DIY cultural movements of the 1960s and 1970s, and the concept of resistant creation of narrative and discourse initially developed by the Situationist International collective of artists of the 1950s, which rejected established social and cultural structures of education and capitalism (Downes 2007).

The manifesto provided a list of reasons for engaging in this cultural movement; a defence of female-centred music, a DIY approach to media skills, and for Riot Grrrl in general, such as:

BECAUSE us girls crave records and books and fanzines that speak to US that WE feel included in and can understand in our own ways.

BECAUSE we wanna make it easier for girls to see/hear each other's work so that we can share strategies and criticize-applaud each other.

BECAUSE we must take over the means of production in order to create our own meanings.

(Riot Grrrl Manifesto 1991)

The movement advocated empowerment through agency and creativity, usually occurring outside of traditional institutions such as school. Riot Grrrl cultural production occurred within networks of people sharing their knowledge in a non-hierarchical fashion, and in doing so, resisting the dominant models of production and reproduction of cultural artefacts. Bikini Kill band member Hanna described her motivation:

I wanted to meet these other women and figure out how we could network with each other - you know, people who are not only feminist, but are also resisting capitalism through creating their own mediums like fanzines and music that's [distributed] through small labels. (Phoenix 1994)

Riot Grrrl was inherently creative and communicative. Girls were able to build their creativity and skills by actually creating media artefacts, while also revelling in the experience of a supportive community which had space for how they were able to create, or may prefer to create – in their bedrooms, avoiding institutionalised or heavily promoted opportunities for structured creativity (Difference 1996).

Riot Grrrl culture respected the sometimes unavoidable need for girls to participate predominantly in their bedroom, and generally at an amateur, self-taught level (Duncombe 1997; Leonard 1998). Zines, “noncommercial, nonprofessional, small-circulation magazines that their creators produce, publish, and distribute by themselves” (Duncombe 1997, p. 427), were written by one or two girls, in a bedroom, using the basic tools of publishing available to the average teenage girl, such as paper, scissors, pens, and a photocopier at a parents’ office or a school library. ‘Alternative’ music, such as that created by seminal band Bikini Kill, and by girls in grassroots rock music skill-sharing sessions (Jennings 1999) could be

practised privately in a home or bedroom, and could then be made public, available live at concerts and festivals, and on tape by mail order. At its core, Riot Grrrl sought to encourage and embrace girls' creative activities, whatever form they came in and wherever they were created, and tried to create alternative forms of skill sharing, learning and performance to move past gender-biased traditional education and industry structures (Kearney 2006).

Zines were "do-it-yourself publications made primarily by and for girls and women" (Taormino & Green 1997, p. xi). Zine culture rejected the notion that extensive training, education and adult status were crucial to any kind of involvement in the media landscape. Amateur skills were sufficient to physically cut and paste imagery and text to assemble a plain paper magazine-like document, and write raw, personal stories and poetry to add into it (Poletti 2008). The movement also encouraged increased connectedness and social engagement between girls, as they learnt, taught, practiced and created together (Bennett 1996; Chu 1997). The search for "dialogue and community" often led women to the world of zines (Whitney 2005), and zine researcher Kristen Schilt (2003) found that many geographically isolated girl zinesters found solace in their zine-based social networks. Connectedness was also delivered through the more practical method of zine 'distros', collated lists of available zines shared through the post by passionate zinesters, such as Mike Gunderloy's *Factsheet Five (F5)*.

Researchers in the area of Riot Grrrl and other DIY experiences of media production have been particularly interested in how girls gain skills through their media production activities such as zines, music, or websites, seeing these skills as long-lasting literacy capabilities which can create valuable and enriching communicative, social and employment opportunities (Cross 1996; Jennings 1999; Kearney 2006; Leonard 1998; Sinor 2005). These media literacy skills also enable girls to decode the messages they are receiving both in popular culture and their subculture, skills which Livingstone sees as endowing the possessor with a crucial form of "social power" (2003, p. 154). As girls gain skills and express themselves, navigating both

the technology and the audience, they also learn about the politics and complexities of the relevant industry.

6.2.3 Benefits of media production for youth and Domain Grrls

Within the spaces needed for comfortable and genuine self-expression, acts of media production offer girls the chance to express themselves by using varied and powerful creative tools that afford additional nuances of meaning. The broad range of media production activities which could be explored by girls, such as video, music, painting, sculpture, dance, text and a combination thereof, also expands the range of style, content and tone girls can display in their self-expression. The opportunities and benefits of media production are traditionally aligned with the agency and comparative wealth ascribed to the producer, which result in these activities occupying an elevated position in academia and wider society. The media producer is also respected for their ability to give body to, distribute, promote and propagate their own beliefs within the product they created, which becomes an approved extension of self within the communities consuming the product. In modern conceptions of male as active creator and female as passive receptor, media production is “an activity historically constructed as adult- and male-dominated” (Kearney 2006, p. 12) while “[t]he consumption of services and products has historically been gendered in the form of the female and placed both oppositionally and unequally against the notion of production as masculine” (Weekes 2004, p. 150).

Researchers who investigate how media production facilitates identity creation and experimentation situate girls’ and boys’ media production activities primarily within the theoretical framework of adolescence (Cross 1996; Livingstone 2005; Sinor 2005). They foreground the benefits self-publishing offers in creating spaces for self-expression and experimentation with the psychological changes of the teenage years and beyond. As identities promoted for girls within traditional, mainstream or commercial media allow only a pre-defined set of socially acceptable, traditionally feminine behaviours, opportunities to explore alternative identities are not readily

available to girls. Chances to create the necessary space, which in turn creates these opportunities, are valuable and meaningful for girls negotiating the issue of their personal identity (Chu 1997).

As zine researcher Jennifer Sinor (2005) points out, feeling connected to a social network can be a crucial step towards feeling safe and accepted in one's identity. As girls become more skilled in their management of their chosen medium, they become more confident in using their skills to express their identities – it is not only the creation of a space that is important, but also the knowledge and confidence to take the steps towards utilising that space. Combining improved media literacy with opportunities for self-expression offers powerful, multi-faceted ways to experiment with identity, such as encouraging feedback from an audience. The space created by the act of media production becomes a space within which identity can be expressed and explored, without risking interference from parents, teachers or other undesired audiences. (Though as will be discussed in Chapter 8, roughly a quarter of the Grrls had to cope with unwanted visitors to their homepages.)

Throughout almost all research into girls and media production, one clear theme emerges: that of media production being most powerful and meaningful in how it creates a space for girls to engage with opportunities to capitalise on their productivity. This space is so crucial due to the technologies of regulation, constraints and supervision which are so easily deployed within the experience of girlhood and youth, and which “[mark] a space in which processes of identity-formation and social placement are monitored” (Driscoll 2002, p. 53). As will be discussed more in Chapter 7, cultural frameworks delineate and demonstrate socially appropriate forms of girlhood, against which girls can be assessed and judged by their peers, family, authority figures, and institutional forces. From magazines targeting girls, through the recasting of public physical space (such as malls and playgrounds), and publicly sanctioned forms of self-expression being promoted to girls, existing cultural and social spaces are more moderated and visible sites of media production where girls risk this assessing and judging. A space where girls may produce media to their own standards and needs, may therefore

reduce such a risk of being visible to unwanted surveillance. The characteristics and definition of such a space, and its role as offering privacy and yet access to a public, will be discussed in greater depth in the following chapter. Benefits are realised from how the act is enabled; how it becomes an opportunity, and the range of opportunities it offers; how it enables self-expression and creativity while allowing girls to learn.

6.2.4 Do It Yourself: the philosophy and its relevance to Domain Grrls

Researchers into media production and youth have repeatedly argued that the media activities of children and adolescents could have long-lasting benefits, as they built practical skills, increased their media literacy, and explored different ways of creating and expressing (Drotner 2008; Hasinoff 2013; Kearney 2006; Leonard 1998; Livingstone 2003; Szucs 2013; Weber & Mitchell 2008; Willett 2008). It is through the acts of trying, doing, testing and changing that children and adolescents can learn, and incorporate their learnings into their mindset, capabilities and perspectives. Building skills for media production can occur in a range of environments, on a continuum of styles, from a self-driven, self-taught, DIY experience with no formal instruction, through to an institutional educational space such as a school class. Different learning environments can be suited to specific topics and learning (and teaching) styles. They can be valuable and effective means of learning, and both those providing and those receiving the knowledge may prefer different parts of the continuum. Intersecting with personal preference, critical aspects of the media production, such as the surrounding environments of pedagogy and governance, directly influence which benefits are experienced by young producers, and to what degree. Even pedagogies which aim to encourage multiple perspectives, open inquiry and self-reflection can ultimately prove more restrictive, driven by adult assumptions rather than young people's needs (Goldman, Booker & McDermott 2008).

As a philosophy underpinning the media activism of punk and the overall Riot Grrrl movement, DIY media production emphasises the validity of the amateur (Harris 2004b; Kearney 2006). Becoming empowered to speak out through the media of their choice is constructed as a step along the path of becoming politically active, be the creator male or female. By combining the punk ethos with radical feminism, Riot Grrrl recast DIY as giving voice to the traditionally unheard, particularly young women. DIY was therefore a way to empower young women, to encourage them to express themselves and be heard through music, words, or any media of their choice, and for the experience to be self-driven and self-determined.

The DIY experience offers an unmapped exploration, where the learner takes input from a self-chosen range of sources, and builds mentoring and teaching relationships where they feel it is appropriate and beneficial for them (Cross 1996). The media producers organise their own learning – perhaps through conscious preparation, or as they go. There may be no formal assessment process, but regardless there is a progression of learning, even if it may be iterative, fragmented or disrupted. Learning through active experimentation, exploring and doing, rather than by assuming the role of receptacle of knowledge, is “a self-motivated learning through play, through trial and error, and through actively engaging with the world” (Weber & Mitchell 2008, p. 43).

Respecting the amateur as both student and teacher, encouraging self-taught experimentation, and seeking a removal of formal and structural barriers to learning, characterises the DIY movement, as does a determined lack of formal definition, a de-centralised and un-authoritarian approach to sharing knowledge, and a strong adoption by feminist artists and cultural producers of the time (Bail 1996; Downes 2007). Cross saw DIY culture as a breaking down of barriers to learn new tools that enable connectivity and empowerment; “DIY culture allows one to connect, research and network by using technology in ways which are unprecedented for feminists and women” (1996, p. 80).

6.3 The material environment of Domain Grrls

Domain Grrls were creating personal homepages in an early, exploratory phase of the Internet. Almost all the Grrls started creating their homepages between 1995 and 1998. The concept of a personal homepage was well known online, but the tools required to create one were still quite simple; mostly plain, text-based interfaces for editing code and content, and only the most rudimentary content management approach. This meant that Grrls needed to learn about the underlying technologies to bring their visions to life, rather than rely on sophisticated tools that could have obscured the technologies while simplifying the authoring process. As website design standards were similarly immature, Grrls also needed to individually decide how they wanted their site to look, drawing inspiration from other sites online and developing their own personal style. Grrls were exposed to the more technical aspects of webpages, as they undertook the typical behaviours to create and maintain a site. By learning how to manually write and edit the commonly used coding languages, they progressed beyond the provided, pre-fabricated page templates, and learnt the fundamentals of computer programming logic, structure and rules.

During this period, HTML was the dominant language used to create websites, particularly personal homepages. It is a relatively simple language that can be typed using any text-editing tool, unlike other programming languages that may require a specific compilation software tool to transform the code text into a program or application. HTML works by enclosing text and images within formatting tags, which can be nested to create a combination of styles; surrounding a word with `` and `` will make it bold, and using `<i>` and `</i>` will make it both bold and italicised. There is a logic to how this nesting works which echoes other programming languages and their syntaxes.

Interestingly, HTML was originally conceived of as a text formatting language, rather than a webpage design tool (Raggett 1998). It had no intelligence regarding the structure of a webpage, no inbuilt capability to guide users to create intuitive,

attractive or usable sites. Using HTML to create a webpage layout could therefore require some creativity and lateral thinking to manipulate and combine the original formatting elements in new ways.

For example, the data table element, originally intended to display a list of fields and values in columns and rows, with visible borders, was used to manage the alignment of text and images across a page, with invisible borders. This quickly became a popular and respected technique among the Grrls; during Anna's years designing her flagship site where she was "open for trying anything new and always trying to create new territory", she moved on to "using tables to make the websites more complex" (Anna, survey, 2010). Tara, exploring multiple technical approaches to her passion for design, "started out with tables because that was hot at the time", which over time became emblematic of this era in web design; this has helped reinforce her self-identification – "I am a geek and I feel more included since I remember tables" (Tara, survey, 2010). Tables rapidly fell from favour as subsequent developments in website code languages allowed for more precise and sophisticated positioning of content on screen, but her knowledge of their importance during this earlier era acts as a credential for her belonging to a geek culture.

In 2000, when almost all the Grrls were still maintaining their homepages, the first browser was released that supported Cascading Style Sheets (CSS) (*Cascading Style Sheets*). Rather than using tags to format each individual piece of content, CSS allowed the author to create and name an abstracted formatting style, and then apply it to any piece of content, just by referencing the name. From this point on, the process of formatting content was dramatically simplified and standardised, which provided more design consistency with less effort, and introduced new design and style options, along with greater interactivity and dynamic content. Combining HTML 4.0 and CSS created what was known as DHTML – Dynamic HTML, where page elements such as menus were freed from static formatting and could behave differently when interacted with in different ways, such as dropping down when a mouse hovered over them. Grrls learnt the logic of HTML and CSS, and how

to make it work for them, moving from simple text and image formatting to dynamic elements, consistent styles, and sophisticated designs.

Most Grrls wrote their code by hand, typing the HTML character by character. Some also used Dreamweaver and other more sophisticated tools that provided some pre-written HTML code and other helpful functionalities. Many used Notepad or similarly simple text editors, where there are almost no inbuilt useful functionalities for HTML authors. When using these tools, the author must manually perform their own trouble-shooting, identify errors (in up to hundreds of lines of code), and distinguish between the characters of their code and those of their content (sophisticated tools display code and content in different colours, but Notepad displays all text in black). A program like Dreamweaver would simplify and streamline these tasks, but were largely out of reach for many Grrls, if their parents would not purchase them. Dreamweaver cost roughly \$US300 in 1998 (Festa 1998), and with most Grrls being in their early teen years and still in high school, it is likely they couldn't afford costs like these. Conversely, Notepad and other similar simple text editing programs were more likely to be free; Notepad was automatically installed as part of any desktop version of Windows (up to Windows 10 in 2015, at least).

Once they had coded the HTML on their personal computers, they needed to transfer the files from their own computer onto the server that hosted their website on the Internet. The server was essentially designated space on a computer designed for storing files and publishing them to a network. Whether managed by a free homepage provider or a Grrl domain owner, the methods of transferring files would likely be the same: File Transfer Protocol (FTP). FTP entailed navigating through directory structures and copying or moving files from the Grrl's computer to the server. Grrls could do this using three main options, each of which are described below. The following three figures display how each option typically could look on-screen.

- Webpage-based Geocities file upload tool: a webpage with a simple 'Upload your file' tool which required no programming knowledge, as provided by a free homepage provider,
- Command-line FTP interface through MS-DOS: a text-only method of sending direct commands to the FTP server, and
- Graphical interface through software CuteFTP v3.0: an interface similar to Windows Explorer or MacOS's Finder application.

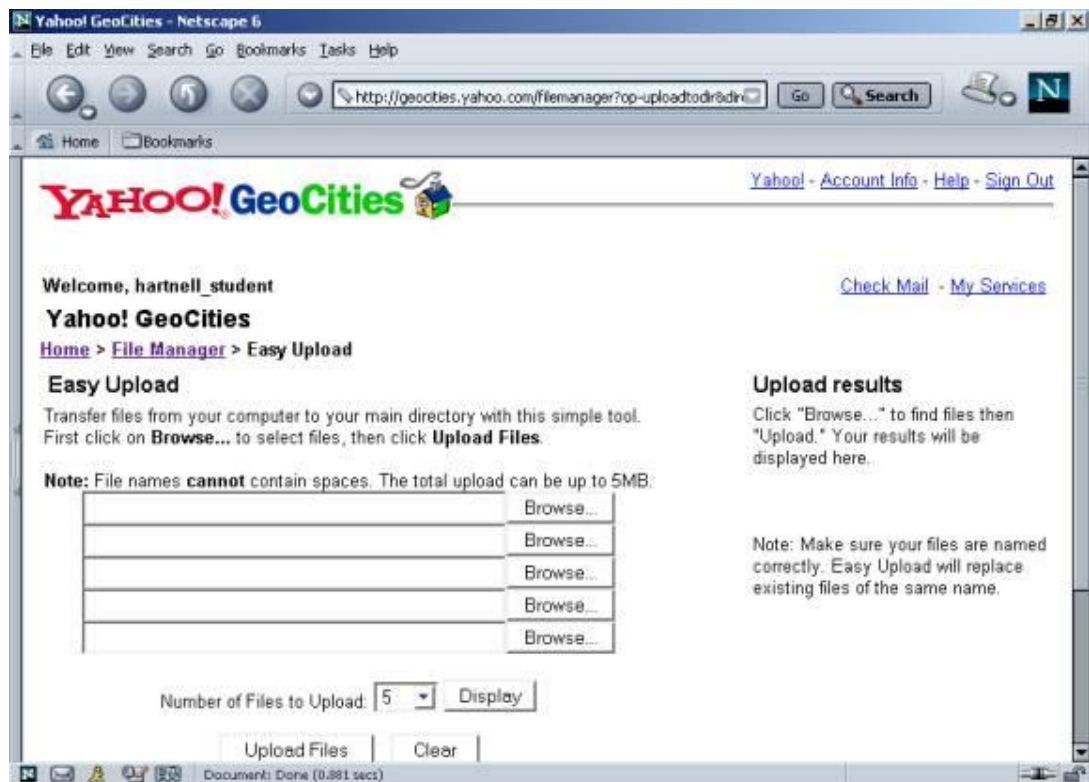


Figure 4: Webpage-based Geocities file upload tool (Dead Media Archive 2010)

```

G:\>ftp www
Connected to www.toolkit.net.
220 www Microsoft FTP Service (Version 4.0).
User (www.toolkit.net:(none)): example
331 Password required for example.
Password:
230 User example logged in.
ftp> dir
200 PORT command successful.
150 Opening ASCII mode data connection for /bin/ls.
226 Transfer complete.
ftp> mkdir testme
257 MKD command successful.
ftp> dir
200 PORT command successful.
150 Opening ASCII mode data connection for /bin/ls.
03-01-99 12:03AM <DIR> testme
226 Transfer complete.
47 bytes received in 0.00 seconds (47000.00 Kbytes/sec)
ftp> _

```

Figure 5: Command-line FTP interface through MS-DOS (Library of Michigan 1999)

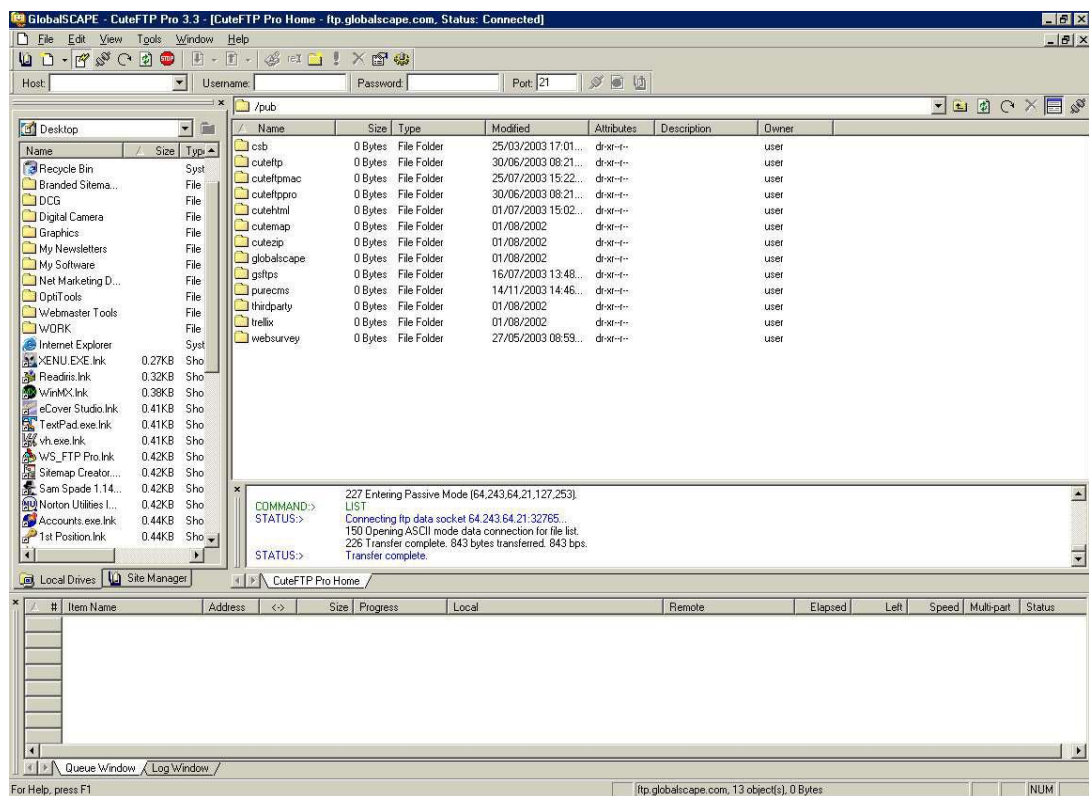


Figure 6: Graphical FTP interface of software CuteFTP v3.0 (EZ SEO News n.d.)

FTP access provided users with control over the directory structure of the site, making it easier to organise large amounts of content, compared to a web-based file

upload tool. Danielle recalls one free homepage provider being “really popular because it was ad-free and had FTP access” (Danielle, survey, 2010).

FTP programs, such as CuteFTP in Figure 6, existed to simplify the tasks of moving files across, surfacing all tools and functions in simple graphical user interfaces (GUIs). They did not try to hide functionality behind an attractive veneer, but rather expected their users to be familiar with associated concepts like read/write access and directory structures (CSS was dependent on some careful placement and referencing of files across and within directories). Using MS-DOS was even less ‘user-friendly’, working off a series of text commands which would need to be learnt, and could then be configured by adding more and more characters, words and attributes to the end of the line. By using either the command line or a standalone program for FTPing files, Grrls were becoming familiar with concepts of files, directories, relational links, and other technical aspects of file management on servers.

Beyond the more logical, rules-based activity of creating and editing code, to determine what should be presented where on a page, Grrls were also learning about webpage design and graphic design, as they decided on colour schemes, font faces and sizes, page layout, and interactivity. Website design was a burgeoning field of interest during the late ‘90s. In 1996, HTML educator Vincent Flanders began publishing the website webpagesthatsuck.com, highlighting examples of terrible design to help educate his audience in how to design well for the web. As a leading pioneer in the space of website usability, Jakob Nielsen released his first book dedicated to the concept in 1999, *Designing Web Usability: The Practice of Simplicity*, going on to found one of the leading web research consulting companies, Norman Nielsen Group.

As a discipline, though, website design was still in its infancy. As the technological landscape and Internet user population were changing, the standards of website design changed too, adjusting to new versions of HTML and CSS, new browser platforms and standards, increasing attention paid to accessibility standards, and new website programming languages like Ruby On Rails and Ajax, in 2005 and 2006

respectively (*The core team* ; Ramsey 2006). To learn website design during the 1990s and early 2000s was therefore not as straightforward as enrolling in a class, reading a textbook, and learning some generally agreed upon principles of good design. Not only were the tools and standards constantly changing, the concept of 'good design' was shifting as well. Grrls were participating in a dynamic environment where technology and design – fonts, colour palettes, whitespace use – collided; they themselves were helping create new standards and new ways of designing websites.

6.4 Learning practices of Domain Grrls

Grrls learned about HTML and CSS by consulting books, websites, tutorials, source code, and – rarely – through classes at school. Strongly aligning to the learning practices Kearney discovered of the girl zine distro website creators she researched (2006), many used free online tutorial and FAQ sites such as HTML Goodies, or tutorials published by their free homepage provider, such as Angelfire. Roughly half looked at other pages' source code, reading the HTML and finding out what techniques the page author used to create their designs. Offline, approximately a third referred to printed books. As HTML and browsers changed so frequently, books rapidly became out of date, and so Grrls also consulted other sources; frequently the book was one of the initial learning aids, quickly surpassed by other more timely sources like other sites' code. Only Lynne, Jenny and Tara learnt coding at school, and they still combined this with other sources of information as they maintained their homepages over the years; as Lynne described her experience, "[in] my 8th grade computer class our teacher introduced us to very basic HTML, and it only served to whet my appetite" (Lynne, survey, 2010).

Much less common than books and code was being taught, one on one, by another person – a source that, like school, was used in combination with other ways of learning. Diana's father showed her how to sign up at Geocities and type some HTML, and Cassie learnt from her sister (and borrowed a book about web design from her). Drawn to the Internet to find people with the same muscle disease as

her, Amy was online at 14, with her first website at 16. She enjoyed coding enough to continue with webpage design and coding even after taking down her own homepage 5 years later. She had a friend “who had a masters degree in web design” (Amy, survey, 2010), and that person walked her through the basics and provided her with hosting space.

Over half the Grrls described their learning behaviour as being self-taught, or as operating by trial and error, while half described reading source code on other sites to understand how they could replicate a design pattern they liked, a learning method that also dominated Kearney’s findings (2006). Lynne’s learning process, though beginning in a classroom at school, drew upon a variety of sources and was ultimately driven and guided by her own ideas:

After that I experimented with free sites, looking up HTML tutorials and reference such as LissaExplains or HTMLGoodies.

After I learned to sneak a peek at sites' source codes, I took my experimentation further and learned the ins and outs of elements that I wanted to reproduce. In short, I learned with a lot of reading and even more trial-and-error. (Lynne, survey, 2010)

This underpins the DIY style of learning from each other’s artefacts which necessitated a willingness to experiment, fail, and learn from one’s mistakes. Viewing source code in particular is a form of self-teaching, as the code author may not have left any helpful notes, and HTML itself is not very self-explanatory. Understanding source code requires an understanding of how HTML works (and at the start, a willingness to learn very quickly), and learning by playing with source code is a deductive task, where the author must be willing to experiment, break the code, and keep track of what they’re doing.

Often, Grrls specifically referred to viewing other pages’ source code for inspiration and direct copying. As they surfed, they would discover an element of design that they liked, such as colour combinations, layouts, text styles, or navigation styles. Like the *bricoleurs* of postmodern cultural practices (Turkle 1984), they would

rework and blend what they liked into their own site. This was mostly seen as an act of learning, rather than one of stealing or plagiarising; as Diana described, “[w]e were insulted, but in some cases perhaps secretly flattered, when we caught others in the community copying or imitating our work” (Diana, survey, 2010).

Simply copying and pasting source code may work adequately, but to customise it any further – changing elements of design like fonts or colours, or the actual content such as images and text – the author must figure out how to integrate the code into their existing code. Each element copied or learned from was a specific way of using the programming languages, and each act of integrating it was a unique task of combining and interweaving the other author’s logic, tags and nesting, and their own. No book or online tutorial they could refer to would tell them precisely how to do this for the exact configuration of code they were looking at. They experimented and learnt by trial and error. Only by making mistakes could authors understand how different pieces of the code interact, such as how to nest, align text and images within a table, and add dynamic elements to a page. The Frankenstein’s monster of a webpage built from other pages’ source code was not something to be ashamed of; it still took skill and a designer’s perspective to determine the best way to integrate the code and have the resultant webpage look how the author intended. Trial and error was a powerful tool at the Grrls’ disposal, allowing them to look beyond archetypal instructions in classes, books and online tutorials, and understand how to implement code to bring their visions to life.

It was a step that they frequently took on their journey to learning how to code, often performed as their skills had begun to mature, after they had learnt the basics of HTML and were therefore able to read code and understand it. Dorothy, who enjoyed playing and experimenting with code, explains being motivated by a desire to learn how to do more advanced HTML code during an era where most people were still learning and teaching the basics:

I looked at other people’s sites, started looking at source codes and trying to reverse engineer it. I never stole anyone’s code outright but I found that to be the most useful method since

tutorials for more advanced things were far and few between back in those days. (Dorothy, survey, 2010)

Domain Grrls were therefore not simply creating digitised versions of an offline personal diary; they were learning fundamental skills of computer programming, coming to terms with the constantly changing standards of 'good' web design, and, individually and in aggregate, defining what made a Grrl's personal homepage meaningful, stylish, and worth admiring.

6.5 DIY and building a network for other Domain Grrls to learn

The Domain Grrl experience is characterised by some of the fundamental aspects of DIY culture: a self-driven, self-taught approach to learning, with a network of mentors rather than a school of teachers, and an appreciation for early, technically immature media artefacts as the media producer continues on their path (Takayoshi, Huot & Huot 1999). Some formal learning could be beneficial but the actual creation of the page and all attendant and concurrent learning occurred within a self-driven, self-taught environment. By working on their websites at home, much of the learning and skills acquisition Grrls were doing occurred outside of a formal pedagogic environment. There were no set schedules, deadlines, tasks, or assessment criteria. Grrls defined their own process for creating a personal homepage, basing this on examples and information that they could find already on the Internet, and within the family home. They would seek out some guidance in the form of (impersonal) online HTML guides or printed books that they read at their own pace. Most importantly, they were creating their pages with no adult supervision, instruction or input, apart from some rare initial input from a family member.

As a rapidly changing and maturing, relatively new technology, the Internet offered options and opportunity to users. Grrls were connecting, researching and networking with each other and building their knowledge through how they used

the technology; through their media production, self-expression and self-presentation. They were both learning and building relationships, with each aspect enriching the other; as Cross says, “[t]he complexity of DIY and the social relationships that are evolving and developing via on-line contacts/networks cannot be underestimated” (1996, p. 85).

The potential existed for Grrls to build social networks of learning – both by learning from each other’s pages, and by creating one’s own page to add to the network – and networks of social interaction and support. Indeed, through a DIY ethos, Grrls were producing both a media artefact, and a learning text on the path of the next Grrl’s journey to become a Domain Grrl. Creating homepages went beyond a simple produce/consume dialectic of cultural capital, and was transformed into a knowledge sharing, educational and transformative journey of communal learning and self-improvement (Driscoll 1999).

Weber and Mitchell found that “where girls construct websites on their own without direct adult supervision, the learning is informal and self-motivated, embedded in their daily lives outside school, and occurring at their own pace and in their own space” (2008, p. 42), which is evident in the Grrls’ decisions and actions throughout their homepage creation. Learning within a social context of people like them would encourage and increase their learning; Davidson and Schofield discovered that for girls learning online, “the presence of socially similar others was helpful for promoting active participation as well as lessened anxiety about technical learning” (2004, p. 52).

Grrls chose their own methods of learning, and set their own pace, locating sources of knowledge they felt comfortable learning from, be they people, books or websites. Typical Domain Grrl behaviours of learning from each other’s efforts, experimenting and failing and starting again, and improving skills incrementally while producing media at an amateur level, all reinforce the DIY culture that informed and encouraged the Grrls’ growth and exploration.

That Grrls were learning while creating, throughout the duration of much of their Domain Grrl experience, reinforces the role of learning and skills acquisition in how Grrls were able to feel confident in the new online environment they had discovered. They were learning and improving in order to continue mastering and enjoying the space. Papacharissi found that for homepage authors, self-presentation activities are inherently and unavoidably influenced and compromised by the surrounding environment online and the authors' skills in navigating these complexities (2002). The relative success of online self-presentation is dependent upon the author's ability to understand and master the online world, and Grrls did precisely that by pursuing web design knowledge and skills throughout much of their Domain Grrl experience. Once they were introduced to the concept of personal homepages and decided to participate, they would start with an initial attempt at self-presentation on their site. Then they would continually learn and redesign their sites, testing out new designs, some new content, and building off what each other was doing. As they wished to change their self-presentation, they would need different or more mature skills; conversely, as they built new skills, they would try them out in new designs and self-presentations. They became increasingly confident in their capabilities, and were rewarded with a sense of achievement throughout the process.

This dynamic, ever-expanding space of producing and learning brings to life a powerfully symbiotic relationship. Homepages were the building blocks of Grrls' self-expression, and of the community they sought to access. Grrls appealed for connection and communication, while adding their site to the rich and enticing social tapestry online that drew in other Grrls who added their own sites. This supportive framework clearly related to the activities of other Grrls, not teachers or parents, engendered a sense of grassroots creativity. Skills were improved by learning from each other, and the next level of expertise was presented in the form of existing artefacts. The scaffolding was accessible, supportive, and flexible, allowing multiple pathways, whereby Grrls could decide how they wished to proceed, and at what pace. The creators of the scaffolding were also often still

present; they were not some long-moved-on author of an out-of-date textbook, but rather, peers who continually refreshed and extended their own activities online.

The ensuing network of learning, inspiration and connectivity was readily available for perusal and consideration. Other Grrls and their sites could be reached by simply clicking on a link. While the community they operated within presented its own expectations and standards for its participants and their creations, it also offered the tools and standards of practice as accessible and achievable. The DIY model of learning through doing, and through each other's doing, rather than from a single source of truth, a textbook or teacher, drove the creation of a powerful social network for both learning and socialising.

As they continued with their site over the months and years, Grrls built and refined their skills in coding and in design. Amber learnt to control her HTML, creating a unique design less dependent on built-in HTML tricks; "the personal page went from basic with flashing text and lots of graphic to a better laid out site with sub pages and fewer HTML gimmicks" (Amber, survey, 2010). Emily also felt her design improved as her skills did; "it got a lot prettier as I got better with everything :)" (Emily, survey, 2010). Anna experimented with different elements of HTML and CSS to try to create more interesting interactions for her visitors; "I started using tables to make the websites more complex and doing more esoteric things to the links when you clicked over them" (Anna, survey, 2010).

Dorothy, Jenny and Tara progressed beyond HTML and CSS, moving to Personal Home Page (PHP). PHP was a web programming language for publishing more interactive, dynamic webpage content, filtering it from other sources such as databases, and processing it to publish as HTML. As the Grrls continued to participate in the rapidly changing technology of Internet culture, they repeatedly demonstrated their appetite for learning, improving, and continuing to play with and enjoy their homepages.

As Grrls were making design, layout and content decisions for their sites, they were also creating – simultaneously, unknowingly, implicitly – new standards for other

Grrls' homepages. Learning from other Grrls' sites certainly helped Grrls develop their own skills in coding and design, but also could mean trying to do the same designs and styles, rather than possibly branching out and exploring their own ideas. Many Grrls used similarly styled design elements, such as fonts, layouts, imagery and colour schemes. As Grrls connected with each other, social networks emerged, connected through relationships and by a shared experience and ethos of media production. This led to design standards being tacitly set as Grrls learnt from each other and designed their code to resemble what they had seen and liked on other Grrls' sites. As Sarah says, "[a] lot of the styles and fonts and images across the community were very similar. It was kind of eerie really" (Sarah, survey, 2010).

By learning from other Grrls' sites, then, there was an element of learning not just how to code, but how to code to create homepages which emulated or echoed other Grrls' designs. The design work was frequently a method of signifying belonging to the girl homepage movement, using elements of style such as colours, font faces, and page layout. Grrls generally describe an accidental process of coming across the styles that they liked at existing Grrls' homepages, appreciating the design and aiming to create a similar design for their site. Once they recognised similarities across homepages, Grrls began to reflectively consider their own sites by these standards, and try to determine whether they fit in and were accepted. For Sally, "[it] felt like my website wasn't 'good enough' for not being part of the recognized community" (Sally, survey, 2010).

Diana, Dorothy, Lynne and Tara improved their skills, motivated by a desire for social inclusion, by adhering to other people's design standards. Diana felt a definite peer pressure to design a certain way; "after getting 'hosted', I felt the implicit necessity to keep my page snazzy and up-to-date with my peers" (Diana, survey, 2010).

Dorothy learnt from other Grrls' sites, and in the process, learnt how to 'fit in' with their styles. Lynne went through a similar process, but ended up being happy not 'fitting in' and using her improved skills to represent herself more appropriately. Like Dorothy, Tara learnt specific elements of HTML to try and work with what was 'trendy'; "I moved on to frames. I tried to work out inline frames but never got the

hang of it until frames went out of style at which point I switched to php for layout purposes” (Tara, survey, 2010).

The Domain Grrl experience included shared norms and standards of homepage creation, from coding through style and communication tools, where each Grrl’s homepage built upon those that came before her, and provided new learning tools and opportunities for those who would come after her. Grrls’ activities were building social connectivity, and this in itself propels the experience from one of accidental, reactive learning, into a dedicated, supportive environment where learning was intrinsic and enjoyed, and skill was recognised and respected. The DIY nature of these homepages added a dimension of community and encouragement. DIY media production cultures and communities such as zines and Riot Grrrl predated Domain Grrls, and their qualities of self-teaching, a supportive community, and a certain amount of pride in amateur skills, were reflected in the Domain Grrl culture.

6.6 The media they produced: Domain Grrls’ homepage content

Grrls predominantly chose to publish content that they had produced themselves: writing (poetry, biography, journal, “rants” or prose) and art (referred to as literally “art” or as photos or drawings). All Grrls included textual content of some sort on their page – short bios, basic information – and ‘written content’ here is used to refer to additional content of a specific type which Grrls explicitly selected to publish on their homepage, such as poetry. Written content was more popular by far, published by the vast majority of Grrls, while only some Grrls also published artwork, predominantly used in conjunction with written content; only one used her homepage expressly for artwork. Poetry and journaling were most popular, with eleven and nine Grrls publishing these content types respectively. The motivations for choosing what to publish reflected a mix of preference and talent (whether real, imagined, or aspirational). Deciding to publish it on their homepage was also driven by particular and personal factors. Some Grrls saw their homepages as a location for

displaying their creations to the world, similar to a gallery, while others felt their page could act as a venue where they could express thoughts and feelings, in the absence of a similar locale in the offline world.

6.6.1 Written content

As a form of self-expression, personal writing is well-established (Bourdieu 2000; Conway 1999; Kearney 2006), reflecting Western culture's "new conceptions of the subject as rational, inquisitive, and reflexive" (Kearney 2006, p. 144). A practice that echoes previous generations, it also foreshadowed the rise of journaling sites such as LiveJournal, blogging and livestreaming, through SNSs such as Facebook, Path, Twitter and Foursquare. The idea of creating and publishing written content for a public and by doing so, expressing the self as a cohesive whole, is echoed in later research by boyd; "[bloggers] are consistently producing content that they are passionate about, directed at an audience that they feel can best support them" (2005, p. 7).

Not only would Grrls be familiar with the concept of personal writing, the format was also relatively easy to use on a homepage. Unlike artwork, text-based content could be authored directly in the online environment: entered into a text entry field on a page creator tool, copied from a separate file (such as a Word or Notepad file) into an HTML file, or even typed within HTML code as a combined act of coding and writing. Even poetry, which requires some degree of control over layout and display, also required little more than the ability to insert line breaks, and HTML also included an array of text formatting options which could be played with, such as colour, size, italics, and superscript.

As publishing new text content could be as simple as cutting and pasting from one file to another, replicating the format of the traditional offline journal online was easy, and therefore offered a quick way to create a structure and form for the initially undefined personal homepage. As Karlsson argued in her analysis of girls' blogs and the characteristics of regular updates:

autobiographical storytelling is necessarily an act of fabrication, a verbal and visual construct made up of selection, arrangement, aesthetic concerns, and, importantly, an attempt at assessing the Web environment the writing is connected to and attracting a loyal audience (2003, p. 222).

Written content allowed Grrls to bring their feelings and thoughts to life word by word, using linguistic design and website design to craft the message – to fabricate it, as an act of creation and not necessarily dishonesty – and in doing so they could explore any topic, any fear or hope they had, as long as they could describe it.

With few examples or templates to work from, when Grrls were creating text content and using layout, design and content cues to frame it as a specific type of writing, they were experimenting with techniques not yet formalised or easily learnt. Yet Grrls did not necessarily recognise this, even retrospectively; Sarah felt that a journal was in itself not a creative endeavour:

I wanted to keep a journal, and when I started mine in 1998 there weren't very many websites that were mainly journals. I'm not creative enough to do anything other than just a journal of my own thoughts. (Sarah, survey, 2010)

This perspective, shared years after her Domain Grrl experience, was probably coloured by the details of her experience; existing friends and family discovered her homepage which resulted in the loss of friendships and confidence. Yet she was defining a new way for self-expression without many templates or structures to work from, and was being creative simply in finding a way to frame her text content appropriately.

6.6.2 Visual art content

Art was generally less popular than written content, with roughly a third of Grrls publishing the former, and most Grrls publishing the latter. Some Grrls singled out

two particular forms of visual art: photos and drawings, including some self-portraits. Publishing visual art on a personal homepage was not as easy as simply copying and pasting written content. Grrls had to organise a digital version of the item, be it a photo or a drawing, and contemporary imaging technologies like scanners let Grrls do this within their own home. After digitising, they then had to transfer the image to the homepage server and create a reference to it on the homepage. Publishing visual art online meant first creating it offline, whereas written content could be created on the computer, and simply copied and pasted to the site. Creating written content was more popular, perhaps because creating a digital version – rather than a paper-based version that was then digitised – was less complicated and therefore easier to do. Similarly, because HTML was predominantly oriented towards text content, it was easier for Grrls to visualise and create written content rather than transliterate visual artwork to a digital format and online display.

6.6.3 Fandom content

Grrls who were maintaining fandom sites published information that they felt would be valuable to other fans, who they presumed would be their public. *Full House* fan Tara felt her fandom site “was mostly for other teenage fans of the show” (Tara, survey, 2010). *Buffy the Vampire Slayer* fan Grace was passionate about publishing and sharing fan information on her fan site. Her journal at LiveJournal was intensely personal, and not for consumption by offline friends or family (using LiveJournal’s inbuilt tools, she could restrict access to her content only to other LiveJournal users she selected), and her fan site was staunchly impersonal and purely informative. She describes the motivation for her *Buffy the Vampire Slayer* fan site; “I wanted to create a place where I could write all the information I knew and help people who wanted to find out about the topic (pre-wikipedia)” (Grace, survey, 2012).

Some Grrls were initially motivated to create their fan sites to fill a void online, and offer useful information to the fans that would be looking for it. Talking about fan sites, Tara explained that she “noticed there were not many good ones online, most

of them were poorly made and had the same content. It was a chance to show off my skills” (Tara, survey, 2010). Other times, Grrls wanted to share their fandom-related artistic creations, such as manga (Japanese animated art) fan Catherine who “wanted a place where I could upload my drawings and show them to people” (Catherine, survey, 2010). First going online in Hungary at 13 years of age, and creating her homepage at 15, Catherine struggled with exorbitant Internet access rates and difficulties in even accessing the Internet at all. However, her homepages and Japanese manga fan-sites were extremely important to her, as they allowed her to connect with other fans, and she had not found anyone offline with similar interests.

6.7 Outcomes of learning: pride, confidence, and lasting IT skills

Coding by hand, letter by letter, demonstrated the confidence and expertise of the coder; she could write it without the aid of a dictionary, a textbook or a piece of software. She typed it naturally like she typed her native, human language. Proving her dedication to the craft, by demonstrating her willingness to totally immerse herself in the *lingua franca* of the Web, was a way for a Grrl to feel like she was a geek. Grrls recognised this, pointing out that writing code by hand, and in simple tools such as Notepad, made them feel “genuine” (Ashley, survey, 2010) or even entitled to “brag” (Diana, survey, 2010). As Lynne described her increasing confidence and skills in coding, she explains; “I eventually started to code raw in NotePad, often from complete scratch/rote memory, just because it made me feel hardcore as a programmer” (Lynne, survey, 2010).

To use such a simplistic program and still create complex code is more impressive than to use a powerful editing tool that reduces the workload of the actual code creation, regardless of the sophistication of the end product. Four Grrls also recalled how proud they were of their achievements at the time; during a period where the majority of their peers were not creating their own homepages, Dorothy could experience “the elated feeling of looking at your website, browsing it, and thinking

‘wow, I made this’” (Dorothy, survey, 2010). Lynne enjoyed “[showing] it off in a fancy way” (Lynne, survey, 2010) and Tara “felt like I was good at something” (Tara, survey, 2010). As Lynne describes so evocatively:

having a slice of the Internet to oneself was like moving out of your parents’ house at an early age -- “Wow, I love what you’ve done with the place! What does this cost you? I can’t even begin to think of how I’d get something like this to happen”. (Lynne, survey, 2010)

Danielle, who was determined to build her design skills, summarises her sense of pride in what she achieved over time:

I had this skill, this sort of power and knowledge that at the time, not a lot of people had. I could create these beautiful images and websites and it was like magic! It was my very own, and I loved reveling in the dorkiness and beauty of it. (Danielle, survey, 2010)

Being able to write code by hand was not simply a status symbol; it also exposed Grrls to the inner rules, logic and working of programming, introducing them to complex concepts such as object-oriented programming, modularisation, and nesting. As Grrls became proficient in HTML, they sometimes integrated other languages – mostly CSS, JavaScript, and PHP – to create robust, mature code with more sophisticated components such as animated menus, pop-up messages and dynamic content. Building skills in HTML could also be a crucial first step towards a longer-term interest in IT, if they so desired; “I firmly believe it got me the career I had today. It made programming a lot easier” (Jenny, survey, 2010), wrote Jenny, who became a computer scientist. At the very least, they had taught themselves a skill that, even if actually an entry-level programming ability, was well regarded at the time.

Half the Grrls, when asked to identify the long-term benefits of having their homepages, mentioned the skills they gained. “I have the Domain Grrl experience

to thank for all those feathers in my cap” (Lynne, survey, 2010) said Lynne, as she progressed through multiple majors at college and job applications for roles including retail and office work. Some of these Grrls also drew a direct correlation between the skills they gained as Domain Grrls, and their employment history and opportunities. They credit their Domain Grrl experience with building their technical skills, business skills, and providing them with recognised abilities that they can include on their resumes. Jenny believed her Domain Grrl experience led to her job as a programmer at AT&T, and felt that programming was easier for her as she could draw on that experience with HTML (during her Domain Grrl experience she also progressed beyond plain HTML to learn the more sophisticated language PHP to create her website). Lynne listed her skills on her resume, from a words-per-minute typing speed, through to knowledge of HTML, CSS and the graphic editing software Adobe Photoshop.

During data gathering for this project in 2010, when there were many different languages in use for coding webpages, being able to code HTML was no longer seen as a strong technical skill – as Diana reminisced, “it’s really not the prized skill that it once was” (Diana, survey, 2010). However, even if fluency in HTML was perhaps a more fleeting qualification, roughly a third of the Grrls also developed more long-lasting business and technical skills, more relevant to the professional sphere. In addition, as Grrls learnt to understand the Internet and the web, they found themselves comprehending other new technologies faster. Nadia, who ended up working professionally in web design, credited her Domain Grrl experience with giving her valuable knowledge of “websites, design, writing - even marketing, strategy & business thinking” (Nadia, survey, 2010). The tools and languages used at the time may no longer have been relevant, but the ways of thinking certainly were. Isabel, focused on the design side of her Domain Grrl experience, went on to become a graphic designer; “my knowledge of the Internet and webmaking (although now outdated!!) still seems to help me learn new programs and be better equipped in the business world” (Isabel, survey, 2009).

Dorothy, who freelanced periodically in design, similarly evoked the notion of soft, somewhat professional skills – or at least skills attractive to employers:

web design definitely improved my writing capabilities, along with everyday use of logic and other concepts that most people don't really do unless their career involves it. (Dorothy, survey, 2010)

Internet technologies and website creation tools and standards continuously evolved and the Grrls' HTML skills became outdated. Even Isabel, who was passionate about the design of her homepage and ultimately became a graphic designer, fell behind the times; "i got busy in college, html and web design evolved quickly and i didn't keep up" (Isabel, survey, 2009). As Jenny pointed out below, technology changes had presented new hurdles for girls to overcome to become proficient in current Internet technology. This does not need to inhibit self-expression – more sophisticated platforms simplify the publication process dramatically compared to personal homepages. However, Jenny argues that the concurrent skills acquisition which occurred during the Domain Grrl experience would now be more challenging, requiring significant commitment, learning and depth of knowledge, more than just Notepad and the HTMLGoodies website:

Either you have to be a programmer or use a content management system and never have to write a single line of html. If you took the same group of girls from back then and placed them in today's internet world, I think many of them would just be bloggers who make pretty graphics for their blogs. The programming part of web development has become complex and intimidating. I'm a web developer for a living, yet I haven't touched any code in WordPress for years because there's such a steep learning curve that I don't have time for. There's no more fiddling around with b2 code, it takes a much bigger commitment. Just to modify a theme in WordPress requires much more work. Css files have gotten ten times bigger. If you want to be a web developer these days, there

are more resources available, but it's also much harder. JavaScript alert boxes don't cut it anymore. You need to learn whole frameworks. But this also makes it a more valuable and worthwhile skill. I hope girls will recognize this and continue to put in the effort, but we had it easier. (Jenny, email correspondence, 2015)

Grrls' nostalgia plays a strong role here; during the Domain Grrl era, people could create a personal homepage using pre-fabricated templates and simplistic formatting options supplied by free homepage providers. They did not need to learn any HTML; instead, they chose to. Without conducting a detailed comparison of how girls now learn coding through their self-publication online, it is worth noting that although the simplicity of early versions of HTML may be lost, that does not guarantee that girls now face a greater hurdle to technical proficiency in any digital publishing platforms (e.g. Facebook, Wordpress, Tumblr, Instagram, Snapchat).

6.8 Chapter summary

This chapter has focused on the theme 'skills', positioning the Grrls as media producers by reviewing previous research into youth and media, and arguing for the Grrls' experiences to be seen as a continuation of DIY media practices, such as zines. Domain Grrls built their webpage creation and design skills, and their homepages, as DIYers who pursued their interests, taught themselves, experimented, failed, and continued, and learnt from each other's creations. At a time when website authoring skills were rarely taught, not widely known, and related to constantly evolving technology, Grrls actively cobbled together the information they needed to continuously learn and evolve their skills over time. Situating this research within prior research which focused on the content of girls' homepages, this chapter also reviewed what Grrls published on their homepages, noting their predisposition towards written content, and similarities in how they curated and selected what to publish. Furthermore, as personal homepages included links to other Grrls' sites, and as social networks were formed through communication and interaction, learning networks were growing simultaneously, with Grrls finding inspiration from

each other's sites. The following chapter discusses the outcomes of the Grrls' skills within the theme of connectivity; whether the homepages they created met their hopes and expectations of safe spaces.

Chapter 7 Domain Grrl connectivity: building counterpublics in safe spaces

7.1 Introduction

Having considered the Domain Grrls as individuals and producers in previous chapters, this chapter now considers them as members of social networks, and investigates the connections between them, addressing the final theme from coding, 'connectivity'. This chapter argues that the fundamental outcome of the Domain Grrls' homepages was the creation of safe spaces for Grrls' self-expression, with a relevant audience. With the skills they had built, Grrls were able to create websites and connect with the authors of others, building social connectivity and utilising technology and tools to build friendships. Together, these activities created a type of public space online, though one which was often experienced as more private or intimate. This chapter begins by discussing the concept of safe spaces and why they are relevant for girls broadly, and the Grrls specifically. It then argues that the Internet was an opportunity for Grrls to create these spaces, and in doing so, to instantiate a counterpublic; a public of specific strangers, welcomed within a safe space. Feedback from this counterpublic performed the invaluable role of helping Grrls review and consider the work they were undertaking as adolescents developing themselves (Stern 2008). This chapter then describes and discusses the Grrls' behaviours and mechanisms which created the social connectivity that built their counterpublics.

7.2 Safe spaces for girls in an increasingly restricted world

7.2.1 The public sphere and alternatives

As girls navigate adolescence, their self-expression may be restricted, due to the stringent requirements and narratives presented to them through mainstream channels. Girls are presented with carefully modulated and managed narratives of girlhood and adulthood in popular media (Driscoll 2002; Palladino 1996), such as how “commercial teen magazines ... present consumerism, appearance improvement, and heterosexual romance as the primary activities in which girls should be interested” (Kearney 2006, p. 153). If they challenge the life narratives promoted to them, such as by exploring non-heterosexual sexualities, non-binary gender identities, or opting out of standard education pathways, they are at risk of being surveilled, policed, governed, and reprimanded by parental, institutional and educational powers, and even their peers (Chesney-Lind & Irwin 2004; Fyfe 2014; Harris 2004b; McRobbie 2004). For girls associated with ‘other’ ethnicities, religions, or from a less privileged socioeconomic background, this risk is substantially greater, even as they simply go about their lives (Rentschler & Mitchell 2014). Ultimately, if they are to express themselves in the manner, with the tools, and in the site of their choice, they will need access to an environment that allows this – and to do so without being watched by figures of authority who may intervene and prevent access.

For media production skills to be put into use, the right venue is required, and the opportunities for self-expression, self-exploration, experimentation, resistance and discovery which such spaces provide, such as those offered by writing zines (Chu 1997; Leonard 1998), are invaluable for girls. As discussed in Chapter 4, self-expression in a safe space provides girls with the opportunity to develop their own voices with few fears of repercussions from those with institutional power in her life. Girls can have their say, expressing thoughts, ideas and opinions, exploring newly discovered aspects of life and the world. Through these actions a girl can

refine and improve her ability to convey her thoughts to an audience, and in doing so, become a proficient orator and storyteller (Rodriguez 2001), “claiming the right to speak” through the “idea of authority implied in that of authorship” (Dyer 1991, p. 196).

Building further on this framing of self-expression to consider the space in which it may occur, youth studies researcher Henry Giroux sums up the broad requirements; “providing the conditions - institutional, economic, spiritual and cultural - that allowed them to reconceptualize themselves as citizens” (1998, p. 48). Narrating one’s self, during adolescent years where the individual struggles with competing and conflicting demands and forces, gives back a sense of control over one’s life and destiny. Writing about autobiography more broadly, author Jill Kerr Conway (1999) recognises similar civic implications, seeing acts of self-expression as a method of an individual recognising their agency, and then being able to develop the reflexive gaze required to assess the morality of their behaviour. Danielle felt newly entitled and allowed to create a space:

I remember those days fondly, and I think it was good for me to feel like a part of this little world of self-expression. It taught me that it's ok to explore your own thoughts and feelings, and create a website all about yourself. It validated me as a teenage girl, that my emotions were something worthy of discussion. (Danielle, survey, 2010)

Space for self-expression leads to some degree of self-reflection (Stern 2008), especially within a space where socially sanctioned dialogues of femininity, girlhood and youth are only apportioned as much relevance and respect as the girls themselves choose to give. This self-reflection can lead to an acknowledgement of agency, again, on girls’ terms rather than as dictated to them through the socially approved, mediated spaces of engagement and self-expression that curtail and manage girls’ narratives. Anna searched online for people through whom she could discover a social and cultural world larger than that in which she felt trapped offline:

Since I was in the suburbs I really didn't have anywhere to go besides the Internet so I started creating websites from my house when the majority of people my age had started to go to raves. I wanted to meet people who I could relate to and felt a need to connect with something greater than the box I was stuck in. (Anna, survey, 2010)

As sociocultural forces can disenfranchise and deprivilege girls, and simultaneously devoice them, safe spaces present a framework for creating a site where their voices can be heard. The 'safe space' concept developed as a venue where traditionally disenfranchised could be safe, and speak:

In feminist, queer, and civil rights movements an understanding of safe space has developed that is associated with keeping marginalized groups free from violence and harassment. (The Roestone Collective 2014, p. 1346)

'Safe space' is referenced continually throughout research into girls', women's and children's media production (Bortree 2005; Senft 2008; Sinor 2005; Tiernan 2002) as a site where self-expression can occur without fear of repercussions. The threat of violence from which traditional safe spaces protect their inhabitants, is manifested as the threat of punishment, medicalisation, or harassment that would exist in daily life – from family members, educational systems, law enforcement, the medical profession, psychiatry, and any other external force seeking to influence or control their life. Safe spaces offers girls the opportunity to express themselves, and often to do so within a space of one's own making, to one's own specifications, and to fit one's needs. Stern (1999) argued that girls were using personal homepages as safe spaces to speak. Leonard (1998) saw zines as safe spaces for girls to participate in a broader public. Reid-Walsh and Mitchell (2004) hearkened back to the role of safe spaces to allow women's writing in Virginia Woolf's *A Room of One's Own*. Writing about girls' blogs, Katie Davis (2009) recognised adolescent relationships as potential safe spaces for identity exploration.

Contextualising the safe spaces Grrls created relies upon the concept of the public sphere, at whose borders such spaces could exist. In the second half of the 20th century, sociologist and philosopher Jürgen Habermas set his original ideal of a public sphere up against the debilitating impacts of mass culture as he saw them; the corrupting confluence of the private and public, into a meaningless mass of individualised expression into a vacuum governed by hegemonic forces of authority (1989 [1962]). Habermas argued that the ideal public sphere "mediat[es] between state and society, a sphere in which the public as the vehicle of public opinion is formed" (Seidman 1989, p. 231-2). The concept of the public sphere is readily deployed in debate and critique as a key site where people can express themselves and their opinions, and find a social and political voice. Turning to leading counterpublic theorists, Michael Warner defines it as "the social space created by the reflexive circulation of discourse" (2002, p. 62), and Nancy Fraser summarises it as an arena of "discursive relations" (Fraser 1990, p. 57). The idealistic public sphere of Habermas and its unfettered flow of thoughtful critique of the state has long been challenged by theorists and researchers, and contemporary debate instead depicts a reality of a contested, unbalanced, consumerist space embodying limited democratic ideals (Calhoun 1992; Fraser 1990).

Over time, other theorists have identified new forms of public, such as counterpublics (Fraser 1990; Warner 2002), heterotopias (Foucault 1984) and border spaces (Harris 2004b), and characterised the public sphere as a more fragmented domain of discourse and action (Lunt & Livingstone 2013). The active, engaged citizen of the traditional public sphere was specifically challenging and debating the institutional governance of their society, whereas these new spaces allow for other foci of critique, such as challenging the governance of one's own self. Girlhood researcher Anita Harris (2004b) argues that border spaces can illuminate how girls are politically engaged, by acknowledging how their political sphere may be vastly different from those of others in more established settings such as government and education. Rather than fixate on the traditional public sphere, the notion of border spaces put forward by Harris counters that participants, such as girls, are in fact engaged members of society, but that they

themselves set the context and boundaries of this engagement, and the society within which they wish to participate. As a kind of public space on a micro scale, border spaces are “spaces of withdrawal and exclusivity among interest groups” and “subordinate groups” (Goode 2005, p. 46). Border spaces are therefore defined in opposition to, and subversion of, a hegemonic form of public space; “[b]order spaces allow a reconfiguring of what constitutes critique and where it should be articulated” (Harris 2004b, p. 164).

Tempering the ‘safe space’ concept with ‘border space’ helps resist the ability for a traditional safe space to be exclusionary and controlling – segregating and even silencing. As the Roestone Collective explains:

setting up safe/unsafe spatial binaries can enact or reflect masculinist social control to regulate women’s use of and movement through different spaces. While some forms of safe space provide transformative interventions into threatening spaces, others are highly controlled, separatist, and act as sites of resistance precisely for the sake of safety. (2014, p. 1349-1352)

‘Border space’ evokes a literal location of this space as a public site which is hidden from view, on the fringes, and that its location of being largely invisible, makes it safe for girls. While ‘safe space’ is used consistently in this thesis to align with existing discussions in academia, it should be understood as also drawing upon the dialogue-enabling nature of border spaces.

7.2.2 Girls ‘at risk’: Increasing regulation of girls and their spaces

Throughout the twentieth century, researchers and theorists were developing the concept of ‘adolescence’ and its position in Western society, as discussed in Chapter 5 (Erikson 1993 [1950]; Hall 1904; Piaget & Inhelder 1958). As the adolescent became identifiable, there was a concurrent move to restrict their movement and behaviour. Young people’s freedom to move around outside the home, for play and

socialising, as children and as adolescents, was increasingly constrained. Organised movements such as Boy Scouts and Girl Guides emerged to help structure and oversee young people's free time, while fencing in playgrounds helped limit children's activities at play, and relatively new sites of public engagement such as shopping centres became increasingly inaccessible (boyd 2014; Dixon & Weber 2007; Harris 2004b; Livingstone 2005; van Manen 2010). Young people faced increasing difficulties in congregating in a public space without the involvement of authority. Girls and boys were also encouraged to remain more in the private sphere of the home, sometimes driven by zeitgeist social fears which sought to protect them from crime and danger (boyd 2008). As public space was rendered increasingly inaccessible to girls and boys, the spaces they were permitted to access were increasingly controlled as a pseudo-public space for youth, "refigured as sites for civic education, adult surveillance, and commercialization" (Harris 2004b, p. 151).

The home becomes a negotiated site, and its role depends on the particular nuances of an individual girl's situation and life. It can be a site that is easily accessible to girls, where they may even have their own bedroom as a site for private engagement with social networks, media, and technology. As they have less access to public spaces external to the home, "the home continues to be a site for both technology-based work and leisure for young people" (Facer et al. 2001, p. 101). The home is also a site frequently under direct control of their parents or guardians, who are also often figures of authority in the girls' lives. Girls' leisure time, where the potential for adolescent experimentation is greatest due to increased resources (physical, metaphysical and psychological) being available for them, is constrained and managed within a domestic environment. As Driscoll explains, "[girlhood] is represented across various forms of girl culture as a process of containment" (2002, p. 257); girls experiment within these boundaries, and test pushing beyond them, but it is a defining feature of girlhood – operating within a defined and constrained culture.

This containment is practised in different and negotiated forms, such as the development of 'bedroom culture' as a physically bounded site for girls' maturation and self-discovery. This is not to dismiss the bedroom culture that girls do develop, as they create a space imbued with valuable cultural meanings, and where they may create zines, phone friends, chat online, create music, consume magazines, and any other form of engagement with media. We must however recognise the experience of boundedness. Harris links the regulation of self-expression to the reduction in spaces available to girls (a practical manifestation of Driscoll's 'containment'), as they spend increasing amounts of time in school and the home, and therefore in locations where they can be easily monitored (Harris 2004b). The private and internal emotional and psychological life of interiority which ideally would be under the individual's control, is instead at risk of being monitored and governed.

Self-expression is considered acceptable with only institutionally sanctioned methods and messages, as "the privatization of the public is accompanied by the publicization of the private" (van Manen 2010, p. 1024). To facilitate scrutiny, girls are encouraged into a life of openness, communication and freedom, incited "to live large and speak out" (Harris 2004b, p. 151). However, this form of self-expression is highly structured and managed, with feedback and recriminations deployed as required through both casual and formal structures such as community, religious and legal groups and representatives. The space this can occur within is the problematised private sphere of self-exploration where the nominally public and private collide (Goode 2005). Fully explored acts of self-expression may include girls expressing dissent or dissatisfaction, while what is desired by a hegemonic society of its girls are expressions of approval of the life choices and narratives made available to them, and avowals of intended success in pursuing these paths.

Girls' parents, teachers, doctors, judges, and other institutional figures engage in a narrative of girlhood which justifies and demands oversight that facilitates control of girls' self-expression – the narrative of the girl 'at risk'. This theorised, abstract risk is cast as "a psychosocial ... 'crisis' faced by girls as they entered adolescence" (Ward & Benjamin 2004, p. 15), where hormones, sexuality, body image, self-

esteem, and popular culture exert increasing influence on girls. A recurring trope in popular discussions of girlhood (Pipher 2005; Sax 2011), being 'at risk' is to risk deviating from the expected narratives, choosing unacceptable alternatives or being assaulted, harassed, or worse.

This narrative reinforces the portrayals of adolescence and girlhood by the popular media by positioning them as irrevocably linked to a notional adulthood, and as the only path to successful adulthood. Harris (2004b) argues that it emerged from analyses of modern (and postmodern) society where the success of girls in navigating the complexities of adolescence's challenges – emerging sexuality, increased work and study opportunities – has been taken to represent the success of society in navigating the rapidly changing power structures, lifestyles and implications of 'modern life'. "[Y]oung women [are presented] as a metaphor of social change" (McRobbie 2004, p. 11), and their choices and goals in life are scrutinised closely to ensure they align to a successful realisation of this change.

From *Seventeen* magazine exhorting girls in the 1940s to "learn how the political system worked" (Palladino 1996, p. 90), girls have been directed while also being protected and surveilled. Girlhood researcher Lynne Edwards (2005) analyses newspaper articles about girls and Internet crime, and reports on an all-pervading theme of girls needing to be protected from multitudes of nameless dangers online. Girls are not seen as having full, conscious decision-making abilities and Internet literacy skills, but more as accidental, ignorant and helpless visitors into the online world, and hapless victims of Internet crime ('Girls' studies forum and book review' 2008). Feminist criminologists Meda Chesney-Lind and Katherine Irwin (2004) researched the entrenched discrimination non-white girls in America can encounter, being disproportionately likely to be characterised as 'at risk', and the ensuing institutionalisation they face in supposed attempts to 'rescue' them from their lives.

The girl herself is what social horrors, predators and abuse can damage, and therefore it is to the girl that these discourses turn for evidence of improvement, as she is disingenuously positioned as an empowered, rational individual capable of

exercising agency – who has presumably exercised it unwisely by putting herself at risk:

the strategies that researchers recommend have, in many cases, been altered from work that implicated adults and institutions to work that centers on the individual girl as a site of change (Ward & Benjamin 2004, p. 18).

Just as the girl's life choices are positioned as the site for potential success of 'modern life', her failure points to the impending failure of this society – and guiding her back to the path to success is the only acceptable solution to the existential threats to a way of life.

As the girl is seen as the 'site of change', less attention is paid to the discriminatory and disempowering external forces that may have restricted a girl's life choices, or to the lack of true choices available to a girl. Broader political or cultural action is eschewed for governance directed onto the girl herself. The discourses of governmentality that are imposed upon girls are rendered differently for girls of different backgrounds. They may be expressed as psychiatric treatment, provided in the girl's home rather than through a hospital or prison, for girls from families of financial and legal means, and expressed in institutionalisation and criminalisation for girls with less resources to draw on (Harris 2004b). In all cases, the girl is still conceived of as the site of failure, and the site where some form of improvement must be realised.

Additionally, the pressure they find themselves under to embody this metaphor, as they stand in for the success of their nation and their generation (Jowett 2004), is realised in the purposeful and goal-oriented management of their time and space by figures of authority. Their self-expression must be monitored and managed not only as a form of protectionism (protecting the girls from social ills and protecting both the girls and their society from their own potential, psychosocial power, their sexuality), but also to ensure they progress down the safe path of success through which they will demonstrate the validity and entitlement of broader society.

Providing girls with the freedom to choose venues and methods for creativity and self-expression that may not be officially sanctioned increases the risk that they may explore 'inappropriate' narratives, or express a thought or belief that contradicts the status quo and leads to 'deviance'. Safe spaces created and managed by girls fundamentally conflict with the framework of the 'at risk' perspective.

Girls are expected to express satisfaction with the options being presented to them in the pages of a magazine or in the job discussions at school, thereby confirming the success of this society which promotes "self-inventing" (Harris 2004b, p. 9). Self-inventing, insofar as girls may invent themselves according to these prescribed narratives, is positioned clearly as a girl's responsibility, albeit one which institutions and adults may interfere with as deemed necessary to keep the girl on a 'safe' path. The girl represents social change, and therefore must perform that change through appropriate and acceptable methods.

Self-expression unfettered by mainstream discursive tools of surveillance and management can present possibilities for girls to discover, consider and decide upon alternative choices for their lives, and this is actually the risk which the 'at risk' narrative tries to address; locking down opportunities for self-determination in case the path chosen is not officially sanctioned.

7.2.3 The glass bedroom: crafting safe spaces in the public sphere online

An alternative space on the edge of approved spaces and behaviours, the Internet offered girls a venue for debate, discussion, critique, engagement and escapism. Stern found that the Internet offered girls "protected spaces for reconfiguring actual, possible, and ideal selves in various arrangements, all of which are central to their self-image" (2008, p. 108). These activities are more likely to be managed, governed and structured in the offline and officially sanctioned spaces traditionally available to girls (Driscoll 2002; Kearney 2006). The Internet of the Domain Grrl era, contrastingly, provided mechanisms and options for girls to express themselves in a public setting (Kearney 2007). Although, as will be discussed in Chapter 8, these safe

spaces were not impermeable; Grrls could not be certain that only the desired people would find them and engage with them. Mediating technologies such as the Internet can facilitate some delineation of space to provide a degree of safety and certainty, but the safe space still exists within the broader context of the Grrls' lives, and a state of constant negotiation with the forces at play within that context. As a negotiated safe space, the Domain Grrl experience offered potential, but did not guarantee success.

Before the arrival of mainstream Internet, youth studies focused on other sites of young people's media production, in particular the personally created interior design and utilisation of the bedroom. As mediating technologies became more effective at sharing media artefacts created by young people, self-expression expanded beyond the four walls of the bedroom. Zines are created, submitted to 'distros', received in the mail and read; phone conversations with schoolmates and friends can be carried out; fan magazines cut and pasted together; and personal homepages built – activities which “[provide] some room for overregulated young women to be in the world without leaving their homes” (Harris 2004b, p. 162).

The Internet collapses geographic barriers between the bedroom and the outside world, as a computer brings the outside world inside the bedroom or other domestic spaces (Kearney 2007; Robards 2010; Weber & Weber 2007). Girls' rooms may be seen as sites where they can be protected from – or restricted from – the perceived risks of public visibility and engagement, but in fact, girls are adept at utilising the resources at hand to communicate with the world beyond their door, and at connecting with that world in a very public way, if so desired. Kearney points out that “many turn to their bedrooms as a haven where they are safe from surveillance and ridicule” (2007, p. 128).

The permeability of online spaces, combined with the physical experience of privacy often experienced by girls using the Internet from their own bedroom, delivers the “metaphoric construct” of the “glass bedroom” (Pearson 2009) or “digital bedroom” (Weber & Weber 2007, p. 64), a space of private activity with a public scope. All Domain Grrls used computers in their home when working on their homepages, but

only four had their own computers in their own room, which, as I found, did not actually translate into any enhanced or more rewarding experience. The bedroom played a smaller role in the Grrls' experiences, yet the practice of producing the media artefact of the personal homepage, and then participating in communities and building social relationships, required a sense of security that the home itself provided. Mandy demonstrates this clearly through her choice to use her home computer, even though her school had good quality computers:

My school had great (for the time) computer resources. There were more computer/Internet restrictions at school than at home. My mom didn't care how much I went online as long as I kept my grades up and wasn't doing anything inappropriate. [...] not enough free time at school [...] and also I didn't want my peers to know I had a website. (Mandy, survey, 2010)

Even without the restrictions imposed on Internet access by her school, it is unlikely Mandy would have voluntarily exposed her homepage creation to her peers.

For the Domain Grrls, the 'glass bedroom' concept can be expanded further to incorporate the domestic setting as secure compared to the main alternative option for the Grrls: school computers, which only two Grrls used, Sarah and Karen. Online at 14 and publishing her first site at 15, Karen wrote some fiction, published some "angsty" writing (Karen, survey, 2010), and maintained her site for 6 years. When describing her activities online, Karen was terse, cryptic, and simplistic. For example, in response to the question "How did the content and style of each website change over time?", she responded with "yes" (Karen, survey, 2010). However, she was passionate about the friends she made, many of whom she still spoke to on the phone regularly, years later. She used home computers as well, and Sarah stopped using school computers after getting into trouble with a teacher who suspected her of uploading 'viruses' to the school network:

I got in trouble in my 8th grade computer class when my teacher caught me uploading something to my Angelfire directory.

Apparently that means "virus" or "hacking," so she felt it necessary to watch me constantly for the remainder of the semester. And seeing that I had dialup at home, which would boot me off at regular intervals, being online at school was my ticket until we switched to DSL in 2000. So I would say I didn't have enough access until 2000, and from 2000-2003 I had perhaps TOO MUCH access -- felt like I was on there every waking minute. (Sarah, survey, 2010)

Livingstone (2003) argues that this is an identifiable trend in how girls and boys behave within the home, not simply the bedroom. The home becomes a site for both production and consumption of media, and of different frameworks for participating in media, such as education and leisure. Livingstone also warns that this is not simply an expansion in freedoms experienced by girls and boys at home. Issues surround the emergence of a home that is rich in media that both isolates and engages, and where leisure becomes a personal, mediated engagement with media and culture. The potential for freedom of self-expression with domestic media production must be weighed against abandoning the quest for far greater freedoms that the offline, public sphere offers to privileged adults.

Similarly, acts of media production need to be differentiated according to their likelihood of acting as a platform for experimentation with self-expression, and their propensity to establish a relationship between the producer and media which is characterised by externally imposed frameworks such as consumerism (Livingstone 2005). Youth media researchers Shanly Dixon and Sandra Weber see the risk of households degenerating into Stephen Kline's "media saturated spaces" (Dixon & Weber 2007, p. 23) with all the attendant dangers such as "the violence of gaming, the cyberstalking in the chat rooms, the insistence of porn merchants" (Kline 2004, p. 141). As socially inscribed media tools, technologies and practices become ingrained in the domestic experience, their economic and political characteristics subsequently become embedded in young people's lives. The inspiring and

transformative nature of play gradually becomes compromised by the input of commercial, regulatory and supervisory interests.

However, young people are not simply passive consumers of a heavily marketed and circumscribed culture (Kearney 2007). They are capable of appropriating digital media to refashion it for their own purposes. Young people are particularly affected and constrained by the model of political consumption, as they “are constructed within the discourses of the global media economy as an undifferentiated mass of consumers” (Facer et al. 2001, p. 93). Consumption and production are not irrevocably separate, competing or conflicting, either, nor is one inherently more noble or empowering; young people consume, produce, and are consumed and produced simultaneously through media narratives and channels (Weber & Mitchell 2008). In fact their consumption of media products is not naively acquiescent, but mediated both by their own internal thoughts and the reality of their lives, while also at risk of being influenced by powerful media constructions of youth as consumers (Kearney 2006; Livingstone 2005; Shade 2007; Weber & Mitchell 2008; Willett 2008). This ‘active consumption’ of digital products and technologies empowers them with the ability to acknowledge, appreciate and adjust to these complexities while still achieving significant exploration of their options for self-expression.

Kearney cautions against allowing the dichotomy of public and private to persuade us that girls seeking better spaces for speaking and listening are “retreating to private spaces”; instead, as she argues, “they are reconfiguring such sites to create new publics that can better serve their needs, interests, and goals” (2007, p. 138). Notions of public and private are reconfigured and repurposed, as young people consider concepts including control, ownership, visibility and secrecy (boyd 2010; West, Lewis & Currie 2009). Danielle, a dedicated coder and designer who lived in a small town, did not tell any of her friends or family about her homepage; “I liked the fact that this “thing” was my very own, and no one in my real life knew about it. I felt like it was my special secret” (Danielle, survey, 2010). She enjoyed being able to

continuously customise and adjust her homepage, and was excited by the public nature of it, and the prospect of strangers visiting:

[t]he thought that people I didn't know could stumble upon my little world was really thrilling. [...] I had a completely indulgent, consequence-free way of expressing myself. I was completely anonymous and had total freedom as to what I did and how I did it. It was really a wonderful part of my adolescence. (Danielle, survey, 2010)

As young people undertake this navigation and negotiation, they do so while they similarly navigate and negotiate their own identities, weighing up their personal motivations and the external influences of their community and culture. As Horst and Miller explain, "in some ways, people make their home inside social networks rather than just communicating through them", and that "what has been termed the virtual is more a new kind of place rather than a form of placelessness" (2012, p. 106). For Danielle, this resulted in a combination of connectivity, escapism, pride and connectivity, more than just a collection of HTML code or a few email exchanges. Young people engage with digital media and participate in media production, and in doing so they constantly manage and consider themselves, their environment, and broader cultural forces. The Internet offers them the space and place to do so productively and rewardingly (Stern 2008).

Together with youth and social media scholar Nancy Baym, boyd has developed the concept of online publics as networked publics (Baym & boyd 2012), "publics that both rely on networked technologies and also network people into meaningful imagined communities in new ways" (boyd 2014, p. 201). By engaging with a networked public, young people are seeking to be in a public space, when offline public spaces are increasingly off limits. As these are "mediated publics" (boyd 2008, p. 8), the qualities of mediation inflect the young person's perception of their activity with the "conundrum of visibility" (boyd & Marwick 2009). Being visible in a public space, yet that space being invisible in other parts of life, while offline and online lives still bleed into each other, heightens the sensation of the online space

being a public one. Writing in 2014 about young people's engagements in SNSs, boyd argues that young people engage in networked publics to intentionally be visible, to share, to "look respectable and interesting" (p. 203), "to develop a sense of self and to feel as though they are a part of society" (p. 206). Networked publics are not necessarily safe spaces, and when young people use SNSs to reinscribe their offline social lives (boyd 2014), it would be difficult to argue they consistently *are* safe spaces. The Domain Grrl experience demonstrates how the earlier era of the Internet allowed such an overlap, where the counterpublics created by the Grrls were inherently networked publics as well.

Danielle's mental image of a stranger stumbling upon a site they had not even known was there, is evocative. It echoes Harris' description of how girls were connecting online, in these safe spaces; "[a] key dimension of these new social relationships being forged by young women on the Web is that they are virtual, marginal, and partially out of sight" (2004b, p. 162). Grrls could define their homepages not according to guidance received from traditional figures of authority, but based on their own ideas and inspiration from other Grrls online, and look for connections where those authority figures would hopefully not discover them. Due to the sparse population of the Internet, Grrls could even hope that their space would be safe from offline friends and family members, a belief that will be explored further in the following chapter about the Grrls' privacy practices and experiences.

7.2.4 Freedom for self-expression: Domain Grrls' experience of safe spaces

As Grrls created and maintained their personal homepages, they could publish content that, if shared with existing social networks, would have resulted in negative repercussions in a more public sphere. The stereotypical 'angst' of adolescence found an outlet through comparative anonymity, with Grrls recalling the new-found ability to express their emotions without fear of offline consequences; being able to speak about someone without wondering if they

would find out. A personal homepage for these Grrls was a new and freeing way to give voice to their thoughts and opinions that they did not feel comfortable speaking in offline settings.

Regardless of the specific type of content they chose to publish, Grrls reported a similar sense of being free to decide what to say and how to say it, and that this was an integral and critical benefit of having a personal homepage. Anna, feeling stranded in the suburbs suffering major depression with no way to find people like her in the offline world, went online and “found [...] a new canvas for expressing myself”, writing about “suicide and hatred” and finding “a bunch of other people who did too” (Anna, survey, 2010). Ellen, whose homepage lasted five years and recalls predominantly publishing her self-drawn cartoons, saw her homepage as a space to express the anger she had no venue for offline, “like writing in a diary” (Ellen, survey, 2010). Lynne, inspired by the girl homepage communities she discovered and expecting her parents would never discover what she wrote, “used the opportunity to swear and rant about the same stuff that all my rebel-grrl sisters did” (Lynne, survey, 2010). Ultimately, she grew confident enough to move past the trends she was attracted to and choose content that she felt reflected herself. Whether talking about topics simply for the sheer pleasure of doing so without being punished, or expressing a truly personal, integral thought, the sense of freedom online was experienced by many Grrls. Having outlined the critical terrain, we now turn to the Grrls’ experiences to explore how their engagement with safe spaces, counterpublics and personal homepages expanded their ability to express themselves.

Ashley credits the anonymity offered online with encouraging her to create without any sense of artifice, as she was “able to ‘let go’ and be more comfortable with myself”, expressing herself more “openly”, “honestly” and “freely” (Ashley, survey, 2010). She had a vision of the public she was publishing for, too, expecting other teenagers with a similar sense of humour and intelligence, an interested, positive and welcoming contingent of supporters. This experience is one of comfortably and confidently settling into the self she was expressing, and doing so in a venue where

she expected a sympathetic reception. Ashley's forum was periodically attacked by hackers, yet this did not dissuade her or make her spaces less safe; the anonymity she felt in a space separate from her existing social networks emboldened her to continue regardless, and provided a sense of protection.

Cassie saw her homepage as a site to express her anger, whereas in her existing social networks of friends and family she was concerned about offending, hurting or driving away people, or not finding "the right words to express myself" (Cassie, survey, 2010):

Blogging kept me sane for a few years in my life - I was a very angry person, with no emotional or physical outlets. [...] I wanted to write about what I thought and felt but didn't want to hurt/offend anyone I knew. A blog was a good way of doing this - I was very angry at the world at the time and needed an outlet. [...] Immediately after I felt like I'd "vented" and it calmed me down. It was like writing in a diary, except typing was much quicker than writing! (Cassie, survey, 2010)

She also noted that her online audience could "even [find] it entertaining" (Cassie, survey, 2010), suggesting an element of pride in how her self-expression – normally a liability – would become valued and appreciated in a different context, with a new audience (nobody she knew already). She specifically was seeking some validation for thoughts and feelings that she had no other way to express safely; she wanted to see "if people treated me differently if I was myself and said the things I felt and thought with conviction" (Cassie, survey, 2010). Her need for a safe space for self-expression was a powerful motivator in her personal homepage experience, as she could relax into a space that would not censor or punish her for her thoughts.

7.3 The counterpublic: a public within a safe space

7.3.1 Counterpublics through media production

Through their acts of media production online, Grrls were able to build a safe space for self-expression where they could reach out to an envisioned audience, a public. As I will argue, the Domain Grrl public is in fact a counterpublic, a transformation of an unknown audience of strangers into an envisioned public. The counterpublic exists within a safe space; it is a public which Grrls sought and enjoyed engaging with, and the counterpublic is therefore as vital a concept to understand the Domain Grrl experience, as safe space itself. As defined by social theorist Michael Warner, a “public is a space of discourse organized by nothing other than discourse itself” (Warner 2002, p. 50), and a “counterpublic maintains at some level, conscious or not, an awareness of its subordinate status” (Warner 2002, p. 86). A counterpublic may therefore be found within a safe, border location – not geographically, but discursively and through models of governance and visibility. The homepage itself therefore plays a pivotal role as being the discourse itself, the artefact of media production around which a counterpublic may form within the context of a safe space.

In a counterpublic, the individual speaks to an audience, similar to the traditional concept of the public sphere; however the audience is peopled with strangers who would not be permitted to participate in the idealist’s public sphere (Warner 2002). Fraser defines a similar concept, what she calls “subaltern counterpublics”, as “parallel discursive arenas where members of subordinated social groups invent and circulate counterdiscourses” (1990, p. 67). Together these definitions speak to the role of a counterpublic as being a space where subordinated social groups can recognise their status, even subconsciously. I therefore argue that the Domain Grrl experience created a space as the Grrls used their homepages to create media (the discourses) through which they could reach a more sympathetic public, and achieve greater freedom for self-expression, than in other spaces such as school. Through these acts of media production and self-expression, they were then able to build

social connectivity and transform their individual experience into part of a group. As Karlsson described female diary writers online, “production and consumption of autobiographical stories form a continuous spiral” (2003, p. 229). By understanding the Domain Grrls’ expectations of audiences, their actual audiences, and their use of homepages to publish content which was designed to encourage engagement, I argue that it becomes clear the Domain Grrl experience was in fact a counterpublic. This therefore strengthens the argument that the Domain Grrl experience offered opportunities for social connectivity that was valuable and rewarding for the Grrls.

In a counterpublic, the discourse assembles and organises the public out of strangers and “also addresses those strangers as being not just anybody” (Warner 2002, p. 86). Counterpublics welcome the stranger who would find relevance in their discourse (Warner 2002), and are therefore a valuable discursive mechanism for understanding the Grrls’ behaviours in publishing content for an unknown audience. “Counterpublics are spaces of circulation in which it is hoped that the poesis of scene making will be transformative, not replicative merely” (Warner 2002, p. 88), refuting any critique that would situate meaningful public engagement solely within the public sphere. This transformative nature lies within their dialectic between two functions as sites for “withdrawal and regroupment”, and “training grounds for agitational activities directed toward wider publics” (Fraser 1990, p. 68). Counterpublics are not merely enriched or developed through their discourse; they are defined by it. They are, as other publics, instantiated by a combination of participation, and the discourse that is being participated *with*. As sites where counterdiscourses are invented and circulated (Fraser 1990), counterpublics are intrinsically defined by and symbiotically enabling the discourses of their participants.

If we look to some singular, solitary public sphere as the ideal site for girls’ self-expression, we neglect the myriad alternative, dispersed publics and counterpublics which have emerged and been recognised. As Domain Grrls created web pages, and published written and visual content upon them, they were creating discourses designed to access a perceived audience of strangers, counterdiscourses where they

could express aspects of themselves more freely and reach a counterpublic to provide the understanding and support they could not access in their existing social circles. As a counterpublic, the Domain Grrl experience demonstrates the goal of transformation rather than replication. Grrls sought access to people they hoped existed, whom they had not found in their existing social circles (similar to the girls in Stern's research of 1999), and these connections would then deliver genuine change of some sort in their lives. In addition, the extent and breadth of the social outcomes of the Domain Grrl experience demonstrate some level of intrinsic change; Grrls did find a supportive network who had been through what they were going through, who could listen, comprehend, and offer friendships and togetherness in this space.

In an era of the Internet where 'stranger danger' often dissuaded users, and Grrls, from publishing their own names, or sharing (Jenny published "no recent pictures of me to protect my safety" (Jenny, survey, 2010)), Grrls nonetheless shared enough information about themselves to claim a somewhat inherent, authentic self. They then met these people offline over the years, and now and then even becoming romantically involved with them. The counterpublic is a powerful framework for viewing the Domain Grrl experience as not only media production, but also building connectivity and a public, within a meaningful safe space.

7.3.2 Constructing the Domain Grrl counterpublic

The notion of a public peopled with a specific type of stranger echoes the broader research of Papacharissi who found that "the need to affiliate with a particular Web page community revealed the tendency to direct one's self-performance to a specific audience, one that the Web author potentially shared common interests with" (2002, p. 656). The personal homepages themselves were artefacts that represented the Grrls, displaying aspects of their identities as well as evidence of their technical and design skills. As Grrls presented their selves online, the audience they called forth in the public nature of their creativity was not necessarily constrained to a one-way relationship. The public "*exists by virtue of being*

addressed”, and is as such “autotelic” (Warner 2002, p. 50, original emphasis), containing its meaning – of being a receptive public engaging in discourse – within its inherent nature of receiving and engaging. Although these qualities of assuming an audience in an act of media production are inherent and initially directed by the creator, the communication technologies of the Internet enabled a far more symbiotic and interactive relationship with the audience.

As they typed, wrote, uploaded, spoke, designed and coded, they continuously engaged with an assumed audience, even one they self-deprecatingly suspected of not caring about them. This audience was not the totality of humankind, all Western Internet users, all English speakers; it was defined by discourse, as the Grrls expected a specific subset of known unknowns to visit them – people ‘like me’, but people they didn’t know. This public incorporated both the very notion of publicity – that the public must be “locatable” (Warner 2002, p. 76) – and a restricted view – that the public “selects participants by criteria” (Warner 2002, p. 75). In this way, Grrls were performing the exact negotiation required to seek out, create, engage with and join a public. They acted for imagined strangers, creating artefacts to resonate with them, and constantly enacting and re-enacting moments of engagement with them. They frequently updated their sites, compulsively redesigned their layouts, and repeatedly consumed other Grrls’ sites to clarify their vision of their intended public.

Grrls therefore often selected content – such as emotional poetry – that was addressed to, or designed to attract, a public which they did not already know, but of which they had a clear expectation. As Diana sought acceptance and support from the girl homepage communities, she understood that the community members were strangers, yet from a specific online group; “I wanted strangers - girls like myself - to read it” (Diana, survey, 2010). By producing media for strangers to consume, many Grrls were – even if initially unwittingly – expanding their social network, as their visitors interacted with them. Meaningful and sometimes long-lived friendships developed over time; Mandy met many of her online friends offline throughout the years, after “most of the strangers who introduced

themselves became friends” (Mandy, survey, 2010). As Cassie used her site to express anger she could not offline, she discovered an understanding and supportive network of friends; “[it] was nice when they sent me compliments or support. [...] It just felt nice to know that I wasn't alone, and that being myself wasn't something to be ashamed of” (Cassie, survey, 2010).

Often Grrls were driven by a desire for social participation or even inclusion when they decided to publish their homepages. They wanted to behave the way other Grrls behaved, or to reach out to new people. By addressing strangers and envisioning their audience as being like them – with similar struggles – Grrls were positioning their audiences as counterpublics, which “remain oriented to stranger-circulation in a way that is not just strategic, but also constitutive of membership and its affects” (Warner 2002, p. 87-88). Mandy first went online when 12 years old, and immediately began creating her first homepage:

When I first got online, I was obsessed. I stumbled across sites that girls my age were making, and wanted to do the same thing. I was home alone during the summer of 1997, so I spent hours upon hours online every day, working on my site. [...] As a teenager, I wanted to fit in online as much as I did in real life. (Mandy, survey, 2010)

The public that Grrls were anticipating was populated with people who were currently strangers, but whom the Grrls hoped would become more; would offer support, build friendships, and become a social network for them.

When girls are producing media as part of discovering and developing their self through self-expression, the audience plays a fundamental role in receiving, consuming and providing feedback on what has been expressed and produced. Approval, critique, advice, support, commiseration, and consolation, all show girls how this version of their self is received by a public that matters to them. Identity work benefits from genuine and useful feedback, from people who understand the girl, the limitations and opportunities she faces, the hopes and dreams she is trying

to explore (Stern 2008). During adolescence, the role of the public is increasingly significant, as “[peers] assume a central role during this time of transition and uncertainty”, acting as “a source of identification” (Davis 2009, p. 147), or even as a surveilling, disciplinary force (Cover 2012). Sharing experiences and pastimes serve to strengthen the bonds of friendship (Shade 2007; Weber & Mitchell 2008), and the “emotional support and validation that adolescents experience in their intimate friendships provide them with a safe space for identity exploration” (Davis 2009, p. 148).

Personal homepages provided a space for Grrls to test out their improving skills, drawing inspiration from the homepages of those around them, and enjoying the experience of learning more and creating sites that were more stylish. Sarah explained that she “liked to see what people could do with their graphics and their creativity. I’m not really that creative of a person so it was nice to see what others could do” (Sarah, survey, 2010). Similar interests were also often influential in the creation of communities and individuals’ social networks, such as Nadia who started out in fandom; “[w]e all started out as fanfic writers & readers, and just naturally gravitated towards each other cos we liked each others’ writing & ideas” (Nadia, survey, 2010).

Sometimes the similarities were as simple as all being teenagers and girls, but even then, by being at the same life stage, Grrls were able to relate to each other and offer support, building friendships and networks. Emily summarised the interplay of finding peers and appreciating their thoughts:

it allowed me an outlet to talk about my life to people who weren't directly connected with it, which helped give me perspective and served as a "safe space" where I felt like my words wouldn't get back to my IRL life. (Emily, survey, 2010)

7.3.3 The vision and the reality

Many Grrls were producing their homepages with a specific audience in mind, people whose opinions they valued and respected, strangers who fit a certain type. They were largely successful, instantiating and maintaining counterpublics through their homepages and associated activities, rewarded for their efforts with long lasting relationships that transcended the online sphere; networks of support and understanding to support them through the challenges of adolescence.

The people most Grrls hoped would visit and read their sites were those who in some way were similar to them, with Grrls identifying one or more discernible characteristics that would be held in common. This counterpublic of strangers was therefore clearly envisioned as a specific type of people, not simply as an undistinguishable mass of humanity, “never just the sum of persons who happen to exist” (Warner 2002, p. 51). This could be a simple fact of demographics, most often that they were the same age or gender as the author; Isabel “wanted other girls around my age to read it” (Isabel, survey, 2009). They could have similar interests or experiences, such as the manga fans Catherine, who “wanted to reach people of similar interests” (Catherine, survey, 2010), and Brigitte.

Brigitte was online at 12, and creating her homepage at 15, using a “mediocre” (Brigitte, survey, 2010) family computer in her low-income family home in Canada. With three siblings, she struggled to get enough time on the computer, but managed to create a homepage to share her manga-related fan art online. Her online friends were important to her, as none of her offline friends were interested in manga; “it was nice talking to other people with the same interests at me. it was very difficult to talk to people and have friends at school” (Brigitte, survey, 2010). Alternatively, less frequently, Grrls were looking for someone who matched a specific characteristic, such as Amy searching for people with the same health problem.

By seeking to connect with people ‘like them’, Grrls were practicing “homophily”, where people are drawn to those similar to them, in sex, gender, age, religion,

education, occupation, and/or social class (boyd 2014, p. 166). They went online seeking people who could relate to them on some level, and the relationships they made were transformative in how they improved the Grrls' lives. Homophily when creating social connections does not automatically lead to meeting strangers who can empathise. It is important to distinguish here between the practices of homophily online due to not finding supportive people offline, and homophily online as a simple reinscription of offline social networks, as the Grrls were seeking similarities that they were not able to find offline. They were able to use the Internet to build genuine connections with new people who offered a social benefit they believed they could not otherwise obtain offline. While their preferences in who to connect with may have largely aligned to typical social attractions, they were lucky to be doing so when the online population was sufficiently broad, and online social practices not yet clearly defined. They were able to use the Internet as a source of potential support from specific strangers and in doing so, create a counterpublic, rather than as another method for accessing the same pool of known individuals.

Grrls generally did not want people from their existing social networks to visit their sites. Only six Grrls wanted existing friends to come and visit, from either online and offline social spheres. Lynne shared her personal homepage with her friends from LiveJournal; "[o]f course, my friends were pretty much guilted into keeping up with my page, badgered with constant 'I updated my site!' updates on LJ [LiveJournal]" (Lynne, survey, 2010). Most frequently, though, the connections Grrls were hoping to make were with people who understood what they were experiencing during girlhood, and who could relate to the challenges, successes and failures of their lives. As Nadia summarised the people she was looking for; "[p]eople who were interested in the same stuff as me. People who could relate to the stuff I wrote & made" (Nadia, survey, 2010).

The prospect of strangers possibly visiting their site was not daunting or problematic, whereas there were people from their existing social networks who Grrls hoped would not find their homepages. Grrls were looking to reach out to new

people, and so they understood that these people would by necessity be unknown to them. A few pointed out some specific logic behind this. Jenny, a computer scientist who first went online at 9 years of age, felt that meeting strangers was unavoidable; “It was made for strangers to read. Is that not the point of the Internet?” (Jenny, survey, 2010). In her enthusiasm to make new friends online, Lynne saw this as a consequence of her own online behaviour:

I knew that would probably be a large part of my visitors,
especially because I routinely went to strangers’ sites and spread
compliments around guest books, tagboards, and comment pages.
(Lynne, survey, 2010)

Some pointed out that they were creating their homepages specifically *for* strangers, in one case expressly to reach out for some form of emotional support. Again, Sally’s raw need to find anyone who she could connect with, states this clearly; “[d]idn’t bother me at all to have strangers read it--I wanted them to, I wanted them to comment and tell me that they understood, that SOMEONE understood the pain I was going through” (Sally, survey, 2010).

Domain Grrls were comfortable with the idea of strangers visiting their sites, and expected it, hoped for it, or even depended on it as proof that their site was connecting them with the people they did not yet know, but hoped were out there. A few Grrls specifically hoped that members of their audience would be actively looking for a social connection in some way, such as Sally, describing her ideal audience for two different sites she ran:

Strangers, mostly--people who had shared experiences with me,
who appreciated my writing & who wanted to talk to me about
their experience or commiserate about the misery of mine. [...]
The focus of my journal changed from being a record of my
experiences to being a record of my experiences with mental
illness, so I really wanted there to be an audience of people who
“got it” and who were supportive. (Sally, survey, 2010)

Grrls reported a variety of people actually visiting their sites including one or more of online friends, offline friends, family members, strangers who had something in common with the Grrls, and random unknown and unidentifiable people. They could only definitely know who visited if their visitors identified themselves somehow; if they left a message in the guest book, sent an email, or spoke to them offline. Roughly half felt they did know for certain who visited – e.g. “friends from Internet/irc” (Karen, survey, 2010). The other half made an educated guess at their visitors, such as Isabel, who explained, “i think the intended audience was mostly what ended up being my audience, though i honestly do not know for sure” (Isabel, survey, 2009).

Roughly half the Grrls found that the public they hoped to attract, *did* visit their sites, and less than a quarter found that the people they strongly wanted *not* to visit, still did. Even though only one Grrl (Brigitte, who actually sent the URL to some family members as an invitation) explicitly wanted family members to visit her site, another five Grrls still found they visited – which could be upsetting, and have significant consequences, as will be described and discussed in the following chapter.

Of the many Grrls who were seeking someone like them to visit their site, many believed they succeeded. The seven Grrls who felt they had not, were visited by two specific types of people. One type was people they usually already knew – offline friends, online friends, or family. Mandy suspected she was visited by all three; “[m]ost of my friends, despite my not wanting them to. My mom, probably. My online friend group” (Mandy, survey, 2010). And the other type was people who ranged in age, gender and life stage; “actually, people of all ages and life situations. it was pretty surprising” (Ashley, survey, 2010). Overall though, the main type of visitor being sought after – strangers were similar to the Grrls in some way – comprised the counterpublic that well over half the Grrls felt they received, and they subsequently felt that they were part of a community or social network of similar, understanding people.

7.3.4 Friendships, communities and supportive networks

All Grrls except one made friends during their time producing personal homepages. Sally was the outlier, and as she grew to enjoy her journaling activities on her homepage, she moved to LiveJournal where she felt she would be more successful in making connections with people who were also struggling with mental illness, and where she ultimately made lasting friendships. Other Grrls' friendships frequently turned into enduring relationships that outlasted the websites themselves, with ongoing communication over the phone, for a few Grrls, and sending letters and cards through the post for others. Some Grrls met in person, either with individuals or with larger groups of friends, such as Amber's friendship group; "[we] ultimately ended up having our own little convention in 2003, where a group of us flew to Washington, D.C. to hang out" (Amber, survey, 2010). These could be best friends, and were considered "awesome" by Dorothy (survey, 2010), and "incredibly close" by Karen (survey, 2010). As part of the social circles which provided such support, these friendships could be powerful, and appreciated by the Grrls, as Anna recalls, "We could relate to each other on a level that we couldn't relate to anybody else" (Anna, survey, 2010).

Often these friendships were ongoing at the time of research, years after the Grrls had stopped maintaining their websites. The connections between the Grrls went beyond a shared interest in a band, a shared talent in HTML coding, or the same website style; they had discovered people who genuinely understood them and enjoyed their company. In two cases, this even extended to a romantic relationship; one (now ex-) boyfriend (with whom Isabel was still close friends), and one marriage – as Jenny drily pointed out, "I also met my husband through my website, so it's had a very significant impact on my life" (Jenny, survey, 2010). Grrls often felt a sense of acceptance and support from the people with whom they connected. Amber recalls, "[f]or the most part, the communities were supportive. Helping each other out, pumping up self-esteem. And there were others out there who had been where I was and knew just what to say" (Amber, survey, 2010).

The emphasis here is on active engagement through communication; the knowledge that these Grrls existed was the starting point, and the Grrls then connected, talked, and commiserated with each other. Interaction was “like 24 hour therapy” (Anna, survey, 2010) for Anna dealing with mental illness, and Grrls often agreed that the sense of belonging was ‘very important’ to them. Having people to speak to, who would listen and reach out, and who provided a genuine support network, demonstrates what scholar Theresa Senft terms ‘tele-ethicality’ in her research into camgirls, “women who broadcast themselves over the Web for the general public, while trying to cultivate a measure of celebrity in the process” (Senft 2008). She describes tele-ethicality as “a commitment to engage, rather than forestall action in our mediated communities, despite the potential for fakery and fraud” (2008, p. 56). Grrls did not describe consciously parsing similar equations of responsibility, appearances and publicity which Senft did when attending a friend whose suicide attempt she witnessed online¹. Indeed the support they recall was reliable and heartfelt, consistently experienced across the majority of Grrls.

Diana, who continuously reinvented herself online moving between homepage incarnations and online social groups, mused that:

Perhaps part of it was because my personal life was less than ideal at the time, and part of it was simply having like-minded friends who shared common interests when my real-life friends didn’t have or use the Internet. [...] I think part of all of this was just me growing into my teenage years. (Diana, survey, 2010)

The Domain Grrl era encompassed different types of social connectivity and social networks. Friendships required an understanding of the personal as an individual, and private communication such as online chat, phone calls, and emails. The sense of belonging or social connectivity emerged from the active social activity, as well as styling one’s homepage and creating content to reflect implicit website standards for girls’ homepages, and having the technical skills to do so. All Grrls who felt socially connected through their homepages experienced similar social and

emotional benefits from the relationships they built and the sense of belonging they experienced.

The communities some Grrls identified were social and supportive; as well as individual friendships, there was a sense of togetherness through overlapping and interrelated connections with multiple people; as Nadia describes, “a group of girls who only chatted heaps with each other” (Nadia, survey, 2010). There was a world of similar yet unique Grrls to connect with, which Isabel noticed in the variegation of website design which didn’t weaken social bonds:

the community was girls from around the world who had personal websites like mine that they used to express themselves. the content was similar in a basic way, but the individualized treatment of everything made it extremely interesting. it was important to feel that the things you were going through were being experienced by other girls all over - you weren't alone. (Isabel, survey, 2009)

They did not make only one friendship with only one person; they were building different types of relationships with different people, many of whom seemed to understand what they were going through. They were aware of the wider population of Grrls creating homepages, and would look up to some for inspiration, and then build friendships with a handful of people to whom they felt connected.

More than just conversation, Grrls were receiving support in times of emotional need, such as Emily; “[t]he people I met online kept me sane- they gave me people that would listen to me and not judge me” (Emily, survey, 2010). This was particularly important for some Grrls who struggled with finding social support in existing social networks, and who made invaluable friendships online with people who could actually understand their situations, and be there for them, like Brigitte; “it was very difficult to talk to people and have friends at school” (Brigitte, survey, 2010).

This sense of connectivity was consistent across Grrls' experiences, including those with specific interests online such as fandom, or medical conditions. Similar to personal homepages, the authoring and maintenance of fan sites were acts firmly situated within the context of a cultural community; in this case, one of fans, rather than teenage girls. Grrls who created fan sites mostly felt part of a specific fandom community. Fan sites were a particularly socially oriented type of website as their authors sought to share their knowledge, opinions and visions for their favourite characters and topics, and in doing so, find other people who understood and sympathised with their passion and fanaticism. This is strongly reflected in the Grrls' experiences; they described similar relationships, activities and a sense of togetherness in the fan communities as the other Grrls did with relation to the broader girl communities online. Amber "met so many people and learned so very much about others and made lifetime friendships" (Amber, survey, 2010), while Brigitte also enjoyed finding people with a shared interest. There were similar long-term relationships and romantic relationships, meeting up in person, and that same sense of finding people who truly understood what they, as fans, were going through in their love for whatever movie, video game or other cultural icon with which they were infatuated. This sense of community was frequently meaningful and rewarding, or at a more simple level, it was the transformation of the personal into the communal, shared purpose that the Grrl felt united her with other like-minded people.

Grrls who felt they belonged to communities of artists, specific geographies, or medical conditions, experienced a sense of security and acceptance by finding other people 'like them', such as Amy with her medical condition; "I had a sense of belonging and it was nice to see I wasn't the only one" (Amy, survey, 2010). These Grrls were quite focused on a specific topic in their websites, and if none of their existing friends were interested in it, the Grrls were relieved at finding other people who shared their passion. As a manga fan in Europe, Catherine describes; "[I] had relatively unusual interests and I knew very few people in my physical area who had them (and even then they were mostly turned on to these interests by me)" (Catherine, survey, 2010). Amy sought people with the same medical condition; "[I]

thought it was nice to possibly find someone with a similar diagnosis or at least with the same symptoms as I did” (Amy, survey, 2010).

The importance of connectivity is highlighted by Nadia’s story. She was the only Grrl to have explicitly self-identified as being higher up the hierarchy of technical skills and coding wizardry. Although her smaller group of friends initially emerged based on similar interests in fan fiction, she traces the group’s strength – and that of her subsequent friendships – to the social understanding between the Grrls. Being in the group “meant that what I stood for as a person was... okay. There were other people who treated life the same way I did” (Nadia, survey, 2010).

This goes beyond the fundamental requirement for participation in order to instantiate a public for one’s media production (Warner 2002); there is a certain interactivity and quality to the communication which was desired and ultimately expected. “It gave me an outlet to talk to other people in similar situations” (Emily, survey, 2010). The Domain Grrl experience provided a safe space where, by recognising significant elements of website design and content, Grrls could identify people who were similar to them, connect with them, and in doing so, add them to a social network of individuals available for conversation, sympathy and support.

7.3.5 Foreshadowing: seeing social connectivity in the social networking era

As Grrls considered the SNSs and social media platforms which supplanted personal homepages, they described a sense of continuity between their own experiences, and those enabled by these newer technologies. The social connectivity which was so vital and sought-after, and at the same time regarded as suspiciously new and possibly inappropriate, was now an integral part of mainstream online behaviour. The behaviours Grrls explored, such as meeting people in the flesh who had previously only been connected with over an Internet connection, was now taken for granted. Amber, for whom a personal homepage played a powerful role as her “real social outlet” (Amber, survey, 2010), describes:

I think I got to the place where meeting people online and making friends via a computer was a normal thing well before others in my peer group. Online dating, sites to meet people in a new city, these things are all the norm now, but I was open to them much before. I knew people who had met on message boards and married. One of my best friends to this day is a girl I met on a chat board. It's like society has caught up with me. (Amber, email correspondence, 2014)

As Grrls observed this broadening of the Internet, as more people used it as an opportunity to expand social connectivity and communication, Grrls sometimes evinced beyond nostalgia, a sense of their era being thoroughly in the past and their experiences therefore becoming overtaken by the mass media experience of this new generation of the Internet.

Back then, and afterward, I felt like I was part of an exclusive club of weird people using the Internet in this very specific way... and now it seems like [...] everyone [is] doing that now (via blogs and social media) (Mandy, email correspondence, 2014)

The Internet used to feel a lot smaller. I felt like I knew every other girl out there who was designing websites. We seemed to all be connected via links, quilting bee patches, message boards. Web design is much different right now. Code for sites has become complex. (Jenny, email correspondence, 2015)

I grew up. And frankly, as I grew up, the Internet did, too. LiveJournal didn't exist. Neither did Facebook, Flickr, etc. I started to see less and less of a need for the kinds of websites I was putting together. (Diana, survey, 2010)

7.3.6 Building connectivity using tools and technology

As they sought to build social networks and relationships online, Grrls deployed the technology, affordances and design of personal homepages to try to connect with their visitors and other Grrls. Competency in using them ensured Grrls could successfully form the practical connections upon which meaningful relationships could be built. If they wanted to communicate with another Grrl, they had to select from the communication options provided by that Grrl on her website (e.g. guestbook, direct email, instant messaging panel). If they wanted their site to appear interesting and attractive to other Grrls, they needed to select the right tools by which they could signal that they were 'in', such as the guestbook Sally included "of course, so that people could leave me messages praising my really barebones & 'gritty' layout or whatever. (So egotistical!)" (Sally, survey, 2010). As counterpublics emerged in an audience of interested strangers, communication tools transformed them into a mix of dynamic, engaged relationships and connectivity.

Grrls used a variety of website-based communication tools including guestbooks, forums, webrings and cliques, which increased their connectivity with their visitors and declared their social engagement online:

The affiliation with a particular web ring community, or even a specific Web provider, became part of projecting a certain self image and linking one with a certain social group, even if that particular group only existed online. (Papacharissi, 2002, p. 656)

These tools were generally free to use and often simple to install. They were widely available for any website, not just personal homepages, and were provided as a snippet of code to copy and paste into existing website code. Reflecting findings of other girl homepage researchers (Kearney 2006; Reid-Walsh & Mitchell 2004; Stern 2004; Takayoshi, Huot & Huot 1999), the most popular by far was the guest book. Guest books were a page of the website where visitors could write a message that would be publicly displayed, along with their name and an optional link to their own

website. Cassie was the only Grrl without one, for the unfortunate reason that “the damn thing always crashed” (Cassie, survey, 2010).

Sarah, Anna, Ashley and Dorothy all hosted forums (or Universal Bulletin Boards – UBBs) on their personal homepages. A forum is a dedicated set of pages on the site where conversation topics are addressed by registered members who visit the site regularly. Anyone can start a conversation on a forum, and can decide how much to participate. All four Grrls had positive experiences with their forums being well frequented and a source of enjoyment and fun. Sarah, who had a low-key but rewarding social experience with her personal homepage, describes, “I did have a guestbook and webring banners and for a while, I did run a forum called ‘Cheese’ even though it wasn’t about cheese at all. I think that was probably the most fun part, the forum” (Sarah, survey, 2010).

Ashley’s forum was popular with her visitors, although technical challenges eventually forced her to abandon it:

probably the most popular portion of the website. after being hacked several times and my subscription to UBB ran out, it became too difficult to maintain and keep users (especially when constantly having to reset usernames and PWs [passwords] after being hacked). (Ashley, survey, 2010)

As Anna intentionally set out to build a network of Grrls like her through her domain, she eventually decided to create a forum; “[e]ventually I decided that we should have our own message board and that’s where the fun really began” (Anna, survey, 2010). Her group of friends had friendly rivalries with other domains and forums, which manifested in public conversations and arguments on each other’s forums:

We loved fighting with other domains on their message boards. We always had wars with the plastique.org UBB and the prettie.net UBB.. They’d come and fight on the narcissistic.org UBB and it was all full of pure craziness and fun. (Anna, survey, 2010)

Almost as widely used as the guest book, was the webring – of which many Grrls had more than one. Webrings were collections of related sites, such as fandom sites, or teen girl homepages. Homepage owners could join the ring if it was open to everyone, or could apply to join if there was oversight. Each webring had a banner or tool that the members placed on their site, so a visitor could click through to another website in the webring, creating a journey through sites that they would find interesting. Any Grrl could create a webring; they just needed an image for a banner, and other people who wanted to join. Mandy and Anna actually created their own; Mandy started two, for left-handed people and girl scouts, and Anna created one to publicly make fun of a girl homepage style she did not like:

I started a webring called "we hate beautiful//whores" which was a parody of websites that were overly fluffy. Long story on that one. Eventually I came to terms with secretly being jealous of beautiful//whores. (Anna, survey, 2010)

Other webring topics mentioned included musical artists, and one more exclusive called the “WebGoddess” ring, whose owner/s decided which site designs were sophisticated enough to be granted access. Danielle, who was passionate about web design and loved redesigning her site, applied twice to this ring, and being accepted represented the approval of her peers and superiors:

I remember vividly that it made my day when I finally got accepted in to the WebGoddess web ring. I was rejected once, and polished my design skills and finally got accepted. Only sites with killer design got in! (Danielle, survey, 2010)

Similar to webrings, but more exclusive, were cliques, which were more likely to be controlled by an individual or a group, who would then determine who was allowed entry to the group. Cliques operated similarly to webrings, as Mandy explains; “you’d put the clique banner on your site and it would link back to the clique page” (Mandy, survey, 2010). Grrls who were members of cliques were also usually part of

webrings; the purpose and use of the two overlapped as a communication and cultural tool.

The manual nature of these tools meant Grrls had to perform tasks that may seem tedious, simplistic, or excessively technical, but connections were being made autonomously, consciously and intentionally. These tools, relatively simple by later standards, were effective at allowing Grrls to connect with the specific people they wanted, when they wanted. Grrls could express genuine interest in each other, and build relationships with each other. They could also exclude or ignore Grrls whose sites did not interest them, and even go as far as target and mock groups of Grrls whose sites did not meet their expectations for design or content. There was no involvement or regulation of this social activity by automated technology, figures of authority or institutionalised governance; all decisions around social connections were made by the Grrls themselves. The people to whom a Grrl reached out could feel confident that she was genuinely interested in them; this was not simply an automated process performed by an underlying platform. This quality was circumstantial; the technology was not expressly designed to encourage Grrls to take control of their socialising and community building, rather it was simply immature, and as such had certain affordances which constrained behaviour in particular ways, and permitted this socialising behaviour. This immaturity forced Grrls to carefully design their online presences and diligently participate in online communication, and these actions then led to and transformed into social networks which emerged that were for Grrls, by Grrls.

Owning a domain, and the hosting space it provided, helped Grrls make social connections too, though not necessarily strong ones. Almost all Grrls who had their own domain hosted other Grrls. Lynne was the only one who did not, although she wanted to. She attributed her lack of hostees to the relatively unskilled and low quality design of her own site on the domain being unattractive to other Grrls; “seeing that I was too lazy to really cultivate my domain, I never attracted anyone interested in being hosted” (Lynne, survey, 2010).

Many Grrls shared space with their friends, usually online friends and in one case, an offline friend. Sometimes Grrls would share with other Grrls who were similar to them in some way, though not necessarily friends. A host and their hostees could present their websites as a collective of sorts, such as Anna who felt about her hostees; “[they] were the people I felt were on a similar creative wavelength to me. We shared a certain mindset and vision. We were best friends” (Anna, survey, 2010). Alternatively, they could exist as totally separate and unrelated, as Dorothy experienced:

I had an application form and I usually accepted most people if they seemed well-meaning, nice, and had nice websites. I wasn’t elitist with picking hostees. At one time, I believe I probably had about 12 hostees. (Dorothy, survey, 2010)

Grrls organised hosting through many different channels: email, chat, as a barter or exchange, or by formally applying for space. Application forms were used by Dorothy as a way to find hostees, and by a couple of the Grrls who applied to be hosted on other domains. The application process was an effective way for Grrls to control their domain space – they could keep other Grrls at arm’s length, gathering the information they felt was necessary to decide whom to offer to host, and communicating with the applicants only if they wanted to. Only Anna actively sought out strangers to befriend and offer space to, an activity she firmly situated in a community-building context; “I liked hosting other websites because it was like we were creating our own city. Narcissistic.org was its own piece of land and we could do anything with it that we wanted with it” (Anna, survey, 2010). She consistently viewed the personal homepage experience as a particularly empowering, communally oriented time of Grrls finding friendships and support at a crucial time of life, and her domain played a strong role in her own experience of this.

Testifying to the enduring allure of the personal domain, over a third of Grrls who owned domains purchased their domains *after* their original involvement in the personal homepage movement. They carried on the traditions when possible, sharing space, designing as time permitted (Lynne sadly recounts “[t]hree years and

one layout. What a waste” (Lynne, survey, 2010)), publishing personal information, and choosing meaningful domain names. Having a domain was an enduring method of self-publication online, especially as Grrls could run different software on them to create more modern online presences, such as Wordpress blogs. Senft’s research into camgirls discovered a similar, lingering affection for the technology amongst its original experts:

most camgirls with whom I began my research think of webcamming today less as a lifelong commitment, and more as a creative phase that they entered deeply into for a time, became overexposed to, and then abandoned, to pick it up later as something to be engaged in only when the mood strikes (2008, p. 11).

7.4 Summary

By creating personal homepages, Domain Grrls were defining a particular space for themselves, a space which was both an individual act of media production, and a communication tool for building a counterpublic, relationships and connectivity. The personal homepage is argued in this chapter to instantiate a safe space for the creator online, and then by doing so in view of other people ‘like me’, to then create a counterpublic. By being a site of discourse, the homepage could catalyse the creation of a public of subordinate individuals, a discursive counterpublic of girls in contemporary Western culture creating their own discourses (homepages) and connecting with each other. As visitors consumed their content and responded, counterpublics of interested strangers could be formed and friendships developed, encouraging Grrls to feel secure within their safe spaces. Yet other seeming safe spaces of personal homepages and the Grrls’ counterpublics could be subverted and even destroyed by unwanted visitors, from social groups the Grrls were trying to avoid, who were arguably less subordinate in their positions of being, for example, the Grrls’ parents. The following chapter addresses the seeming dichotomy of publishing content in a space for which access could not be easily

restricted, for a counterpublic, while trying to feel safe, private and protected. Grrls developed practises to protect identity, build privacy, and still feel public, and yet for some Grrls this negotiation could still not prevent incursions into their carefully constructed online world.

¹ Senft's friend was a webcammer who had previously attempted suicide. She read Livejournal posts by her friend which concerned her, so she visited the webcam site, where she saw her friend in images which indicated she had attempted suicide again. Senft writes in detail about her own actions and thought processes which followed (Senft 2008). These included: irritation that she was now late to complete a school assignment as she used study time to try and save her friend, analysing various ways to respond that would demonstrate her concern (she settled on a voicemail message), and justifying her decisions to herself along the way. Her recounting the experience in her book displays an impressive honesty about and acknowledgement of her reactions.

Chapter 8 Complicated connectivity: privacy practices, collapsed contexts, and social hierarchies

8.1 Introduction

During the Domain Grrl era, the concepts of ‘privacy’ and ‘publicity’ were complicated, challenged and redefined as the Internet initially existed largely separate from offline social networks for many users, creating an illusion of privacy while simultaneously encouraging communication in inherently public formats. Grrls were seeking to connect with strangers, and therefore made their homepages available to the wider public of the Internet, yet frequently wanted to control the access of existing friends and family, even though they too may have been on the Internet. Without complex technical controls to manage access rights for visitors, Grrls were negotiating the boundaries of disclosure and intimacy with nascent privacy practices. They could not foresee ‘collapsed contexts’, a situation likely to happen in digitally networked spaces, identified by boyd (2014). These occur when boundaries between social and cultural circles are difficult or impossible for individuals to maintain. When this happened, Grrls would modify their behaviour online, sometimes retreating from the Domain Grrl experience they had previously been enjoying and finding meaning and value within.

This chapter extends the analysis on the challenges relating to the theme from data coding addressed in the previous chapter, ‘connectivity’. It addresses the inherent

tension in how notions of privacy and publicity played out in moments of connection for the Domain Grrls, as they negotiated their use of a space they had felt would be private, yet which they couldn't control or guarantee. This chapter further acknowledges the social dynamics and hierarchies which presented hurdles for some Grrls to surpass to feel they could hope to access the social support and safe spaces they could see through other Grrls' homepages. Finally, this chapter describes how Grrls ultimately left their homepages behind, completing this thesis' story of the overall Domain Grrl experience. By addressing breaches of privacy and social exclusion, and recognising the ultimately transitory nature of the Domain Grrl experience, this chapter seeks to demonstrate the nuanced and complex nature of the experience. Girlhood is not a unitary experience, and even as I have demonstrated the significant benefits Grrls could gain from creating their own personal homepages, this chapter acknowledges the multi-dimensional nature of even this fragment of girlhood.

8.2 The paradoxical dichotomy of public and private: contested privacy online

Personal homepages powerfully demonstrate the fracturing of the traditional differentiation between public and private spheres (McNeill 2003; Reid-Walsh & Mitchell 2004; Stern 2008; Vickery 2010; Weber & Weber 2007). The public/private debate repeatedly appears in discussions about the Internet (Barnes 2006; Bell 2007; boyd 2007; Lange 2007; Livingstone 2005; Pearson 2009; Poster 1997; Robards 2010; van Dijck 2011; van Manen 2010; West, Lewis & Currie 2009) – the conundrum of writing for a unknown audience, possibly even a non-existent one; the presentation of personal information in open fora; the archiving of strands of life in privately owned repositories of data. In the Domain Grrl era, this can be seen in the mode of creation – the lone figure in their home in front of a screen – juxtaposed against the end result of creation – the webpage published to a (predominantly) public server, available to be spidered by public search engines, and read by any user on the Internet.

Furthermore, a constant theme throughout the literature about personal homepages, online diaries and personal blogs is the “paradoxical combination of complete anonymity and a startling level of intimacy” (Pinckard n.d.). This private/public dichotomy, where one-to-one conversations can be held in the full view of millions and seen only by a few hundred, has appeared in research both into personal homepages (Chandler & Roberts-Young 1998; Reid-Walsh & Mitchell 2004), and into more recent SNSs (Barnes 2006; West, Lewis & Currie 2009), and emerged in this research’s data coding within the theme ‘connectivity’. As these researchers ultimately conclude, the dichotomy is a false one, and instead the issue is a multi-faceted intersection of power, control, knowledge, visibility and security.

The very public functional existence of these pages in itself sustains this paradox, as “[w]here the gaze is invited there is neither privacy nor invasion” (Gill 2001, p. 83). Writing during a particularly cyberutopian era in the late 1990s, Janet Murray situates the source of this paradoxical experience in the psychosocial characteristics of the technology used, within “[t]he enchantment of the computer” (1997, p. 99), which bridges “the threshold between the world we think of as external and real and the thoughts in our mind that we take for fantasies” (1997, p. 292). Largely critical of digital culture, cultural theorist Paul Virilio offers powerful and useful depictions of the technologising of this type of communication. The “‘artificial horizon’ of a screen or a monitor” (2000, p. 14) embodies the limitations of “an entirely virtualized geographical reality” (2000, p. 16), as a process of “inversion of the usual conceptions of *inside* and *outside*” (author’s emphasis, 2000, p. 14). Emerging from this inversion is “tele-surveillance” (Virilio 2000, p. 13), enmeshed within the economics of individual, user, reader, and information, content, creation, when these activities are performed within the Internet networked society. We can even see tele-surveillance in Stern’s finding of girl homepage creators’ self-censoring method of content creation, where they “strategically select the information they present on their home pages to construct a public persona” (1999, p. 23).

boyd (2008, 2014) identifies a further tension in how the Internet offers young people almost invisible access to publics, when they are nominally safe within adult-regulated spaces like their home and school. Accessing publics does not imply “a rejection of privacy” (2014, p. 19), though, as young people seek privacy online from prying eyes of family members in the home, and as they seek privacy within certain online public spaces they feel shouldn’t be accessed by certain people, such as those same family members. The concept of ‘public’ is complicated when publics are accessible in virtual spaces which simultaneously imply privacy, such as SNSs; as a university student explained, “[w]ell, it is sort of public . . . but it is not the general public - it is like your public, the people that you hang around with” (West, Lewis & Currie 2009, p. 624).

Grrls’ experiences and practises reflect privacy theorist Judith Wagner DeCew’s definitions of two core types of privacy: informational privacy, concerning access and control over personal information which is important to the individual, and expressive privacy, regarding “expressing one’s self-identity or personhood through speech or activity” (1997, p. 77). Grrls were seeking the social safety of expressive privacy by creating their homepages as venues for self-expression, rather than concerning themselves with informational privacy issues such as identity theft. They were navigating a terrain of privacy and publicity that was still developing, where expressive privacy was assumed due to the likely absence of people from their offline networks who could ridicule or restrict their self-expression. Grrls had to discover for themselves a suitable balance of privacy and connectivity, and did struggle when the sense of expressive privacy was proven more illusory than practically demonstrable.

The ability of the Internet to connect people was a double-edged sword for the Grrls. Internet technology that could effortlessly negate geographical distance and time zones could also flatten and simplify the complex terrain of interpersonal connectivity. The subtle negotiations of privacy, access, and visibility that ideally provide a media producer with some degree of control and ownership over their creation, became problematised and weakened online. Information was eagerly

published, and then became digital data, easily accessed, replicated, and shared. Informational privacy was certainly compromised, and the envisaged audience, and the instantiated public, of self-expression could not be guaranteed, and even if one day a Grrl found her expectations of new friends and relationships were being met, the next day she could find her homepage being perused by unwelcome visitors. As Grrls pursued a vision of self-expression within a venue that was public enough, hoping that their desired audience would find their content, they were consequently negotiating a contested zone where private activity collided with public availability.

Privacy here refers to the Grrls' hope that their actual audience would match their ideal, that expressive privacy would be enabled through supportive people consuming what they created, and that making personal information available would bear fruit in the form of social connectivity – the counterpublic – when the desired people would find it. Grace's use of 'private' to describe a site where she looked for and found social engagement and acceptance, illuminates Grrls' sense of privacy in a public space:

I wanted anyone who was a fan of Buffy to read my Buffy website.
[...] I felt so much at home, made many many friends, shared stories, shared music, fanfiction, poetry, news and met up IRL at gigs as a consequence. [...] I had something that was private; my own, that I had total control over. (Grace, survey, 2012)

Roughly half the Grrls also attempted some form of anonymity, refraining from publishing certain types of personal information. However, powerful digital technology and global infrastructure automatically rendered this personal content, these acts of self-expression, available to anyone who did discover these homepages. Grrls relied on the interconnectedness and cybernetic conversationality of the Internet to reach out and create a discursive counterpublic for their acts of media production, but this was in fact a negotiated act within an environment not naturally suited to the subtleties of privacy and accessibility. Reaching out to

strangers in the early Internet with the hope of finding the desired people meant also unavoidably also exposing one's creations to those who were not desired.

Almost all Grrls felt that they had been careful with what personal information (such as name, location, and school name) they published online due to personal safety and privacy concerns. By including only one or two pieces of this information, they were able to balance their desire to represent who they felt they were, without risking people knowing exactly who they were. For some Grrls, there was a definite desire to remain anonymous, and these Grrls were less likely to use personal information to describe themselves. When deciding whether to publish this type of content, all Grrls were therefore balancing two main priorities, based on their own desires and goals for their homepage: to provide what they felt was an appropriate view of their selves, and, to remain anonymous to some extent, and safe.

Ashley published how she was performing in school, as well as personal artwork. She describes changing what she published over time, but maintaining some internal consistency; "it changed as i grew older and my personality and interests changed. always highlighted my current 'self'" (Ashley, survey, 2010). She also made an effort to stay unidentifiable online, describing how she named herself, and the personal content she published; "by a nickname (shortened version of my real name), or my real [first] name. kept my last name private as much as possible. [...] only hometown. no identifying information" (Ashley, survey, 2010). She attributed online anonymity with providing her with control over her identity and allowing her to express her identity more freely than in her existing social networks and settings. "i expressed myself more openly online under the veil of some anonymity and for that reason i was able to "let go" and be more comfortable with myself" (Ashley, survey, 2010). Ashley demonstrated a complex negotiation of privacy, security, authenticity and freedom; her curating of personal information on her homepage provided a sense of safety which allowed her to thoroughly explore her identity and express herself more freely, and in doing so, be more true to herself.

In this ongoing identity exploration, there was also a problematisation of authenticity and performativity, as Grrls were often negotiating a contested

intersection of privacy and publicity. In some instances, Grrls were especially aware of their different audiences, and tailored their content accordingly. This constant, conscious decision-making process to determine how to portray one's self reflects the ongoing negotiation of both 'giving' and 'giving off' self through a variety of personas, as previously discussed; "[w]e often self-consciously attempt to sustain and cultivate behaviours that would fit our endorsed personal style and qualify us as cool or elegant or nerdy, daring or cautious" (Morag 2014).

Grrls accordingly selected content depending on who they believed their audiences were; this does not automatically indicate some sort of lack of authenticity; authenticity being here the collection of practices through which Grrls attempted to demonstrate their selves to their perceived audiences. Nadia explored her identity as a nascent intellectual and had a homepage specifically for this purpose, where she tried on the persona of an opinionated individual, while attempting to pre-empt the risk of backlash; "[m]y writing was about me and what was in my head - did my best to be respectful if anyone else was involved" (Nadia, survey, 2010). She participated in communities with other like-minded Grrls, and reported that she "brought more of my self to the forefront" (Nadia, survey, 2010) only on some later versions of her homepage.

Lynne was constantly moderating what she published with her audience in mind, "I was often quite particular about what I put up -- too personal can be too much overall" (Lynne, survey, 2010), and displaying some sense of performativity, where "I wanted my life to be full of fun, so the life I portrayed online was just that" (Lynne, survey, 2010). Yet she also reported a sense of uninhibited self-expression, "I used the blog to spout whatever I was thinking" (Lynne, survey, 2010), and her online experiences created a sort of journey of self-discovery.

Diana, seeking recognition from the girl homepage communities while intent on maintaining separation between her online and offline social networks, intentionally assumed a different pseudonym every time she created a new homepage, as a method of declaring her own control over her identity. She was a performer of her identity, using her name as a signifier of both constancy and

change – “It was like having a stage name” (Diana, survey, 2010). Yet this performance was a kind of ritualistic, talismanic reaffirmation of her identity being intrinsically under her control; “To me, it [updating her pseudonym] meant being a little truer to myself” (Diana, survey, 2010).

This problematisation speaks to the challenges of representing one’s self in a venue where expressive privacy could not be guaranteed. These Grrls in particular intentionally aimed to ‘give off’ the self they felt best balanced their personal desire for self-expression, and their audience’s expectations and tolerance for this self. The platform of the Internet and personal homepages existed with little oversight, rules or regulation, yet the very nature of online self-publication entailed an audience, which could offer both appreciation and approbation. Grrls seeking the support and approval of their peers needed to negotiate their expectations, although the flexibility and potential for exploration and experimentation meant they were not in total thrall to their peers. Rather, they were able to design the presentation they were giving off, reflecting the selves they identified with, aspired to, or were intrigued by, while considering their audience to the extent they wished. This is a realistic scenario in a social setting of communication; participants are always beholden to social standards of interaction and self-presentation, and must cater to them while developing their own voice to best represent themselves. As Internet researcher Brady Robards argues, “[t]hrough Goffman’s dramaturgical lens, I am convinced that there is no single “authentic” persona, but rather many sides to the personas we present to others and to ourselves” (2014). The personal homepage experience was no different; the negotiation was ongoing, and not insurmountable.

8.3 Privacy practices of Domain Grrls

The intersection and negotiation of public and private took its toll, proving there were to be no simple answers to the social stresses of adolescence in simply creating a new space in the form of a homepage and talking to people online. In the Domain Grrl experience, ‘privacy’ was deployed primarily as a mental perspective of the Grrls, and only circumstantially supported by the technology, and as a result, it

was unenforceable, and all too easily breached and damaged. Being private in the compromising communication space of the Internet is a “boundary negotiation process” (Tufekci 2008, p. 33). The university students in Internet theorist Zeynep Tufekci’s research, 10 years after the Domain Grrl experience, published social network profiles in order to have a public presence online, while simultaneously optimising privacy by choosing less identifying names and restricting visibility of their profiles to friends. The Grrls similarly selected their names carefully, and assumed that, as few people were then online, their friends and family were unlikely to visit their site, thereby creating an illusion of restricted visibility.

They negotiated the boundaries of their spaces, content and presence believing that the online space was sufficiently distanced from the offline; that even if the Internet was filled with other people whose closeness to the Grrls’ homepages could not be controlled, it was nonetheless still far away from their friends, family and schoolmates. Danielle appreciated the sense of being part of something bigger; “I liked the fact that this ‘thing’ was my very own, and no one in my real life knew about it. I felt like it was my special secret” (Danielle, survey, 2010).

One practical measure Grrls took to maintain a sense of distance between their offline and online social activities was to work on their homepages at home, rather than at school. This was broadly due to privacy concerns; Mandy pointed out that she avoided doing anything with her site at school, as she did not want any of her peers to find out she had a website, and Sarah was similarly concerned about lack of privacy if she were to use shared computers. The only Grrl to work at school exclusively for any period of time was Lynne, and that was because her dial-up connection at home was slower than a connection at school. Once her family installed a DSL connection, she stopped using computers at school, and exclusively worked at home. Some Grrls found added practical benefits of working at home; Dorothy’s home computer had software she found useful, while Brigitte liked to store her files on her computer, and Cassie was able to ask her sister for help if she was at home. Jenny and Cassie even cited boredom as a contributing factor; homepage creation was simply an interesting activity to do when bored at home.

Ultimately, ensuring a safe space for Domain Grrls was not predicated upon a guaranteed, segregated or members-only audience, but rather in the Grrls' clear conceptualising of their potential audience; and the limited anonymity and physical distance of the Internet did offer an increased sensation of safety that emboldened the Grrls. They did not literally know their audience in advance; yet their primary purpose in creating personal homepages was the act of self-expression, and they expected that a certain kind of audience would be engaging with their content. An *appropriate* audience is crucial in this context, rather than a *defined* audience. Being watched is a positive experience when those who watch are the people to whom the media producer is reaching out. When Grrls believed that their desired audience was viewing their homepages, and when friendships formed with these visitors bore out this belief, this was a positive experience. Yet for a small number of Grrls, they did not manage to reach the audience they longed for. From Anna's mocking of the "beautiful//whores" stereotype she identified in girl homepages (Anna, survey, 2010), as discussed in Chapter 7, we know that even when people visited who somehow could relate to the Grrls, they may not have approved of what was published. In addition, when unwanted existing friends and family visited their homepages, they may have been offended or angered by what they read. The Domain Grrl safe space was constantly a work in progress; it was safe as long as Grrls felt that their audience was not mocking them, ignoring them, or angered by what they wrote.

The Domain Grrl experience technically meets the requirements of a safe space, as the technology of the Internet and the relative immaturity of it during that time combined to offer a space most people wouldn't know about, which required a high level of technical skills and thereby a high degree of control over the space. However, the lived reality proved otherwise; sometimes, the Grrls' audiences contained not only the most frequently envisioned and hoped for strangers 'like me', but also pre-existing friends, schoolmates and family members. There were also experiences of painful social harassment and exclusion, responses to the contents of the homepages. The aftermath was experienced offline and not on, yet

online consequences followed of increased fear, and more importantly, decreased self-expression.

As discussed in Chapter 5, one way Grrls attempted to maintain distance and privacy online was through selecting a name that they thought might offer them some anonymity. Name selection for these Grrls was quite a precise and thoughtful activity. Jenny and Karen used pseudonyms to address safety concerns as they felt they were quite young when first online (at 9 and 14 years of age); Jenny switched to her real name once she turned 13. Grrls who used their real names generally used their first name or an offline nickname, rather than including their last name. Sally, Ashley and Mandy intentionally avoided publishing their last name online, due to safety and/or anonymity concerns; as Sally says, “I have never used my real last name when journaling, because it’s hyphenated and would easily point to just me” (Sally, survey, 2010). Mandy wanted to keep her homepage secret from all but her closest existing friends, and repeatedly found herself “embarrassed” after existing friends and relatives happened upon her page, which had information about her “crushes” (Mandy, survey, 2010). Tara failed to find a pseudonym she felt comfortable using, and ultimately chose to use her first name for an acceptable mix of differentiating herself online without harming her personal security, as her name was “common enough for it to not be identifying but not so common that I couldn’t be differentiated from other website maintainers” (Tara, email correspondence, 2014).

Many Grrls were concerned about their personal security online, yet saw no risk in using their first names. They did not expect homepage visitors or online friends (or stalkers, or enemies) to find them in the offline world using only their first name. Dorothy was unconcerned as the Domain Grrl era inherently presented less risks of being discovered by existing family and friends, yet she did control her available information more tightly when there was a specific personal need relating to her mental health:

I never really cared much about being anonymous. This was in a time before social networking, where people couldn't easily search

for your profiles like today. I didn't actually start using a handle/screen name until much later. I normally just used my real first name but left out my last name. I think I was pretty honest about portraying myself online for the most part, but I think I hid some more details when I was going through the depression than when I first started. Overall, I didn't really feel like I had anything to hide, and other people finding my websites were mostly people around the same age who had similar interests. At that point, I was a legal adult, so I didn't feel like I had anything to really worry about. (Dorothy, email correspondence, 2015)

A Grrl's first name was difficult to break away from, and it played a firmly established role in how she presented herself to a public. Extending that discussion from Chapter 5 to consider the Grrls' expectations and desires for privacy, pursuing anonymity was a complex, negotiated activity, as Grrls who withheld their last name still published some personal information, such as the names of their town, state or school. Only a couple of Grrls strictly distinguished between online and offline, such as Nadia, who stated "I liked to keep my online life away from my offline life. It was personal space for me. :)" (Nadia, survey, 2010). Her selection of content reinforces this stance; "I didn't like showing photos or writing a bio. Was more interested in getting to know people over chat & email" (Nadia, survey, 2010).

Mandy wanted to ensure a similar separation, distinguishing between being unidentifiable and being 'honest':

I definitely wanted to be anonymous in the sense of keeping my online and offline lives separate, though I didn't do a great job of it, but I rarely used pseudonyms or changed names of people I wrote about. I remember honesty being an important theme in the teen journals community - that sense of wanting to "keep it real" and put yourself out there - but I don't recall struggling much with that personally. Probably because I was only 11-13 at the time and it might not have occurred to me that I could have gotten away

with inventing a fake online life for myself! (Mandy, email correspondence, 2015)

Later, the more sophisticated chat software technology AOL Instant Messenger (AIM) presented a scenario where her contexts would be mandatorily collapsed, if she created a single account and shared it with anyone she spoke to online (both from her Domain Grrl experiences, and existing family friends). She recalls attempting to enforce a clear division between the different groups she spoke to on AIM, by maintaining separate accounts and sharing each with only one group of friends:

Suddenly everyone was on AIM, so eventually I would chat with lots of classmates online. I didn't necessarily let all those acquaintances into my "online life," though. I think at some point I may have had multiple AIM profiles - one I used with offline friends and one for online-only interaction. (Mandy, email correspondence, 2015)

Returning to the roles of safe spaces and a public, during the Domain Grrl era there was a clear need to abandon some arbitrary distinction between private and public, and seek some sort of integrated grey space located in the largely overlapping space of the two online. Reid-Walsh and Mitchell describe these homepages as “a kind of contradictory space – a private space that exists openly in a public domain ... a type of ‘safe’ space” (2004, p. 181), judged as safe for women and girls especially within the traditionally male-dominated space of the Internet. The concept of ‘private’ in the context of personal homepages and self-expression online can be understood now as:

less about keeping secrets for their own sake as about having control over who knows what about you, choosing who you tell, and how, as well as choosing who you do not tell (Livingstone 2005, p. 49).

'Private' is the notion that the instantiated audience aligns to the author's hopes for their viewing public; privacy is possible in the degree of control and awareness that the author can hope to have over the online life of their content. Laurie McNeill, writing about online diaries, also sees the blurring between "'virtual reality' and 'real life'" (2003, p. 25) – virtual and real are no longer set in opposition to each other, and similarly flexible distinctions between public publishing and private content challenge existing preconceptions regarding the public and private spheres. The venue of the Internet consistently undermined the desire to distinguish between these types of content, arena, and behaviour, and the Domain Grrl experience, with private content published in a public arena for a counterpublic conceived of as strangers, is a powerful example of the blurring of these lines in action. What Virilio sees as "universal voyeurism" (2000, p. 16) can in fact be self-aware acts of public speech made by Internet users who are actively negotiating a domain of surveillance and voyeurs, constantly envisioning their audiences and tailoring their messages appropriately.

8.4 Collapsing contexts: shattering the illusion of privacy

Safe space was compromised due to the permeability of the online sphere; homepages had none of the sophisticated privacy control settings that later became available on SNSs. Privacy was assumed by default as Grrls expected strangers to visit and did not share the URL with existing friends or family. The homepages were both expected to be, and often experienced as, a predominantly safe space. As Lizzie describes, homepages could be "sort of private, but not really, and also sort of an unexplored territory without a lot of oversight being imposed on me" (Lizzie, survey, 2014).

They thereby challenged a simple perception of privacy while still offering a sense of unsupervised freedom. This status would be threatened if someone whom a Grrl did not want to visit came to the site and viewed the content, and most worryingly, decided to act on what they saw, as is described below. Yet Grrls had no way of

knowing exactly who was planning to visit their site, or precisely who visited it; they couldn't proactively bar an unwanted visitor, or explain in advance what a visitor was about to see. The risk of such a collapse in contexts, having unwanted people from existing social networks visit their site, was a constant threat to the Grrls, even if they were not aware of it.

Until the moment of a breach, the homepages functioned as safe spaces for these Grrls, providing assumed expressive privacy in the absence of any proof of otherwise, just as they did for the Grrls whose privacy was maintained over time. As Grrls overwhelmingly expected and hoped for strangers to visit their sites, they also acknowledged the chance that existing friends and family could visit, and their varying attitudes towards this – and the repercussions in the handful of cases where it did happen – demonstrate the fraught nature of this intersection. To have a site open to strangers meant it was also open to any other visitors, and for roughly a quarter of the Grrls, this caused consternation and pain in their offline lives when friends or family did visit.

A few Grrls definitely did not want existing friends or relatives visiting their sites. Two of them never experienced this, but regardless, “didn't want them to” (Diana, survey, 2010), or felt that there was a clear boundary between offline and online worlds, and that offline visitors would have breached this, which would have been “weird” (Danielle, survey, 2010). For Diana, who sought solace online as her “personal life was less than ideal at the time”, and enjoyed making “like-minded friends who shared common interests” (Diana, survey, 2010), existing social networks were ineffectual and did not provide her with the social support that she needed. It is therefore understandable that she was not interested in them visiting her online safe space. Danielle similarly perceived the Internet as a whole new world of opportunity when compared to her offline life. The personal homepage movement was “something that was almost intangible, outside of my small hick town -- you had to be smart to be a part of it, you had to know how to do technical things -- and it was mine” (Danielle, survey, 2010).

Her friends and family in her town did not offer her the relationships, communication and social interaction that she desired, and if they had visited her homepage, it would have disrupted how she regarded and engaged with the Internet, and this could have taken from her something which she felt improved her quality of life. For the other five Grrls who didn't want existing social contacts visiting their sites, one issue that emerged was the idea that as these people were not the target audience, this would have compromised the Grrls' sense of freedom in their own spaces. Ashley, who enjoyed having enough anonymity to feel true to herself, hypothesised that she would have been "probably a little bit self-conscious. i expressed myself much more freely online than in my person" (Ashley, survey, 2010).

Existing social contacts did visit other Grrls' sites. Emily recalled her Domain Grrl experience as a time of self-expression and connection, with a homepage that "gave me a place to express myself and share my thoughts", and which acted as "a page that people ANYWHERE could see/read" (Emily, survey, 2010). Through her homepage, she could get feedback from objective people on the topics that concerned her; "an outsider's perspective", from "anyone and everyone" (Emily, survey, 2010). She described her homepage as an "outlet to vent to w/out [without] people I saw everyday getting angry about what I was saying" (Emily, survey, 2010). This gave her a much-needed way to discuss topics important to her, including "myself, what I thought was interesting, my everyday life, sports teams that I followed, music that I liked" (Emily, survey, 2010).

She felt comfortable expressing herself freely in a new, safe space, but unfortunately her homepage was ultimately visited by those people she was trying to find space apart from. "it caused problems in my real life" (Emily, survey, 2010), which led to Emily deleting her site; "I ended up stopping blogging because of drama that it caused when people read what I thought and got mad about it. Very high school style drama" (Emily, survey, 2010). Her homepage was a safe space for approximately five years, and then a breach of privacy meant she could no longer rely on it.

Amber saw her homepage as a “social and emotional outlet” (Amber, survey, 2010). Her site acted as a conduit to connect her to strangers, people she hoped would be sympathetic, as she “desperately wanted to be accepted by others” (Amber, survey, 2010). The friendships she made during this time were long lasting and some of her closest friends; she found that network she desired. The need for this social space is made more apparent considering what happened when her existing friends found her homepage. She was “mocked by classmates when they found the site”, and she felt this was more than accidental or in any way justifiable, as she believed they “were out to mock me” (Amber, survey, 2010). Like Diana and Danielle, her personal homepage experience was a shining light in an otherwise frustrating adolescence; “I was a small town girl and finding others like me was tough. Looking back, I can see that this was my real social outlet” (Amber, survey, 2010).

As classmates who she was already emailing found her homepage without her telling them about it, they made fun of her creations and dismissed her online experiences:

I had a group of friends online that I e-mailed quite a bit, and when I found out that one person had discovered my website and mocked it badly, I needed to move it. One friend offered me space on her site, and she helped me move everything. (Amber, survey, 2010)

This was a challenge to her entire online life, and as she was already feeling relatively isolated socially offline, she felt “very crushed by the mocking”, and “mortified. It was used against me” (Amber, survey, 2010). She dispassionately apportioned part of the blame to herself; “[i]t was my own fault - a personal journal online is public. It’s like leaving your paper diary in the front hall of a shared house. Only worse” (Amber, survey, 2010).

This is a telling simile; a personal journal is an extremely powerful and vulnerable site of self-expression (Mandy similarly described unwanted people visiting her homepage as “akin to having my diary read” (Mandy, email correspondence, 2015)).

Amber moved her homepage to a new location online to protect it from these people. For Amber, her homepage functioned as a journal where she could express herself and build connections with others, yet she ultimately recognised that the affordances of the available technology offered only an illusion of genuine, guaranteed privacy.

Sarah had mixed emotions about visitors from existing social networks, distinguishing between different types. She wistfully sums up the challenges in navigating what could have been an uneventful, acceptable situation; “[i]f friends other than the horrible girls in my dorm had read it, I would have been fine with that. [...] some family members found it and that was bad....” (Sarah, survey, 2010).

The repercussions for her were significant:

I got in trouble with my family and that was a whole big terrible thing. I also got some of the girls in my dorm really really mad at me and that really sucked too. I mostly stopped writing personal stuff on my domain after that. [...] I got into a fight with some family members about 10 years ago and didn’t speak to some of them for an extremely long time. I also got into almost a knock down drag out fight with some girls from my dorm, but I moved out early and kind of ran and hid from them to avoid the fight.
(Sarah, survey, 2010)

These challenges to her existing social networks reverberated within her online activities; “after I had some very negative consequences, I mostly stopped writing online” (Sarah, survey, 2010). Looking back, she believes she should have practiced more self-censorship; “I would just be a little bit more careful about what I wrote at times” (Sarah, survey, 2010). Yet overall, she had a largely positive experience of being a homepage creator and a community member, meeting up with online friends offline, and hosting friends on her domain. Unlike other Grrls, she managed to traverse the terrain of collapsed contexts without her entire Domain Grrl experience being ruined. Though her personal homepage experience was a positive

one, the intersection of public and private for her was a perfect storm of friends, family, and study.

Mandy's site was visited by both friends and relatives who subsequently teased her:

I had one offline friend who was also into creating websites, and I trusted her enough to share a bit of my online life... but teen friendships being what they are, she eventually ended up spreading the info around school. Most of the embarrassment was related to the guys I liked finding my site and reading journal entries or poems I'd posted about them, or a friend reading something mean I'd written. For me, it was akin to having my diary read. I don't remember any major consequences other than being teased a little at school about things I'd put online. Each time it happened, I'd just take steps to anonymize myself more - move the site to a new URL, change names and remove identifying details, etc. When I started doing this regularly to avoid being found out, I found out that my offline friends were constantly trying to figure out where my latest site or blog was so they could "spy" on my writing. That sounds awful on paper, but honestly, if the tables had been turned, I'd have been doing the same thing! (Mandy, email correspondence, 2015)

She expressly did not want them visiting her site ("Definitely not my parents or anyone I knew in real life" (Mandy, survey, 2010)), a recollection presumably affected by the repercussions she could recall from when this did happen. She consequently began to practice self-censorship to avoid the next instance of people in her offline social networks teasing her when they found out about her romantic interests. Even though both Amber and Mandy didn't want visitors from existing social networks, and were upset and disappointed by social harassment by those who did visit, they nonetheless still had rich and rewarding online experiences, with "lifetime" (Amber, survey, 2010) and "lasting" (Mandy, survey, 2010) friendships, respectively.

Domain Grrl sites were ‘private’ insofar as the intended audience was clear in the creator’s mind. However, there were no tools available for the Grrl to translate that expectation into reality. Regardless of Grrls’ intentions when creating their site, the technology they were using provided no simple way to restrict access to different people. As they wholeheartedly invited and welcomed strangers to their sites, they were also unwittingly (and, if they had realised, often unwillingly as well) providing access to people they already knew. The simplicity of the technological environment hampered their ability to maintain truly safe spaces. They were safe spaces only while they remained online and the unwanted offline audience remained at a distance. The sense of homepages being an absolutely private space frequented by strangers or those who were explicitly invited from existing social networks, was circumstantial and misleading, yet while the illusion held, the safe spaces created genuine freedom and empowerment for Grrls.

For all these Grrls, the safe space for expressive privacy, to express themselves, free from control, censorship and reprisal, intersected with an interest in who would be consuming their creations. As they published their thoughts and opinions in a public venue, they felt some measure of safety when contemplating their counterpublic, which they expected to be more understanding and sympathetic than their existing social networks. Their hoped-for online counterpublic would be receptive to their content and respond to it, and their self-expression would therefore build new connections and possibly respect, rather than offline self-expression that could cause further conflict between the Grrls and their existing social networks. This was indeed the case, but when privacy was breached, it was distressing and caused changes in behaviour online, highlighting how important that sense of safe space was to the Grrls.

8.4.1 Domain Grrls ambivalent about existing social networks

For another six Grrls, the prospect of visitors from their existing social networks was less threatening. Such friends visiting their homepages could feel “normal” for Catherine (Catherine, survey, 2010), living in Europe and trying to find fellow manga

fans online or off. Karen “didn’t really care” (Karen, survey, 2010), while Nadia, creating many sites and exploring different topics, such as cruelty-free makeup and skincare, would have been “not bothered” (Nadia, survey, 2010). Emily, using her homepage to vent to online friends who could keep her “sane”, “would have been fine about it” (Emily, survey, 2010). Another four Grrls felt mixed, as these friends would learn things about them they had hoped to keep hidden from them. These Grrls used their sites as an opportunity to express themselves, and in the case of Dorothy, to engage in creative activities without being mocked:

I was still embarrassed when one of my IRL [In Real Life] friends stumbled upon me working on my sites in the computer lab.

‘Cartoon Dolls? What the heck are those?’ (Dorothy, survey, 2010)

She subsequently began some self-censorship, having “learned quickly to not put any really embarrassing information online” (Dorothy, survey, 2010).

Sometimes this meant using their site as an alternative venue where expressing themselves would not get them in trouble. Cassie “wanted to write about what I thought and felt but didn’t want to hurt/offend anyone I knew”, and so she would have felt “a little odd” if friends from existing social networks had visited (Cassie, survey, 2010). These Grrls struggled with the temptation of having their friends learn more about who they were, and the risk that this could backfire on them. Sally sums this up succinctly when asked how the unwanted visits of friends could have affected her: “[like] my privacy was being violated” (Sally, survey, 2010), while also musing that the actual results were quite different:

[although] this did happen once or twice and aside from asking them if they felt like I was being too harsh to them, which they uniformly said no, I felt like they’d gained a much greater understanding of who I was/am. (Sally, survey, 2010)

She juxtaposes the fear of intrusion with the fact that by intruding on her online space, her friends actually learnt more about her – a level of interest that she sought but never received from those she idolised online.

8.4.2 Domain Grrls positive about visitors from existing social networks

Only six Grrls felt entirely positive about existing friends or relatives visiting their sites. Some of them were excited to share the fruits of their creativity; Brigitte would “feel good because they would see my art work [manga drawings]” (Brigitte, survey, 2010). Or, there was some sense of social achievement just by having them visit, that it would be indicative of some sort of status change or improvement in the friendship; Amy “would have felt flattered that they put that much effort” (Amy, survey, 2010), implying her existing friends perhaps didn’t have as much consideration or sympathy for her medical condition.

In fact, two of these six Grrls felt it would have been surprising if strangers had visited their sites, situating their experiences as less aligned to a counterpublic and a safe space. Brigitte even expected her public was “People who I sent the link to, who were mostly friends and family” (Brigitte, survey, 2010) – she reached out to her existing social networks intentionally to encourage them to become her online social network too, rather than maintaining her homepage on the border of her offline life. Importantly too, there were no negative repercussions if any people from their existing social networks did visit their sites, so as the participants recalled their original desire for them to do so, their memories were not affected by any unexpected, negative ramifications.

8.5 Hierarchies and high school: exclusion and exclusivity amongst Domain Grrls

By engaging with publics through their homepages, Grrls had to negotiate and navigate their way through their social expectations and norms. Just as some Grrls

felt accepted, others felt excluded, and the social friction that can flare up during adolescence (for both girls and boys) appeared online even as Grrls were trying to escape their offline experiences of it. A fundamental factor in the structure and consequences of the social hierarchies and connectivity was the design and style that Grrls displayed on their homepages. Grrls could form individual friendships based on mutual interests or any other personal connection, but to become widely respected or regarded by the broader movement, they needed to demonstrate some particularly impressive design skills.

There was a hierarchy where Grrls with the best skills rose to the top, which entailed having more visitors, and setting some design trends – even being the site that other Grrls copied code from to integrate into their own homepages. Lynne explains how the hierarchy was headed up by the most elite of Grrls – using the geek terminology ‘l337’ for ‘leet’, from ‘elite’; “it’s almost as if there were the “l337s” (most often the hostesses) and their disciples (most often the hostees), to simplify the stratification based on caliber of popularity and skill involved” (Lynne, survey, 2010).

Lizzie had a strong existing social life so did not crave acceptance by this group, but was attracted to it:

I looked up to a lot of people on the ‘scene’ and kind of hovered near them--going to sites they recommended, linking them, making my site more like theirs, etc--but I didn't form a lot of relationship with them. (Lizzie, survey, 2014)

Grrls with less advanced design and coding skills knew they were not these “queens” (as described by Jenny (survey, 2010), who ironically went on to become a computer scientist), but could be inspired by them. The stratification here provided a useful structure; Grrls knew which sites to visit for inspiration and to learn from, and to see the design they needed to align to, in order to feel like they fitted in. In this way, the hierarchy functioned as a fundamental, relatively widely accepted and respected educational framework rather than simply a function of exclusion.

As well as this skills-based hierarchy, a few Grrls reported a more harmful, socially organised hierarchy. They felt that the Domain Grrl experience was reminiscent of high school, with popularity a key indicator of success, and the formation of friendship circles that were by nature exclusive and exclusionary. Mandy, who discovered strong friendships and tried to protect her homepage from being discovered by her existing social networks, reported some drama, yet less than high school, with its attendant stresses of actual close physical proximity and broader social circles:

I loved having a virtual friend group that had all the fun of real-life friends (inside jokes, etc.) without worrying about things like whether they were more/less popular than you at school or whether you were going to fight over the same boy. None of that mattered when we all lived several states (or sometimes countries) apart. Not that there wasn't drama, but overall, I felt like I could be myself with my online friends more than I could be offline.

(Mandy, email correspondence, 2015)

Sally, who always felt on the outer, identified an “in-crowd” of the most popular, of which she “desperately wanted to be” part (Sally, survey, 2010). In fact, Sally is the only Grrl whose personal homepage did not lead to a sense of being in a community (although her LiveJournal activity did). Her recounting of this was quite emotive:

The sites in the community I wished I was in were all extremely stylish and mod, with a lot of cryptic comments (sometimes even hidden in the html) about their life that you had to piece together. [...] I felt like my website wasn't “good enough” for not being part of the recognized community. being part of the stylish teenage-girl community seemed to me like you got hosting space, you got recognized and lots of links, and you got to talk about your website like it was more than just a stupid little hobby. Looking back, it

seems like the benefits were just being part of the 'in-crowd.'
(Sally, survey, 2010)

Other Grrls who were more embedded and engaged in the girl homepage movement held similar opinions; Dorothy also felt that certain Grrls were "influential", noting that one such Grrl ran a very popular forum. Danielle saw a mix of behaviour that both attracted and repulsed her:

Friendly and snarky at the same time -- I feel that I made some great friends, but I also saw how girls ganged up on each other, accused one another of copying design, starting fights on forums, leaving anonymous comments in guestbooks. (Danielle, survey, 2010)

Regardless of technical skills or homepage design, as friendships were formed, the social behaviours of belonging and excluding learnt in the high school corridors were being translated to the online world.

This emerged from a seemingly positive social experience; Grrls were entering a larger social sphere than those available to them offline, and were therefore able to meet people more accepting of them and who related to them and understood their lives and interests. However, they were also creating communities, social networks, and friendship groups, and by creating their own broader social spaces of inclusion for their friendship networks, they were automatically creating a space for those who were excluded; the outside. Even without a physically visible demarcation of space, those who were on the outside could feel rejected, excluded, or simply not 'cool' enough.

Nadia, who felt secure in the rewarding friendships she made online, recalls how her online friend dealt with a similar situation by simply creating her own domain:

A girl - K - I knew through another online friend was pissed off at how serious people were being about having a domain. That was around the time that domains & hosting had become really cheap

& accessible, so girls my age and younger were getting domains and taking elitist attitudes in chat & forums. I didn't really 'hang around' the online communities at that time, so I only understood it secondhand. Anyway, K was fed up with how silly it all was, so she registered a domain as a joke - uninvited.net (because none of us had been invited to join an "elite domain") - and invited her online friends and friends of friends. Looking back now, I really appreciate her sense of humour about it - people in general seem to take self-importance so seriously - this was a nice, productive finger-up to that attitude as a whole. (Nadia, survey, 2010)

Owning a personal space in the form of a domain was both an opportunity to create a social space of friendship and 'like-minded individuals', and yet simultaneously, a situation where other Grrls could feel excluded, or simply irritated, and had to come to terms with how to deal with it. As many Grrls were building social networks and friendships, there were those who felt excluded, and watched from the sidelines as public displays of social connectedness appeared on guest books, link pages, webrings and cliques.

A Grrl-owned domain signified social status, both for the host and the hostees; it was prestigious to own one, and even simply being hosted was an achievement some Grrls aspired to. Lizzie ruefully blames this on the quality of her code and design; "I had tried finding a host but I think my site was so bad that they didn't want to host me, ha!" (Lizzie, survey, 2014). Roughly half the Grrls owned and managed their own domains, and two bought them as a last resort after they could not find a domain to host them. Both sought to share the newfound status that they had found difficult to attain previously, and tried to be more welcoming than those who they felt had spurned them. Anna proactively offered space to other Grrls, and Dorothy accepted strangers, not just friends, who applied for hosting on her site. For both Grrls, domains were a mechanism for proactively and consciously expanding their audience and feeling part of a counterpublic, the strangers who

could also be feeling excluded, even within the new counterpublics being experienced by Grrls.

The loose-knit community structures such as webrings and domains which supported the Domain Grrl experience both connected and excluded, with some Grrls keenly experiencing being on the periphery socially. The skills-based hierarchy which was largely unwritten but widely recognised functioned to communally appreciate Grrls' skills as designers. Yet in spite of this nominally positive approach to community-building, it also caused other Grrls to feel dismissed, ignored, and unable to experience any sense of this specific community, even as they went on to feel supported in other online social networks and communities, Grrl-specific or otherwise.

Looking at this through an agonistic lens helps frame this exclusion. Agonism defends "contending forms of citizenship identification" (Mouffe 2000, p. 127) as being a source of the passion which is both unavoidable and productive in a democratic environment. Without claiming the Domain Grrls experience to be democratic, or even requiring such an argument, we can see in agonism a support of conflict, a recognition of its inevitability in a pluralistic society or community, and an argument that it not be seen as inherently debilitating or destructive. The conflict (latent or otherwise) between Grrls at different strata in the technical and/or social hierarchies functions as a demonstration of agonistic tension. This tension may reinforce the claim that the Domain Grrl experience created safe spaces; perhaps not idealistic Habermasian public spheres, but, places of pluralistic communion and difference. Alternatively, the rare yet undeniable cases of social exclusion felt by the Grrls may instead point to a community which was driving towards "rational consensus" (Mouffe 2000, p. 124) rather than allowing for agonistic debate. This question cannot be adequately addressed within the scope of this thesis, but I would reflect that the symbiotic relationship between the Grrls' social relationships and their sense of safe space indicate a more atomic and fragmented nature of space which cannot be easily dismissed as a singular exclusionary site.

8.6 A slow decline: the shrinking role of the homepage for Domain Grrls over time

Grrls often cited an interplay of multiple factors which led to them stopping maintaining their sites. As they transitioned through their teenage years, study and work became more time-consuming, and they had less time to devote to learning code, producing content and maintaining their sites. If they went on to further study after high school, they frequently found that their new environment offered many social activities which slowly reduced their time and need for socialising with friends from their personal homepage activities. Ashley built friendships more easily in college, and this helped draw her away from her homepage; “i started working full time and moved out of state to go to college, where i spent most of my time studying, working, and meeting new people - in person” (Ashley, survey, 2010).

Similarly, Isabel “had so many real world relationships that it didn’t seem to necessitate the website anymore” (Isabel, survey, 2009). Lynne described the intersection of different offline demands on her time:

The main factor is time; these days, I have a job and an increasingly outward social life, not to mention more difficult classes and overall less patience with sitting in front of a computer. That has been the most drastic change, time. (Lynne, survey, 2010)

There could also be a specific social factor at work, such as Cassie’s first romantic partner, who assumed the role of confidante previously played by other Grrls online:

I stopped because I found someone I could talk to. I got a boyfriend when I was 17 and found that he was easy to talk to, and seemed to like me for who I was. He was the first person I really trusted enough to open up to. (Cassie, survey, 2010)

Some Grrls seemed to simply need their personal homepages less and less. Danielle, who worked constantly on her site to improve her designs and win

approval from the girl homepage community, eventually didn't have such a need for her homepage anymore; "I guess at a certain point I had sort of gotten out my angst, or sufficiently sated my need for a creative outlet, at least in that way" (Danielle, survey, 2010). These Grrls lost interest in the experience slowly and naturally, or even felt that what they had gained from their experience was just no longer relevant to their lives. Their homepages had filled some gap in their lives, and that gap had disappeared over the years.

8.7 Chapter summary

This chapter explored more nuanced and complex aspects of the theme 'connectivity'. Grrls depended on the intrinsically public nature of the Internet to search for and connect with people who they could not have otherwise found, and the long-lasting social benefits of their experience are testament to the success of this approach. Even so, social dynamics inevitably influenced Grrls' experiences, and are presented in this chapter through the perspectives of what they wanted to achieve, and what they felt they actually achieved, considering an agonistic perspective for qualifying how social exclusion may have functioned. For those who also presented themselves and their lives online, they risked discovery by precisely the people who offline were not providing the social support they were looking for.

These experiences of the blurring of public and private speak less to any statistical likelihood of such an event happening, and more to the severe implications when it did. Personal homepages were only safe spaces insofar as Grrls could *feel* safe and believe their public was a counterpublic, composed of strangers and not their friends or family. Grrls largely could not constrain access to their homepages, so they were publishing content with a specific public in mind, but having to deal with the consequences if other people chose to visit. The early Internet's aura of opportunity and novelty encouraged exploratory self-expression, but its technical immaturity did not allow Grrls to protect themselves from feeling exposed to the wrong people.

Although ensuing social pain happened infrequently, the simplicity of these situations, whereby the technology offered no barriers to unwanted visitors, suggest that the Grrls were being innocent rather than naïve; that their vision of privacy, of control over their online presence, required a certain level of blind faith to succeed. Searching for ways to prevent access would have delivered very few within the scope of their technical expertise, and could have dissuaded them entirely. Rather, their initial enthusiasm, and their ongoing passion, carried them through a technological landscape comparatively simple and immature, and still allowed for skills acquisition and a large degree of social, mental and emotional benefits and success from their experience. The concluding chapter will recapitulate this entire thesis, reiterate the significance of this research, and recommend directions for future research.

9.1 Introduction

This thesis builds upon prior research into girlhood, media production, and personal homepages, to document an early group of girls – Domain Grrls – whose activities and experiences online as personal homepage creators have not previously been documented, and in doing so to bring to life an important period in Internet history. Using qualitative, virtual ethnographic research methods, this project analysed the Grrls’ practices in self-presentation, skills acquisition, social connection, counterpublic creation, and privacy negotiation, bringing their voices to the forefront while presenting a detailed, insightful perspective into a branch of early Internet culture. Uncovering the Domain Grrl history has provided Girlhood studies with another proof point of girls’ abilities and competence as media producers, and rich insights into how these actions translated into social connectivity and privacy practices. This chapter presents conclusions to this research, summarising findings, arguing for the significance of the research, and providing directions for potential future research.

9.2 Summary of findings

In Chapter 1, “Introduction: thesis aims and overview”, I introduced the Domain Grrls as a social group to the reader, argued for their relevance as a potential field for research, and presented the core research question for this thesis:

How did girls utilise technology, present identity, and connect with each other, when creating personal homepages in the 1990s and early 2000s?

Underlying this question is a key motivation for this project:

To discover and document the previously little-known history of girls in an early period of the Internet.

This chapter established upfront a brief history and explanation for the term 'Domain Grrls', acknowledging preceding girls' media production movements which had provided the term 'grrl'. Finally, in this chapter, the structure of the thesis was laid out.

Chapter 2, "Methodology and methods", discussed the qualitative, virtual ethnographic framework which was used for this research, and addresses the challenges and complications in researching a field which resided in the past, in a virtual space. These included attempting to define the field by locating its participants after its lifetime. This chapter detailed the methods for data collection and analysis, presenting the final themes of self-expression, DIY skills acquisition and connectivity' and also addressed some limitations and shortcomings in the approach. A key achievement of this chapter was to precisely clarify the researcher's relationship to the field, to both demonstrate the validity of an ethnographic methodology, and to address any concerns of bias or assumptions.

Chapter 3, "The Internet of the Domain Grrl era", described the technological and demographic characteristics and qualities of the Internet which created the context of the Domain Grrls experience. By presenting the challenges the Grrls faced to even access the Internet at all, and demonstrating that they were not the typical users of the time, this section underscored the Grrls' dedication to pursuing their activities online. This chapter further contextualised the Internet of the era by presenting two online cultural movements and discussing the extent of their relevance: cyberfeminism and cyberutopianism. The former is a foundational feminist theory and movement of the Internet that assisted with interpreting the

landscape and materiality of the Domain Grrl-era Internet through a gendered lens. The latter, cyberutopianism, ignored gender and youth entirely while arguing for an idealistic vision of endless potential, as typified by proponents describing the Internet as a 'frontier'. While this movement was frequently used in discussions about online communities of the time, this chapter demonstrated its limited relevance to this thesis.

Chapter 4, "Personal homepages and self-expression", reviews the existing literature within the specific topic area of personal homepages, and specifically personal homepages created by girls. This chapter considered the range of academic perspectives brought to bear on personal homepages during early years of analysis, and discussed in detail how some key pieces of research addressed the concept of personal homepages, and found that many situated them within the framework of self-presentation, often drawing on Goffman's work in this space. Girls' personal homepages were researched infrequently, but Stern's findings are particularly relevant to this project, insofar as they addressed the content presented by girls, and attempted to interpret girls' motivations to create their homepages by doing so. The literature review therefore highlights a key gap in the existing research which this thesis addresses: speaking directly to the girls who created personal homepages to capture and analyse their stories, to give them – as girls, a traditionally disenfranchised social group – a voice, and to also engage with them after the majority of their Domain Grrl experience, at which point a retrospective approach is also enabled. This chapter also addressed the underlying concept of self-expression, one of the three key themes from data analysis, which frames the broad concept of how people present themselves in any medium.

From this point, the following four chapters contained the findings and discussions of this thesis, structured around the three themes which emerged from data coding: self-expression, DIY skills acquisition and connectivity. They addressed the Grrls as individuals expressing themselves online, as media producers creating personal homepages, the social networks and counterpublics established through their Domain Grrl experience, and the privacy practices they used to negotiate the

collapse of contexts between different social networks. Together, these chapters told the stories of the Grrls, identifying their achievements, practices, tools, and determination to learn and create in a social and technological space that was previously largely unknown to them.

First, Chapter 5, “Becoming Domain Grrls: motivation and self-expression”, contextualised the Domain Grrl experience within an understanding of ‘youth’, and analysed their acts of self-expression, as relating to the original theme from data coding. This chapter analysed how the Grrls described themselves and demonstrated that Domain Grrls shared common demographic qualities, creating homepages during similar periods of their lives, and doing so with similar hopes and goals in mind. They negotiated authenticity, creativity and privacy as they sculpted the identities that they published online, and refined and changed these over time, integrating content from their ‘offline’ lives to create an identity ‘online’.

Chapter 6, “DIY skills acquisition: Domain Grrls as media producers”, focused on the theme DIY skills acquisition, arguing for the Grrls’ skills acquisition to be recognised as acts of DIY media production. Grrls learnt through trial and error, self-taught with the aid of websites and a *bricoleur*’s approach to code reading and rewriting, and behaved as DIY producers learning in a self-driven fashion with the tools and resources available. This chapter further added to existing research by reviewing the content of the homepages, specifically the popularity of written content. Finally, this chapter addressed the technical skills the Grrls developed, which were long-lasting in their implications for employment, self-confidence, and reputation. Grrls were proud of their achievements, and saw themselves as early geeks, forerunners of future Internet culture. Additionally, by learning from each other’s pages, Grrls were demonstrating the relevance of the theme ‘connectivity’, which is addressed in depth in the following chapter.

Chapter 7, “Building social networks: connectivity in safe spaces”, progressed past the Grrls as individuals and producers, and considered the connections between them, addressing the final theme of ‘connectivity’. This chapter analysed the Internet of the time as a potential site for safe spaces, liminal sites of self-expression

and connection where girls could speak without fear of being seen by figures of authority, such as teachers or parents. This chapter argued for the need for such spaces, and positioned the Internet as such a site, situating personal homepages as extensions of the bedroom culture described by feminist researchers such as McRobbie, and discussing how the Grrls' experiences of self-expression through their homepages supported this. This chapter went on to discuss the social networks that emerged from the Grrls' activities, and argued that these connections were counterpublics. Building upon the concept of a public as being discursively created, and thereby placing the homepages themselves in the role of the elements of discourse, a counterpublic specifies the type of audience which populates that public. This audience is a subordinate social group which on some level recognises this position. For the Domain Grrl experience, this audience is the homophilic 'people like me' that the Grrls sought as they attempted to establish safe spaces online where they could express themselves.

Chapter 8, "Complicated connectivity: privacy practices, collapsed contexts, and social hierarchies", further extended the discussion of the theme 'connectivity', discussing in detail the complications regarding privacy, and inclusion, as experienced by the Grrls. Personal homepages are framed as being part of the public / private discussions about the Internet, and this dichotomy is unpacked to argue for the concept of ongoing negotiation of privacy, rather than a strict delineation between two experiences. The technology of the time, and its inability to enforce any substantial sense of privacy in the amateur personal homepages space, is addressed, as well as the privacy practices the Grrls developed to attempt some negotiation. Ultimately, social contexts did collapse for some Grrls as existing friends or family visited their sites, and this had significant repercussions – self-censorship, social exclusion, a sense of betrayal. These stories are discussed in detail, as well as some more surprising outliers who welcomed all visitors. The Grrls' experiences of social exclusion and exclusivity were also discussed and framed through an agonistic lens to view them as appropriate within such a sphere of (counter)public engagement, rather than destructive to the overall hypothesis of this thesis. This chapter enriches our understanding of the social implications for

the Grrls, building upon the previous chapter to argue for a more complex view of social benefits of such early communities online, by recognising the fundamental challenges of the technology.

9.3 Significance of the research

I will now describe how this thesis addressed the research question and key motivation for the project, the implications of doing so, and how this research generated an original contribution to knowledge. By using GTM as the basis for my data analysis, I allowed the underlying patterns and insights regarding the Grrls' experiences to emerge naturally, demonstrating a willingness to discard my previous assumptions. These data were processed through a blended GTM approach which proved the applicability of media production to this research, while still ensuring the Grrls as individuals and producers were presented as the primary topic of engagement, rather than focusing, as previous researchers did, on their creations exclusively. This thesis positions the Grrls at the centre of this research, and maintains their importance as individual people with a shared experience, detailing their stories as evidence to counteract a popular view of this period of Internet history as populated and dominated by male experiences. In doing so, the research has successfully prioritised the voices and experiences of the Grrls within the broader context of their lives rather than as solely a media artefact analysis, an achievement which is a large part of the original contribution to the knowledge.

The three themes emerging from this research situate the Domain Grrl experience as a combination of practices of self-expression, media production, social connectivity, and, relatedly, privacy negotiation. The Domain Grrl experience may sit alongside traditionally revered scenes of early Internet culture such as MUDs and Bulletin Boards as sites of exploratory communication styles, powerful social dynamics and relationships, and a hacker-esque ethos of play and self-driven technical skills acquisition. Key findings here demonstrate the scope of these themes, emphasising the richness and depth of the Domain Grrl experience, and building upon previous research which investigated only individual aspects of

personal homepages. The original contributions and this direction and guidance are highlighted below, within the following findings:

- Self-expression: Grrls sought to present themselves in an authentic fashion, to attract their desired audience. They largely did not engage in identity 'play' activity, such as assuming entirely constructed personae or 'pretending' to be someone different, which so frequently fascinated researchers at the time and was taken as strong evidence of the potential for the Internet to enable transformation and exploration in people's lives. They explored aspects of their identities as they engaged with different groups of people online, and throughout brought elements of their offline life to their online self-presentation, curating this content to escape not their offline identity, but socially unfulfilling offline lives. This research therefore argues strongly for a nuanced understanding of the role of identity during earlier years of the Internet, and presents valuable insights into previously unknown online identity practices of a rarely investigated group of early Internet users: girls.
- DIY skills acquisition: Grrls were mostly self-taught and drew upon other Grrls' knowledge by cutting and pasting code to experiment, and then expanded to writing their own code. Design trends and standards emerged in their communities, and served to frame one sort of social hierarchy where Grrls revered those with more sophisticated designs. The Domain Grrl experience demonstrated benefits beyond simply acquisition of skills; it provided Grrls with lingering senses of 'geek' pride, enhanced employment opportunities, and improved social reputation. This thesis stands alongside a rich catalogue of research into girls' and women's DIY media activities, such as Riot Grrrl, zine culture, and bedroom culture, and provides unique insights into the Grrls' specific practices of learning and writing code.
- Connectivity: Grrls sought out specifically other people 'like them', demonstrating a homophilic approach to social networking during an era where Internet technology did not dramatically simplify this process. Extending and validating Stern's hypotheses in existing research, I found that

the Grrls built counterpublics peopled of strangers who were ‘like them’ according to one or more specific characteristics, such as gender, age, medical condition, fandom, and artistic or intellectual pursuits. Through these new social connections, Grrls received support, understanding, and a sense of belonging to a community, which were deficient in their existing, offline lives. These benefits similarly lasted beyond the lifespan of the homepage itself. Strong friendships and romantic relationships persisted years after the Grrl’s Domain Grrl experience ended, a finding which all previous research into personal homepages has been unable to provide due to focusing solely on the period of homepage creation, and not including the following years.

- Privacy negotiation in the context of connectivity: The technological landscape of the Internet at the time offered little in the way of tools and affordances for restricting access to content published on personal homepages. Grrls therefore experienced privacy as an expectation of who would visit their homepages, seeking *expressive privacy* where they could express themselves within a secure and safe space to an audience which would appreciate their thoughts and content. Privacy practices were mostly comprised of Grrls limiting what information they published, while still publishing enough to feel ‘authentic’ in their self-expression. This research is valuable in describing the repercussions of breaches of privacy during these early Internet years for marginalised users such as girls, and the collapsing of contexts between social networks. When revisiting this era, when cyberutopianism promised freedom of self-expression online, this research argues that even with drastically fewer Internet users, the online freedom and expressive privacy of more marginalised users were still at risk.

9.4 Directions for future research

There are two aspects of this research which I believe future projects could develop; further research into Domain Grrls, and further research into marginalised groups' use of safe spaces, and practices of media and technology.

9.4.1 Future research into Domain Grrls

Due to a predominance of white, American participants, and a lack of intersectional feminism in the methodology, this research was unable to present any insights into differences in Grrls' experiences according to ethnicity, socioeconomic situation, disability, religion, sexuality, gender identity, or any other intersectional aspect. While acknowledging the methodological difficulties future researchers would face in attempting to provide this fullness in perspective, I nonetheless believe that such research would be extremely valuable in continuing with this aim of uncovering and capturing the history of the Domain Grrls, and further marginalised sub-groups of girls who may have sat within or overlapped the Domain Grrl experience. Some methods which may assist could be:

- Expand beyond the concept of the personal homepage to consider other forms of media production of the time, that relied upon similar degrees of DIY skills acquisition, and presented opportunities for self-expression and social connectivity. Girls with disabilities may have found more accessible online media production technologies. These could include mailing lists, newsgroups, forums, LiveJournal, and chat services. Personal homepages are core to this particular piece of research, but the three key themes are not necessarily limited to this type of media production. There may be social groups where the researcher can find participants, similar to the nostalgic Domain Grrl Facebook, MySpace and LiveJournal communities.
- Consider where these girls may be now. Although this research has not uncovered any direct correlation between current employment and original Domain Grrl experience, there is a suggested relationship between having

fun learning how to code, and pursuing related work. Cultural organisations which engage with this related technology work include industry bodies and conferences, as well as more specifically targeted opportunities such as websites which address the intersection of feminism and geek culture, like www.themarysue.com. Finding women in these sites who created personal homepages in the late 1990s and early 2000s, could also then uncover further social networks to investigate.

9.4.2 Future research into marginalised groups' use of safe spaces, and practices of media and technology

Looking beyond the Domain Grrl experience, I believe the aims of my research can be transposed to how disempowered, disenfranchised or marginalised people develop media practices, create and use safe spaces, and engage with new technologies. My original vision for this thesis was to compare girls' experiences with personal homepages, and with SNSs. I believe this still bears investigation. Specifically, how do girls (and other such groups of people) navigate the profit-driven, data-mining nature of these organisations (Freishtat & Sandlin 2010; Milberry & Anderson 2009; Patelis 2013) through their behaviours of using the tools and affordances provided and promoted by the SNSs? Existing research has discovered how young people are sophisticated users who can manipulate technologies to pursue social connectivity while protecting their perceived privacy (boyd 2014; Debatin et al. 2009; West, Lewis & Currie 2009). Future research may benefit from the methodology and the themes of this thesis. The methodology may guide future research in engaging with the people who create safe spaces, particularly considering the embedded position of the researcher and the challenges of accessing the media artefacts produced. The themes could similarly guide the development of framing the relationship of the media producer with their artefact, and the benefits and opportunities the act of producing media then uncovers.

9.5 Conclusion

This thesis has, at its very heart, delivered a significant contribution to two fields: girlhood studies, and, Internet studies. It has presented a nuanced and critical set of insights regarding the Domain Grrls experience, the Grrls' stories as sites for self-expression, media production, social connectivity, and privacy negotiation. Taken individually, each of these findings build upon a small amount of prior research into girls and personal homepages, and together, these findings demonstrate the potential for rich research to still be conducted on Internet history that is already over a decade in the past, and in doing so, to present an integrated perspective of people and their related practices. This thesis has successfully documented the Grrls as people, and their experiences as a previously largely unknown online movement. It has elevated their story, emphasising the social, technical and personal facets which position it as a fascinating tale of early Internet culture and girl media production. It has also created another safe space where their voices could be heard, and their achievements recognised now and into the future.

Looking back I see that this was a unique experience because it was new at the time. This was the beginning of something so much bigger. (Anna, survey, 2010)

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Appendix 1 Glossary

Term	Definition
Cascading Style Sheets (CSS)	A mechanism for standardising styles (e.g. fonts, colours, spacing) on a website and simplifying their use
Domain	A unique alphanumeric name for a device (such as a server) connected to the Internet, to replace the numerical Internet Protocol (IP) address which all connected devices have
Free personal homepage provider	A company which provides free space for users to create their own personal homepage, and store and publish files for use on it
File Transfer Protocol (FTP)	A method for transferring files (such as HTML files for publication on a personal homepage) between devices connected to the Internet (such as between an individual's PC and a homepage server)
FrontPage	A Microsoft HTML editor and web site administration tool, last version released 2003
Hypertext Markup Language (HTML)	The standard, fundamental mark-up language used to program web pages and other pieces of web content
Internet Service Provider (ISP)	A company which sells the ability for a device (e.g. mobile phone, tablet, computer) to connect to the Internet
Modem	A piece of computer hardware which serves to connect one or more devices to the Internet
Notepad	A Microsoft simple text editor that allows creation of any text content with no formatting. Packaged in Windows since 1985, and still to date in Windows 10 in 2015

Term	Definition
Personal homepage or homepage	A website (consisting of one or more web pages) created by an individual and containing personal information about themselves
Uniform Resource Locator (URL)	An address for a location or piece of content on the World Wide Web; e.g. a website, media file, personal homepage, web page, or social media user profile
Webring	A group of websites, usually relating to the same topic, which connect to each other through some visual linking tool such as a hyperlinked banner
Website	One or more web pages published together on the World Wide Web at a single domain
Web page	An individual hypertext document (as opposed to a Word document, PDF document, or other format) published on the World Wide Web
World Wide Web (www)	The infrastructure which supports hyperlinked webpages on the Internet

Appendix 2 LiveJournal Domain Grrls community

The following is the ‘long’ description of the LiveJournal community dedicated to the Domain Grrls experience. This community referred to whom I call Domain Grrls, as “oldschoolers” and “Internet Girl*Goddesses of the late 1990’s”, and was a site where I recruited participants (*Internet Girl*Goddesses of the late 1990's* n.d.). I first visited it around 2008, and I copied the below quote in 2010. It is described in more detail in Chapter 2. (I have no similar text for the similar Facebook group as it had been deleted when I went to copy any descriptions.) This text is included as it demonstrates the nostalgia harboured for the Domain Grrl era, and is an engaging description of the era itself:

We gave out the awards, joined the webrings, and ran cliques. We were the first to buy domain names (delish, siren, choirgirl, gemz) & the first to start journals. We had exotic pseudonyms, which we changed nearly as often as our website layouts. Our pages resided on servers like Geocities, Tripod, Xoom, and Eccentrica, before the days of watermarks and pop-up window advertisements and ‘getting hosted!’.

We remember what things were like in 1996.

We remember pre-56k modems. IRC. ICQ. Web-Based FTP. And most of all, friendship, that no one, especially people “IRL” could understand.

Enough with the drama. :) Join this community if you want to reunite with old friends and find out where the people whose sites you loved and worshipped years ago, are now!

This community is maintained by gegenschein, formerly known as ‘Kelea’, former owner of delish.net/angel, and current owner of siren.org! (*oldschoolers - Profile* n.d.)

The following is the list of interests for the community, also copied in 2010. Livejournal users could include an unlimited, free text, comma-delimited list of phrases which they felt best described their journal or community site, and which were each automatically hyperlinked to connect the visitor (on click) to other sites which included that phrase in their lists of phrases. Some terminology here bears defining, and a short glossary follows. Please also note that this list of interests was created by the individual LiveJournal user who managed the group, not by the members of the group, and therefore some of these interests may be more specific to that user rather than the broader group of Domain Grrls on LiveJournal.

aim, ani difranco, anime, awards, cliques, computers, depression, domain names, domains, ebay, fonts, francesca lia block, free servers, getting hosted, girl goddesses, icq, irc, journals, laundromatic, mixtapes, oldschooners, pink, poetry, pop music, pop-up ads, popularity, pseudonyms, sarcasm, stevie nicks, the 80s, the 90s, the Internet, tori amos, train, u2, webpages, webrings, weetzie bat, witch baby, writing, young and creative femmes (*oldschoolers* - *Profile* n.d.)

Term	Definition
AIM (AOL Instant Messenger)	A chat application provided by US-based ISP America OnLine
Ani DiFranco	A female alternative / rock musician particularly active in the 1990s
Francesca Lia Block	American female writer of adult and young adult literature, writing predominantly in the 1990s and 2000s
ICQ	'I seek you': a chat application created in 1998 which specifically facilitated one-to-one conversations.

Term	Definition
IRC (Internet Relay Chat)	A chat application created in 1988 which specifically facilitated chat rooms, and was heavily populated with more technically-oriented, geek communities
Pop-up ads	Advertisements published on free personal homepages by third parties
Stevie Nicks	American female singer-songwriter, also the lead singer of popular band Fleetwood Mac
Tori Amos	American female solo singer-songwriter and pianist, very popular in the 1990s
Train	American pop rock band from the 1990s and 2000s
U2	Irish rock band formed in 1976 and still performing and recording as of 2015
Weetzie Bat	Debut novel of Francesca Lia Block, first novel in her <i>Dangerous Angels</i> series of young adult novels, published in 1989
Witch Baby	Second novel in <i>Dangerous Angels</i> series, published in 1991

Table 3: Terms referenced in LiveJournal Domain Grrl community list of interests

Appendix 3 Request for research participants

During 2009 and 2010, requests for research participants were posted in Facebook and LiveJournal community groups which were focused on the girl homepage movements, where other users like myself were posting, and where there was a clear alignment to the movement I remembered. These are described in more detail in Chapter 2. I used variations on the following post:

My name is Naomi Civins, and I am a student at Swinburne University of Technology. I am currently writing a PhD in which I aim to document how members of this community created personal websites and communicated with others doing the same, during the late 1990s and early 2000s. Research will be carried out through online surveys.

Some activities from this period which may be familiar to the people I would like to interview, are:

- buying your own domain
- sharing hosting space
- belonging to 'cliques'
- visiting websites such as narcissistic.org, plastique.org, and envy.nu

If these are familiar to you, please contact me to register your interest in participating in my research, and to obtain further information.

Appendix 4 The individual Domain Grrls

Most Domain Grrls lived in the USA at the time of creating their homepages, therefore their location is assumed to be the USA unless otherwise specified below. The names used below are the pseudonyms assigned by me, and as described in Chapter 5, are drawn from a list of popular girls' names in the USA during the average birth year of the Grrls.

4.1 Isabel

the content was similar in a basic way, but the individualized treatment of everything made it extremely interesting. (Isabel, survey, 2009)

Living at home with her parents, Isabel started using the Internet when she was 12, and created her homepage at age 13. She spent her time in web design and teen girl communities, and enjoyed the process of learning good design and improving her homepage, while also having friends who she could turn to for support. When she went to college, her homepage and domain faded into the background of her life, although friendships she made during her Domain Grrl experience stayed with her for years after, and she went on to earn a degree in graphic design.

4.2 Sarah

It went from me writing just for myself to writing for a small audience and that changed how I thought about what I wrote. (Sarah, survey, 2010)

Sarah used her homepage as a journal to share her thoughts, and was older than many of the other Grrls, first using the Internet when 15 and creating her homepage at 17. Her family, school acquaintances and friends discovered her site over time and were angry with her about what they saw, and as a result, she lost friendships and was no longer confident in expressing herself on her homepage. She

moved to LiveJournal, but found it less rewarding as she didn't interact with her friends there as much as she had the friends from her Domain Grrl experience, where the friendships were more long-lasting, with one even attending her wedding.

4.3 Sally

I felt like my website wasn't "good enough" for not being part of the recognized community. (Sally, survey, 2010)

With her own computer at home, Sally first went online at 11 years of age, and almost immediately began creating her homepage. She sought people who would understand the challenges of her life, but felt she was on the outer of the design-focused girl communities she idolised. She did make friends, but only felt truly accepted once she moved to LiveJournal six years later.

4.4 Ashley

i expressed myself much more freely online than in my person.
(Ashley, survey, 2010)

At age 12, Ashley first used the Internet, and at 14, was creating her homepage, with a supportive mother who encouraged her to use the computer, and let her keep it in her room. She maintained a homepage where she felt online anonymity allowed her to be true to herself, and ran a forum that was popular enough to attract the attention of hackers periodically. She made friends beyond the girl communities, although she never met them (or anyone else from the Internet) in the offline world. The skills she gained in her Domain Grrl experience have benefited her during her career in the law.

4.5 Amber

I was a small town girl and finding others like me was tough.
(Amber, survey, 2010)

At 13 in small town America, Amber first went online, and created her first website a few years later, at 16, at free homepage provider Geocities. Her school friends found her sites and mocked her for them, which was emotionally crushing for her, and drove her to move her websites and create new ones to try to escape. Her online social life, however, flourished as she found the supportive strangers she was looking for, and made best friends who she was still in contact with over 10 years later. A group of her online friends once flew interstate to meet in person, with the friendships growing stronger.

4.6 Mandy

Most of the strangers who introduced themselves became friends.

(Mandy, survey, 2010)

Mandy went online and created her first of many homepages in the same year, at 12 years of age. Although her single parent household struggled financially, there was a family computer that her mother allowed her to use as much as she wanted (as long as her school grades did not suffer). She was inspired after stumbling upon other Grrls' sites, and spent an entire summer working on her homepage at home, not wanting any school friends or acquaintances to discover it. When offline people did finally find it, it was embarrassing, but the friendships she made online lasted for years afterwards, and she found the social acceptance she was looking for. She met with those friends offline multiple times over the ensuing years.

4.7 Anna

We could relate to each other on a level that we couldn't related to anybody else. ... This was the beginning of something so much bigger. (Anna, survey, 2010)

A self-described alien, Anna first used the Internet when nine, and made her first homepage at 12. Living in suburban USA, she used her online activities as an escape from a lonely and troubled adolescence, looking for people who could understand her. She created websites that tackled topics such as mental illness, to challenge

what she felt was the lightweight status quo in the online girl communities. She received enough online attention to feel like a celebrity, and built a large online cultural and social network of friends and acquaintances, which eased her feelings of loneliness and isolation. Many of those friendships were carried over into the offline world.

4.8 Diana

I started taking on a pseudonym, and started becoming active in the teen girl domain craze/ online community. I sought recognition. (Diana, survey, 2010)

Diana grew up in a tech-obsessed household, with telephone and LAN cables traversing the house, and she played text-based adventure games in DOS before she even learned to type. She was an instant fan of the Internet from the moment she first used it when 11 years old, and created her first homepage a year later. She was determined to keep her online life separate from her offline, and used pseudonyms to assume new identities as she moved between different domains (while still publishing some identifying personal information). She struggled with trying to remain true to herself while seeking acceptance from online girl communities, and at about 15, she moved on to creating blogs which she shared with offline friends.

4.9 Ellen

When I would get in trouble they'd take my keyboard away so I couldn't use the computer. (Ellen, survey, 2010)

Online at nine, with her first homepage at 11 and domain at 13, Ellen was fairly relaxed and casual with her homepage even as she enjoyed the technology. She played with coding and graphics editing, and enjoyed social aspects and seeking popularity, but never pursued closer friendships online or off, even though none of her offline friends were interested in the Internet as much as she was. The main long-term benefit she experienced was that the skills she gained were useful in her career, as she worked in the media.

4.10 Catherine

I could get to know different people and become friends with them, I had relatively unusual interests and I knew very few people in my physical area who had them. (Catherine, survey, 2010)

First going online in Hungary at 13 years of age, and creating her homepage at 15, Catherine struggled with exorbitant Internet access rates and difficulties in even accessing the Internet at all. She created personal homepages and Japanese manga fan-sites, making strong friendships particularly with other fans, which was important to her as she had not found anyone offline with similar interests. They met in person, individually and in groups, and at science fiction conventions, and her friendships continued for years afterwards.

4.11 Dorothy

you could write about anything, design your site to reflect your mood every week, you could be the person you've always wanted to be. (Dorothy, survey, 2010)

Dorothy was late to the Internet, online at 16 and with a homepage at 18. She moved between multiple personal homepages, and enjoyed having a space for self-expression, and being able to play with the code and customise it as much as possible. She fell in line with design trends in girl communities for a while, and participated heavily in the community, joining cliques and webrings and applying for awards and reviews. Strong social connections resulted from her community activities, evolving from simple links between websites, into real, meaningful friendships. Even though the friendships did not translate into offline relationships, they were still powerful memories for Dorothy.

4.12 Lynne

I loved the flexibility, the depth and ambiguity offered by having your own site. (Lynne, survey, 2010)

Lynne started using the Internet in her final year of primary school, at 11 years, and created her first homepage of many at 12. Initially going online as it was easier than getting her parents to drive her anywhere fun, her online activity rapidly grew as she discovered girl homepages and was drawn to the flexibility they offered. She enjoyed the technical challenges of manipulating code, as well as the expressive nature of writing political polemics and cryptic, personal content. Her page designs became more personal and less driven by trends as she became more confident in her coding, and grew more self-aware and willing to be true to a self that may not fit in with the girl communities. While she was keenly aware of social stratification in these communities of elitist hosts and their cliques, she also made strong friendships, albeit none that carried over to offline.

4.13 Nadia

I moved through several different communities. I felt accepted, but I didn't feel a sense of patriotism about it. (Nadia, survey, 2010)

First going online in Australia when 14 years old, Nadia created her first of many websites in the same year. She published beauty sites, fansites (with her own fan fiction), and personal homepages. She tried to separate the online and offline, enjoying keeping the online as a personal space just for her. The friendships and connections that she made were pleasant and rewarding in the short term, and she enjoyed the intellectual debates that occurred in some sites and the support in the early fan fiction communities where she felt accepted. Ultimately, though, the social benefits and experiences were eclipsed by the technical, as Nadia discovered her inner geek, and ultimately pursued a career in web design.

4.14 Emily

It gave me an outlet to talk to other people in similar situations. (Emily, survey, 2010)

Online at 13, Emily wanted to create her first homepage, when 15 years old, to publish something that could be seen anywhere around the world. She made

friends that she could vent to, expressing herself and receiving ideas and advice, complaining about her life without worrying about repercussions; friends who could keep her “sane” (Emily, survey, 2010). Although they did not translate into substantial offline friendships, these relationships were instrumental in helping her through her teen years, and the friendships continued online for years afterwards.

4.15 Brigitte

it was nice talking to other people with the same interests at me. it was very difficult to talk to people and have friends at school.
(Brigitte, survey, 2010)

Brigitte was online at 12, and creating her homepage at 15, using a “mediocre” (Brigitte, survey, 2010) family computer in her low-income family home in Canada. With three siblings, she struggled to get enough time on the computer, but managed to create a homepage to share her manga-related fan art online. An anomaly among the Grrls, she shared the site with offline friends and family, but even so did make online friends who were meaningful to her, as none of her offline friends were interested in manga.

4.16 Jenny

Everyone had the same subpages, the same cliques, we belonged to the same message boards. We knew who the queens were, who got the most comments, who knew the most tricks, where to go to get the latest codes. (Jenny, survey, 2010)

Online at nine and with a homepage at 12, Jenny ultimately became a computer scientist and programmer, a passion that was ignited by her personal homepage creation. Inspired to create a fan site initially, she went on to create a personal homepage that was relatively simple, without much opinionated or typically teen angst content. However, it did get progressively more technically sophisticated, and she joined girl community webpage design forums and boards where she built

friendships with other Grrls, friendships that introduced her to technologies and ideas that she felt directly led to her career path.

4.17 Amy

I had a sense of belonging and it was nice to see I wasn't the only one. (Amy, survey, 2010)

Drawn to the Internet to find people with the same muscle disease as her, Amy was online at 14, with her first website at 16. She enjoyed coding enough to continue with webpage design and coding even after taking down her own homepage 5 years later. Most important for her though, was being able to connect and share experiences with other people who understood what she was going through with her health. Those friendships did not usually move into the offline world at all (and when they did, it was only in the form of an isolated phone call), but they were meaningful for as long as they lasted.

4.18 Tara

It was nice to have friends with the same hobbies but it was not my primary community. (Tara, survey, 2010)

Tara lived in Norway, and was first online at 9 years old. When she was 12, her family purchased a domain for personal email addresses, and she began creating her first website, a fan site for the television show *Full House*, on the hosting space provided. Enjoying being able to create something without needing formal training, she went on to create a personal homepage, looking to join the trend of well-designed sites, and ultimately being more technically sophisticated, using PHP code. She made friends with other fans of *Full House*, but no long term, lasting relationships.

4.19 Cassie

It just felt nice to know that I wasn't alone, and that being myself wasn't something to be ashamed of. (Cassie, survey, 2010)

Living in Scotland with parents working in the telecommunications industry, Cassie was online at 5 years of age, though she created her first website when she was 12. With her big sister to help her with the finer points of publishing, she added her self-drawn cartoons to see what other people would think of them. Although she stopped updating her homepage at only 17, it played an important role in those years, as an outlet where she could vent her emotions and anger.

4.20 Karen

angsty teenagers need an outlet. (Karen, survey, 2010)

Online at 14 and publishing her first site at 15, Karen wrote some fiction, published some 'angsty' writing, and maintained her site for 6 years. When describing her activities online, Karen was terse, cryptic, and simplistic ("didn't care, I wouldn't know" (Karen, survey, 2010)), but was passionate about the friends she made, many of whom she still spoke to on the phone regularly, years later. Even if not verbose about her experiences, Karen made clearly meaningful friendships that she valued greatly.

4.21 Danielle

I could go online at night after my parents were asleep and partake in something that was almost intangible, outside of my small hick town -- you had to be smart to be a part of it, you had to know how to do technical things -- and it was mine. (Danielle, survey, 2010)

Danielle first went online when 12, and created her homepage a year later. On the family Gateway brand computer in the kitchen, she quickly fell in love with coding

and designing her homepage, redesigning it 25-50 times over the years. Dismissive of the actual content she published, Danielle charted the evolution of her design skills and her alignment to girl community design trends such as “really curly calligraphy letters” (Danielle, survey, 2010). The pinnacle of her achievements was being accepted into the WebGoddess web ring, which only accepted sites with “killer design” (Danielle, survey, 2010). She made strong friendships through her Domain Grrl experience, and loved knowing that her site was her own, kept hidden from her offline life, and thriving in the midst of a vibrant community and culture.

4.22 Grace

Looking back I can see it has been a long time since I was that social! (Grace, survey, 2012)

Online and with a website at 10 years of age, Grace was a UK fan of the television show *Buffy the Vampire Slayer*, and was passionate about publishing and sharing fan information on her fan site. Her LiveJournal was intensely personal, and not for consumption by offline friends or family, and her fan site was staunchly impersonal and purely informative. She made friends with other fans, including an online boyfriend, and the friends she made were extremely important to her as they offered her support when she needed it.

4.23 Lizzie

I came to value the website thing as being sort of private, but not really, and also sort of an unexplored territory without a lot of oversight being imposed on me, so it remained a creative outlet for me. (Lizzie, survey, 2014)

Lizzie created her first homepage at 11, a year after first using the Internet. Already interested in having personal creative projects such as writing stories, it seemed a natural progression for her to move online. Beginning with a simple personal homepage, she soon honed her skills and began making more design-oriented sites that functioned as creative outlets. A self-described lurker with a strong, positive

offline social life, she did not make many friends, and stopped trying to be an active part of the community online, preferring to dedicate that energy to offline socialising. She ultimately used the skills she built in her career over time.

Appendix 5 Survey

The following are the questions presented in the original research survey.

1. What is your year of birth?
2. How would you describe your ethnicity?
3. In what year did you start using the Internet?
4. In what year did you start writing your website?
5. In what country do you live now?
6. In what country did you live when writing your website?
7. What jobs have you held, and what study have you done since then?
8. How comfortable are you with computers now?
9. What were your living conditions like at the time?
10. At the time, did you feel you had enough access to computers and the Internet? Looking back, do you now think you had enough access?
11. Where did you use computers for creating your website, and why?
12. Why did you decide to write a website? Why didn't you make a different type of media - for example, a zine?
13. How did you learn how to write a website?
14. For each website you wrote, please list: its name and how you chose it, URL, hosting location, and what you wrote about.
15. How many websites did you write?
16. Were there any consequences of writing about the topics you chose?
17. How did you refer to yourself, and why?
18. Did you provide any identifying information on each website, such as full name, address, phone number, or the name of your school?
19. What different programs or websites did you use to write each website, and why?
20. How did the content and style of each website change over time?
21. How did you portray yourself on each website, and did your portrayal change over time? If so, why?

22. Did your website contain any of the following: forum, guestbook, instant messaging panel, webring banner?
23. How long did you continue with your website, and why did you stop?
24. Who did you want to read each website?
25. Who was reading it?
26. How would you have felt if friends who didn't usually use the Internet had come online and read it?
27. How would you have felt if strangers read it?
28. Did you feel you were part of a community?
29. How would you describe the community?
30. How important to you at the time was being part of this community? Why?
31. What were the benefits of being in this community which you noticed at the time? What were the benefits that you can see now, looking back?
32. Did any friendships from this community ever end up using more traditional forms of communication, such as the phone, or meeting in person? How and why did this happen?
33. If you were offered hosting space, please describe how this happened.
34. Did girls and boys have different experiences in your community?
35. Did you manage your own domain? If so, what was the address?
36. How did you decide on the address?
37. How did you pay for the hosting?
38. Did you share space on the domain? If so, who did you share with, and how did you decide who to offer space to?
39. How long did you keep the domain for? If you've since discontinued it, why did you do so?
40. What were the immediate or short term positive and negative results of writing a website?
41. What were the long term positive and negative results of writing a website?
42. Did you have any experiences with domains which you haven't already mentioned? If so, please describe them here.

43. If you consent to being contacted further for this research, please list your email address here.

Appendix 6 Additional email questions

6.1 First follow-up questions

Sent January 2014, responded to by participants Amber, Mandy, Diana, Dorothy, Nadia, Jenny, Tara, Danielle.

1. How did you choose your pseudonym/s?
2. What content did you include in any "bio" or autobiographical information provided on your site?
3. When creating a new design for your site, what inspired you?
4. Why do you think you continued with your site for as long as you did?
5. Are you still continuing with any of your original sites?
6. Has your experience with personal homepages influenced how you currently use the Internet? If so, how and why? If not, why not?

6.2 Second follow-up questions

Sent November-December 2014 to specific participants as follows.

6.2.i Sent to Mandy

1. Was there anything going on in your 'offline' life that motivated you to be more involved online?
2. How important was being anonymous to you? How important was it that you were 'honest' in how you portrayed yourself?
3. How did you feel confident that the people you became friends with online, were who they said they were?
4. Were the friends you made also girl homepage creators?
5. Do you feel there was a larger community of girl homepage creators, some sort of camaraderie or mutual recognition / respect, or social connectivity, on a larger scale?

6. You mention creating dozens of sites - were you creating them all at the same time, or were they one after the other? Did you move from one to the next? (I realise this is going back a long time; any memories will be great!)
7. You mention that friends and your mom found out about your site, and this caused you embarrassment. Can you explain what the consequences were, and how you dealt with this situation?

6.2.ii Sent to Dorothy

1. Was there anything going on in your 'offline' life that motivated you to be more involved online?
2. How important was being anonymous to you? How important was it that you were 'honest' in how you portrayed yourself?
3. How did you feel confident that the people you became friends with online, were who they said they were?
4. Were the friends you made also girl homepage creators?
5. Do you feel there was a larger community of girl homepage creators, some sort of camaraderie or mutual recognition / respect, or social connectivity, on a larger scale?

6.2.iii Sent to Jenny

1. What was life like offline, that motivated you to go online?
2. How exactly did you write the code? What software, what process?
3. How do you think the Internet has changed since then? Could you have a similar experience these days as a teenage girl online? Why/why not?

6.3 Third follow-up questions

Sent February 2015 to specific participants as follows.

6.3.i Sent to Mandy

1. What about your sites about different topics, did you create those concurrently?

2. Considering the multiple times offline people found out what you were writing about them, did this lead to you pulling back at all from your homepage activities? I understand you would anonymise your site to try and protect yourself, but over time, did it become too hard, not worth it, or did it generally make you enjoy your homepage activities less?
3. What are some of your fondest memories of that era?
4. Do you remember exactly how you coded? For example, copying & pasting from other sites; using automatic colour-coding of tags in TextEdit. This possibly changed over time as you used different tools and became more skilled, so please share any different ways you coded, and when.
5. When online, how frequently (if at all) did you interact with people you already knew offline?
6. Were there any instances where you felt people online thought that you (as a young girl) didn't belong there?

6.3.ii Sent to Jenny

1. What are some of your fondest memories of that era?
2. Some girls moved from their personal homepages to LiveJournal. Were you aware of LiveJournal, and did you ever join it? Why/why not?
3. When online, how frequently (if at all) did you interact with people you already knew offline?
4. Were there any instances where you felt people online thought that you (as a young girl) didn't belong there?
5. Did you ever show your homepage to your father? Why/why not? If so, what was his response?

Appendix 7 Evidence of ethics clearance

SUHREC Project 2009/061 Ethics Clearance

Kaye Goldenberg to me, Darren, Resethics

18/05/2009

To: Assoc Prof Darren Tofts FLSS/ Ms Naomi Eve Civins

Dear Prof Tofts and Ms Civins,

SUHREC Project 2009/061: Space to Grow: Online Identities from Cliques to Myspace
Approved Duration: 18/05/2009 To 31/12/2012

I refer to the ethical review of the above revised project protocol undertaken on behalf of Swinburne's Human Research Ethics Committee (SUHREC) by SUHREC Subcommittee (SHESC4) at a meeting held on 17 April 2009. Your responses to the review, as emailed on 13 May were put to a nominated SHESC4 delegate for consideration as to sufficiency.

I am pleased to advise that, as submitted to date, the project has approval to proceed in line with standard on-going ethics clearance here outlined.

- All human research activity undertaken under Swinburne auspices must conform to Swinburne and external regulatory standards, including the National Statement on Ethical Conduct in Human Research and with respect to secure data use, retention and disposal.

- The named Swinburne Chief Investigator/Supervisor remains responsible for any personnel appointed to or associated with the project being made aware of ethics clearance conditions, including research and consent procedures or instruments approved. Any change in chief investigator/supervisor requires timely notification and SUHREC endorsement.

- The above project has been approved as submitted for ethical review by or on behalf of SUHREC. Amendments to approved procedures or instruments ordinarily require prior ethical appraisal/ clearance. SUHREC must be notified immediately or as soon as possible thereafter of (a) any serious or unexpected adverse effects on participants and any redress measures; (b) proposed changes in protocols; and (c) unforeseen events which might affect continued ethical acceptability of the project.

- At a minimum, an annual report on the progress of the project is required as well as at the conclusion (or abandonment) of the project.

- A duly authorised external or internal audit of the project may be undertaken at any time.

Please contact me if you have any queries about on-going ethics clearance, citing the SUHREC project number. Please retain a copy of this clearance email as part of project record-keeping.

Best wishes for the project.

Yours sincerely

Kaye Goldenberg
Administrative Officer (Research Ethics)
Swinburne Research
(Mon, Tue, ev. 2nd Thur, Fri)

Appendix 8 The author's Domain Grrl experience

My Domain Grrl experience began when I was 17, in 1998, during my first year at university in Australia, and a few months after my family connected to the Internet at home. My first personal homepage experiment was at Geocities, and my later homepages were published on a variety of other free homepage providers, including Altern.org and Angelfire.com, until late 1999, when I was offered space on a Grrl's domain, Deviate.org. Three other Grrls were hosted on this domain, the youngest 14 years old, and most of them lived in the USA.

I published a wide range of personal creations over the years, including short autobiographies, poetry, feminist thoughts, movie reviews, discussions of sexuality, and more. I was constantly redesigning the layout, imagery and content of my homepage, with 12 versions still saved on my personal computer in 2016, four from March 2000 alone. I provided guestbooks on earlier versions of my homepage, though stopped when I felt the small number of comments being received was not worth displaying. I formed some connections with other Domain Grrls, though usually I was too ashamed of my web design skills to actually approach any of them and try to build a friendship (I always used HTML and CSS, even as other more skilled Grrls were progressing to use Flash and PHP).

I stopped updating my homepage in 2001, at approximately the same time as I became more involved in a separate, closed online community relating to body modification. This was my first experience with an automated online diary website, and became my primary method of self-expression online for another four years. At this point, in 2005, I then moved to LiveJournal.com where friends from my offline social circles maintained journals, and I retained an active presence there until 2009. I purchased my own domain in 2005, fieldofmemes.com, and enjoyed carrying on the Domain Grrl tradition in this space, although I did not have the opportunity to offer space to any other Grrls or women, and my content was quite sanitised when compared to early homepages, due to the potential audience of employers, friends, colleagues and family members. I let this domain lapse around

2009. As my nostalgia grew through running my own domain, I also discovered a community on LiveJournal where the girls I now identify as Domain Grrls gathered to reminisce and reconnect. I also found similar communities at Myspace and Facebook. Seeing how many Grrls had such positive memories and experiences of the Domain Grrl time highlighted to me the importance of documenting our history and recognising our achievements.