INTO THE FURBY-VERSE: THE NARRATIVE PRODUCTION OF ELECTRONIC COMPANIONS

BY

CATHERINE BARBARA CAUDWELL

A thesis submitted to the Victoria University of Wellington in fulfilment of the requirements for the degree of Doctor of Philosophy

Victoria University Wellington

2014

Abstract

Since the mid 1990s, electronic objects designed for the sole purpose of providing human companionship have been widely available to consumers. Effectively, such objects offer a relationship, requiring interaction from a caregiver to "survive" and "evolve". By offering an opportunity for human–nonhuman attachment, electronic companions raise questions regarding the value of relationships and what it is that makes something artificial or real. Following the success of Bandai Electronics' *Tamagotchi*, Hasbro's *Electronic Furby* became commercially available in 1998, and has since become a primary actor in marketing, design, media, and research narratives that raise hopeful, satirical, and fearful discussions surrounding our potential future with sociable and companionable technologies. All of these stories construct relationships with electronic companions that are generally human-centred and hierarchical, meaning that they look at electronic companionship in terms of how it will affect people. During this time there has also been a growth in online communities that engage in cultural production through fan fiction responses to existing cultural artefacts, including Hasbro's *Furby*. In these stories, the notion of electronic companionship has been explored from diverse perspectives, including a non-hierarchical, animal-centred viewpoint that offers an unfamiliar view of interacting with nonhumans by bringing in aspects of the fantastic. By exploring these consumer-made narratives there is an opportunity to understand how people articulate the boundaries of their relationships with technology.

Through a combination of textual analysis, cultural studies and design research, this project aims to explore the role that storytelling plays in communicating and exploring the cultural and social impact of emerging companion technologies. An empirical analysis of seventy-two online fan fictions compares and contrasts popular themes and motifs in *Furby* narratives in terms of whether they render relationships with, and among *Furbys* as positive or negative. When positive, this analysis highlights that *Furbys* are treated in a similar way to animals in fantasy, as the story's protagonist. Through these positively framed relationships we also learn what it means to be an ideal companion and caregiver to nonhumans, as the characters are empathic, compassionate, and selfless. My analysis of negative relationships with *Furbys* in fan fictions highlights a disconnection between the

Furby characters as marketed by Hasbro, and what they become after entering the lives of their caregivers. Despite being sold as friendly and in need of care, *Furbys* often conjure monstrous and gothic associations that can be read as symptomatic of real anxieties surrounding technological innovation. Building on this preliminary analysis, eighteen still and moving image scenarios were designed to elicit stories, and sixty-four online responses were received. Analysis of these responses found that overwhelmingly fantasy-driven storytelling was used to explore the role of *Furbys* in the visual scenarios, and they were often written as biologically alive and equal to humans. Combined, my fan fiction and response analyses highlight the interplay between observational and imaginative storytelling to articulate the boundaries around human and nonhuman relationships. My thesis therefore suggests that design and marketing cannot set the boundaries of electronic companionship because they will always be redefined by the users, and designers could benefit from exploring the use of their designs once out in the world.

My PhD research project offers: 1) a theoretical contribution by positing fantastic storytelling as a space for critical reflection and engagement with material objects, where the potential of electronic companionship can be explored beyond the imperatives of design and marketing; 2) an empirical case study of *Furby* fan fiction that expands the understanding of fan fiction to include consumer objects as source material for textual production; 3) a methodological contribution to interdisciplinary studies by combining narrative studies and design to explore our relationships with emerging technology, and 4) a design research contribution that explores user stories to support meaning making practices of storytelling about electronic companionship, and equally value the place of the nonhuman in design issues.

Contents

4.5 Author. (2012). Scene from video 2 [video still].

4.6 Author. (2012). Multiple images 1 [photograph montage].

4.7 Author. (2012). Multiple images 2 [photograph montage].

4.8 Author. (2012). Scene from video 3 [video still].

4.9 Author. (2012). Multiple images 3 [photograph montage].

4.10 Author. (2012). Scene from video 4. [video still].

4.11 Author. (2012). Multiple images 4 [photograph montage].

4.12 Author. (2012). Care guide 1 [altered Tiger Electronics instruction manual].

4.13 Author. (2012). Multiple images 5 [photograph montage].

4.14 Author. (2012). Scene from video 5 [video still].

4.15 Author. (2012). Care guide 2 [altered Tiger Electronics instruction manual].

4.16 Author. (2012). Care guide 3 [altered Tiger Electronics instruction manual].

4.17 Author. (2012). Scene from video 6 [video still].

4.18 Author. (2012). Multiple images 6 [photograph montage].

4.19 Author. (2012). Multiple images 7 [photograph montage].

4.20 Author. (2012). Multiple images 8 [photograph montage].

4.21 Author. (2012). Scene from video 7 [video still].

4.22 Author. (2012). Number of responses to each scenario [table].

4.23 Author. (2012). Response types for each scenario [graph].

4.24 Author. (2012). *Furby* attributes [graph].

4.25 Author. (2012). Narrative modes in responses [graph].

Appendix A, Fig 1. Author. (2013). Comparison of *Furby* generations 1998–2012 [captioned photograph montage].

Appendix A, fig 2. Author. (2012). Before and after images of 1998 and 2012 *Furby* dissection [photograph montage].

Appendix A, Fig 3. Author. (2012). Video stills from the 1998 and 2012 *Furby* dissection [video stills].

Appendix A. Fig 4. Author. (2012). Comparison details from the 1998 and 2012 *Furby* dissection [photograph montage].

Appendix A, Fig 5. Author. (2012). Close up comparison details from the 1998 and 2012 Furby dissection [photograph montage].

1. Introduction

I have always shared my home with nonhuman companions. Growing up, two rabbits, three cats, two guinea pigs, three tree frogs, and an array of birds moved in out of my family home. In the mid-1990s we were joined by a collection of electronic animals that were also companions of a sort, although the bond always seemed to fade over weeks, not months or years. With a strong understanding of what nonhuman companionship was and could be, I was fascinated by these objects, not because I loved them, but because I did not. The initial unavailability of virtual pets due to consumer demand gave them an almost mythic quality. They were magical; a living creature inside a little shell, just waiting to be activated. In the mix were also the many nonhuman companions inhabiting the stories I grew up reading, stories so often filled with objects that were more than they appeared, ready to open magical worlds that were hiding in plain sight. For instance, one of my favourite stories is "The Magic Kettle", a Japanese folk tale about an old kettle that shape-shifts into a mischievous tanuki, a Japanese raccoon dog. I think this is the context that electronic animals entered into my life: familiar yet strange, offering something other-worldly.

Figure 1.1 Author. (2013). Bandai Electronics' *Tamagotchi* and Hasbro's *Furby*.

The reality of my electronic companions did not meet my fantastic expectations and I ceased to be a good caregiver about as quickly as they ceased to be good companions. A few months after I finally had a virtual pet to call my own, I lost it on the way home from school. I was probably excited because this meant I could get a new one to replace it, but my mum was more affected by the missing Tamagotchi. She told me later that she had imagined it lying somewhere in the wet grass, beeping for attention with no one to hear its cry. Perhaps she was still feeling the guilt of killing its ancestor, as she had been tasked with caring for my Tamagotchi after they were banned from my primary school. On the afternoon of her first day as babysitter, she picked me up from school with some bad news. She passed me the Tamagotchi and I saw that my little character had sprouted wings and was silently fluttering towards the heavens. My mum worried that Tamagotchi death would affect me like the passing of our nineteen-year-old cat had, but to me it was just Game Over, time to push reset. A few years later, Furby, with its promise of even more fun and companionship, was speedily relegated to the hallway cupboard after it danced, sang, and snored its way on to the family's blacklist. It stayed in "The Furby Cupboard", its batteries slowly leaking, for years.

Anecdotes of my first Tamagotchi and Furby are the stories I tell, and have long told, about electronic companions as I try to make sense of my experience with them. My sincere fascination with these objects has led me to find the stories that others tell about them so that ultimately, I can tell an even greater story about what it means to have electronic companionship in our lives.

Since the mid-1990s, electronic objects designed for the sole purpose of providing human companionship have been widely available to consumers. Effectively, such objects offer a relationship, requiring interaction from a caregiver to "survive" and "evolve". By offering an opportunity for human–nonhuman attachment, electronic companions raise questions regarding the value of relationships and what it is that makes something artificial or real. Following the success of Bandai Electronics' *Tamagotchi*, Hasbro's *Electronic Furby* became commercially available in 1998, and has since become a primary actor in marketing, design, media, and research narratives that raise hopeful, satirical, and fearful discussions surrounding our potential future with sociable and companionable technologies. All of these stories construct relationships with electronic companions that are generally human-centred and hierarchical, meaning that they look at electronic

companionship in terms of how it will affect people. During this time there has also been a growth in online communities that engage in cultural production through fan fiction responses to existing cultural artefacts, including Hasbro's *Furby*. In these stories, the notion of electronic companionship has been explored from diverse perspectives, including a non-hierarchical, animal-centred viewpoint that offers an unfamiliar view of interacting with nonhumans by bringing in aspects of the fantastic. By exploring these consumer-made narratives I believe that we can better understand how people articulate the boundaries of their relationships with technology, and how electronic companions could be designed differently.

With stories in mind, my primary act as a researcher has been to read narratives of both fact and fiction. In my thesis I follow accounts from design and marketing, research, fan fictions, and the responses of research participants to my questionnaires and visual scenarios – all in order to understand how storytelling communicates relationships with electronic companions. I treat all of these stories equally as forms of representation that inform, reinforce, and reject each other. Excerpts from the stories analysed are interspersed with my own writing, and in Chapter 4 especially I employ aspects of creative non-fiction to recount my experience of being among *Furbys*. According to Brinkmann (2009) this creative "literary turn" in research inserts "the researcher as an observing, experiencing, and reflecting I, who reports on lived experience in the first person singular, using literary and aesthetic forms of representation" (p. 1389). Because it revolves around stories, I feel it is important that my research reflects this narrative focus.

Through a combination of narrative analysis, cultural studies, and design research, this project aims to explore the role that storytelling plays in communicating and exploring the cultural and social impact of emerging companion technologies. An empirical analysis of seventy-two online fan fictions compares and contrasts popular themes and motifs in *Furby* narratives in terms of whether they render relationships with and among *Furbys* as positive or negative. When positive, this analysis highlights that *Furbys* are treated in a similar way to animals in fantasy, as the story's protagonist. Through these positively framed relationships we also learn what it means to be an ideal companion and caregiver to nonhumans, as the characters are empathic, compassionate, and selfless. My analysis of negative relationships with *Furbys* in fan fictions highlights a disconnection between the *Furby* characters as marketed by Hasbro and what they become after entering the lives of

their caregivers. Despite being sold as friendly and in need of care, *Furbys* often conjure monstrous and gothic associations that can be read as symptomatic of real anxieties surrounding technological innovation. Building on this preliminary analysis, eighteen still and moving image scenarios were designed to elicit stories, and sixty-four online responses were received. Analysis of these responses found that overwhelmingly fantasy-driven storytelling was used to explore the role of *Furbys* in the visual scenarios, and they were often written as biologically alive and equal to humans. Combined, my fan fiction and response analyses highlight the interplay between observational and imaginative storytelling to articulate the boundaries around human and nonhuman relationships.

My PhD research project puts forth the idea that fantastic storytelling can open a space for critical reflection and engagement with material objects, where the potential of electronic companionship can be explored beyond the often utopian visions of design and marketing. Additionally, my empirical case study of *Furby* fan fiction offers a broader understanding of fan fiction that includes consumer products as source material for textual production. Finally, by combining a fantastic narrative focus with design practice and research, my study offers new methodological pathways for exploring our relationships with emerging technologies and other nonhumans.

Prior to outlining the structure of my thesis, I address the key terms, theoretical viewpoints, and methods that serve as the foundation for my research.

1.1 Methodology

My thesis primarily addresses the question: What can designers learn from fan fiction about relationships with electronic companions? In pursuing this question and the fields it pertains to, a discussion of design, marketing, cultural research, and textual and visual narrative are required to define these terms and their interconnectedness. In doing so, I tease out the theoretical underpinnings of my project, the methods employed to best answer my question, and address the limitations that they pose.

Design and cultural research

First of all, the term design itself is problematic in its broadness and diversity, and as Jones (2009) acknowledges of its purpose and impact:

> All one can say with certainty is that society, or the world, is not the same as it was before the new design appeared, The new design has, if successful, changed the situation in just the way that the sponsor hoped it would. If the design is unsuccessful (which in many cases is more likely) the final effect may be far from the sponsor's hopes and the designer's predictions but it is still a *change* of one kind or another. In either case we can conclude that the effect of designing is to *initiate change in man-made things.* (p. 78)

Therefore, to articulate this expansive field, my thesis approaches design as a culture, inseparable from production, marketing, and consumption. As chapter 2, section 2.1.1 will demonstrate, the design and marketing of electronic companions is intertwined with each other, but also cultural beliefs about childhood and mass production. Julier (2008) posits that:

> A concept of design culture embraces the networks and interactions that configure production and consumption of the artificial world, both material and immaterial. It lies at the interface between object and individual user, but also extends into more complex systems of exchange. It describes normative actions, values, resources and languages available to designers, design managers and policy-makers as well as the wider publics that engage with design. (p. xii)

This vision of design culture is particularly relevant to my study as incorporates not just processes of design, but the meaning making that occurs once it is engaged with on a larger scale, as is the focus of my data gathering. Julier's cultural concept of design also delineates the specific kind of cultural research that this thesis carries out, where the production of artefacts exists in an iterative process of production and consumption. As Julier (2008) further explains:

> None of these three nexi of production, designer and consumption exists in isolation. They constantly inform each other in an endless cycle of exchange.

Equally, they all individually have some influence to play on the form of objects, spaces and images. (p. 13)

With a similar, but more user oriented focus, Margolin (2002) defines the concept of a "*product milieu* to characterise the aggregate of material and immaterial products, including objects, images, systems, and services that fill the lifeworld" (p. 45). The product milieu not only involves the systems and knowledge that create new products, but also "all the resources that individuals make use of in order to live their lives" (p. 45). Again, this vision of product design is important because of the onus it places on how people make meaning with an object once it has entered their everyday life.

Margolin (2002) identifies a disconnect between the work of designers and the use of their products once out in the world. The pace of production is cast as a central factor in the gap in knowledge that results:

Technological innovation and market forces drive much new product development, while advertising offers models of the good life. These activities are moving at such a rapid pace that they outstrip our ability to assess their social, psychological, and spiritual value before the next wave of innovation occurs. (p. 53)

As a consequence, Margolin (2002) calls for studies that "recognise the value of user *and* designer experience for the development of new products, not only those designed within the socially constructed professional design culture, but others as well" (p. 52). By prioritising the work done by users to not only understand product experiences, but also integrate them in to their lives, Margolin (2002) hopes that design can "discern the qualities that result in satisfying use and can provide motivation to develop products that contribute to the attainment of these qualities" (p. 55). In other words, there is a need for the experience of interacting, and living, with design objects to be fed back into their design. As will be elaborated throughout Chapter 2, the use of electronic companions in particular needs to be better understood as they begin to emerge from research contexts into everyday life, and as their reception is recorded in creative ways.

Textual narratives

Acknowledging this product milieu, and in addition to interrogating the design culture that produced *Furbys*, my thesis also addresses the cultural production that it sparks in users and consumers in the form of textual and visual narratives.

My research aims to explore how storytelling explores and communicates relationships between humans and nonhumans through the *Furby* example, and as Connelly and Clandinin (1990) suggest, "[h]umans are storytelling organisms who, individually and socially, lead storied lives. Thus, the study of narrative is the study of the ways humans experience the world" (p. 2). With this is mind, my primary source of textual narratives were fan fictions that included *Furbys* to various extents, and I read these to understand how humans experience relationships with electronic companions. Studies of narrative, according to Chase (2008):

> [V]iew narratives as verbal action – as doing or accomplishing something. Among other things, narrators explain, entertain, inform, defend, complain, and confirm or challenge the status quo. Whatever the particular action, when someone tells a story, he or she shapes, constructs, and performs the self, experience, and reality. (p. 65)

From this perspective, creating a narrative is a critical and reflective process of understanding and communicating experience. The stories I analysed are also works of fiction, and therefore also speculate and imagine how things could be different.

My understanding of textual narrative also comes from the fan fiction perspective; defined by Jenkins (1988), as a reflective and personal practice that draws on existing cultural artefacts. Specifically, "[i]n embracing popular texts, the fans claim those works as their own, remaking them in their own image, forcing them to respond to their needs and to gratify their desires" (Jenkins, 1988, p. 103). Concepts of fan fiction will be further unpacked in Chapter 3, section 3.1, but to further contextualise these narratives, Derecho's (2006) description further provides elements of the speculative and imaginative by suggesting:

> In fan fiction, there is an acknowledgement that every text contains infinite potentialities, any of which could be actualised by any writer interested in doing

the job: fic authors posit the question 'what if' to every possible facet of a source text." (p. 76).

Together these definitions tell us that fan fiction is about exploring the potential of things already existing in the world.

Ultimately my method of enquiry was reading and writing, because both happened simultaneously and as Richardson and St Pierre (2008) suggest, "Writing *is* thinking, writing *is* analysis, writing *is* indeed a seductive and tangled *method* of inquiry" (p. 484). It was necessary to write as I read to keep track of unfolding ideas that only materialised from reading, and connecting concepts to those that had already appeared.

My analysis of fan fiction was an iterative, qualitative process: To identify dominant themes in Furby fan fiction, I started with the question - what do fan fictions communicate about attitudes towards electronic companions? - and also looked for evidence of unintended uses, relationships, imagination, spaces for potential, hopes, and fears. My first close reading determined whether stories would be included in analysis. My criterion for inclusion was interaction with a *Furby*, which meant their characters varied from brief appearance to protagonist and antagonist.

Having defined the set of texts for further study, I employed content analysis as my approach because broadly, it encapsulates "ways of analysing meaningful matter, texts, images, and voices – that is, data whose physical manifestations are secondary to what they mean to particular populations of people" (Krippendorf, 2004, p. xxii). For my understanding of qualitative content analysis I take Krippendorff's (2004) contemporary position that analysts "acknowledge working in hermeneutic circles in which their own socially or culturally conditioned understandings constitutively participate" (p. 17).

Beyond reading to identity relevant stories, I used the sorting of text in order to categorise information pertinent to my study. Essentially, any representation of *Furbys* was noted and added to a list of terms that would later be reassessed as to whether a particular theme was evoked through numerous terms. Julien (2008) acknowledges that:

> Identifying themes or categories is usually an iterative process, so the researcher spends time revisiting categories identified previously and combining or dividing them, resolving contradictions, as the text is analysed over and over. (p. 120)

In particular, sections of text that dealt with the *Furby* were read closely, in order to fully comprehend how it impacted upon, and was impacted by, the fictional world in which it was placed. This constitutes the recording, or sorting stage of content analysis, that according to Krippendorff (2004), occurs when "observers, readers, or analysts interpret what they see, read, or find and then state their experiences in the formal terms of an analysis" (p. 126). The markers of these interpretations can be referred to as codes, defined by Saldana (2009) as "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). The collection of these codes becomes an important step in the analysis process as they:

> [M]ay reveal recurrent instances of "items" or themes, or they may reveal broader discourses. The "categories" or clusters of data identified may represent discrete instances (i.e., something is apparent or not), or they may be represented as degrees or attributes, such as direction and intensity…" (Julien, 2008, p. 120)

McKee (2003) cautions that content analysis that relies solely on counting the occurrence of particular terms fails to address the nuances of the texts and overlapping of themes. However, in my study I felt it necessary to combine both qualitative analysis and more quantitative content analysis as it allowed me to establish the frequency of certain representations of *Furbys* by how they were referred to, such as: evil, monster, demon, cute. As Julien (2008) highlights:

> In quantitative work, content analysis is applied in a deductive manner, producing frequencies of preselected categories or values associated with particular variables. […] The quantitative or qualitative approaches may be combined within a single research study depending on the purpose of analysis. (p. 121)

As the analysis in Chapter 3, Section 3.2 will highlight, this mixed approached to sorting information allowed for broader, qualitative themes such as '*Furbys* have power in numbers', and more frequency based themes such as '*Furby* is evil or demonic', identified

through the presence of those terms. Additionally, narrative analysis, which explores literary elements such as "character, place, scene, plot, tension, end point, narrator, context and tone" (Clandinin & Connelly, 2000, p. 131) in order to understand human experiences in a particular context, also helped me to explore the richness of relationships. I followed the development of *Furby* characters over time, interactions with, and among them, and how they referenced, and connected to other cultural material.

Following these myriad sortings, my next step was synthesis - distilling down the many phrases or codes that I had applied, to discern a set of themes. I then looked to the frequency of those themes to determine the ones that were prevalent to pursue through analysis. By cycling through the analysis process, I ended up with a table of major themes and motifs that I could then analyse in terms of literary content, design issues, media representations, and technological developments over time.

By employing iterative, qualitative, content analysis, I was able to present an overview of how stories worked to make *Furby* more and less familiar, and the ways in which positive and negative relationships manifested. However, a limitation of this analysis is that it uses found data, and as such this analysis could not necessarily be employed as a replicable method for designers. Ang et al. (2013) note that the rise of participatory online media has led to "large volumes of data on human activity and social interaction online" (p. 39), and while this data is easily accessible and rich, there are limits to how it can be analysed, and how methods can be reproduced in subsequent studies. For example, Ang et al. (2013) note that the found data limits the scope of a project, as the researcher cannot return to a participant for a specific, or focused answer to a query. Further, as this is a relatively new phenomenon, the boundaries and limitations of found data has yet to be fully explored. With this in mind, I wished to use the themes, and imaginative potential of such found stories to support story inspiration methods that designers could use to gain an understanding of complicated human-nonhuman relationships. In Chapter 4, section 4.3, I also return to the process of textual narrative analysis to explore stories generated through this method. The development of a tool to elicit user stories also allowed me to explore visual storytelling, and the different meanings it could elicit.

Visual narratives

Eisner (1996) defines a visual narrative as "any narration that employs image to transmit an idea" (p. 6). It is any story told through images, whether still or moving. Visual methods in research are diverse and range from the generation of images by research participants, to the generation of images by researchers to report and represent the findings of a study. In this thesis, visual narrative is employed as a data gathering tool. Stanczak (2007) acknowledges that the objectivity of visual data gathering approaches has been contested, but argues that decisions surrounding the content of visual material are as subjective as choosing interview questions and other textual material. Stanczak (2007) further contextualises this argument by suggestion that:

> This is especially true in an era after the so-called cultural turn, when we no longer assume the pure objectivity of unbiased academic research and allow for or even expect transparent subjective reflexivity in many projects. (p. 8)

Because I saw the creation of visual scenarios as a creative process, my visual narrative approach also falls under the remit of Arts-based research (Barone, 2007), where the aspiration is often to generate "doubts about, the potential for disrupting or transgressing against, and the enhancement of uncertainty regarding presuppositions about the social world that have come to be taken for granted as contributing to final reality" (Barone, 2008, p. 30).

As will be discussed at length in Chapter 3, section 3.2, the schism between how *Furbys* are contextualised in their design and marketing material, and how they are received by consumers is considerable, and something that I wanted to encourage reflection on. In this sense my visual scenarios follow the position of Arts-based research to "promote profound reconsideration of the commonsensical, the orthodox, the clichéd, and the stereotypical" (p. 30) by creating visually rich scenes in which diverse interpretations could be applied.

The visual stories featured in this thesis were created by me in an iterative and creative process. So to communicate the process I undertook, in Chapter 4 I employed creative non-fiction as means of discussing in-depth the process of developing visual narratives in order to represent the subjective, iterative experience of making evocative images. Piirto (2008) defines creative nonfiction as the use of "techniques such as the active voice, rather than the passive voice, in verbs; vivid description using colourful and evocative adjectives,

nouns, and adverbs; and recreated dialogue" (p. 137). Employing this use of language helped me to situate myself in the creative process, and acknowledge my role in shaping the scenario content.

In sum, this thesis project is a qualitative study that is interdisciplinary, adaptive and reflective, seeking to understand "how individuals see and experience the world" (Givens, 2008, p. xxix) through the imaginative stories they produce. Imagination is also crucial on the part of the researcher, not only in the creative design work of this thesis, but also as Fettes (2008) suggests, "[q]ualitative researchers need ways of connecting with the worlds they study that transcend their disciplinary or theoretical commitments so that they remain open to surprise, contradiction, and wonder" (p. 422). In this sense, I find my connection to storytelling a key factor in critical thinking, and seeking new design knowledge.

1.2 Chapter Summaries

The first chapter following this introduction presents a background of electronic companions and the literary genres that often address the emergence of new technologies and the social and cultural changes they bring about. The two chapters that follow are my analysis of three forms of storytelling about electronic companions: fan fiction, responses to visual scenarios, and questionnaire answers. The final chapter concludes the arguments made throughout the thesis and comments on future considerations for this research.

Chapter 2

In Chapter 2 I present a short history of electronic companionship with a specific focus on its impact on people's everyday lives. I provide a case study of the design and marketing positioning of *Furbys* as told through media reports and articles that constructed relationships with *Furbys* as caring and fun. This case contextualises the development of *Furbys* within the child culture industry that is mediated by specific beliefs about childhood. Importantly, the marketing positioning of *Furbys* as nonthreatening and friendly is a theme that is examined in-depth the throughout this thesis. Building on this I draw out the debates that currently surround the future of electronic companions from social, cultural, and design perspectives. These narratives draw on media commentary of

Furbys following their release that shifted the relationship with *Furbys* to one characterised by annoyance and disruption. Cultural research discussions take the idea of disruption a step further by portraying relationships with electronic companions as detrimental to human social life.

The second section of Chapter 2 is devoted to the concept of defamiliarisation in stories about technology, specifically how the genres of gothic, science fiction, and fantasy make the world seem more and less familiar, and how this can trouble idealist marketing narratives about relationships with nonhumans. I then argue that gothic, science fiction, and fantasy literature all employ strategies to make technology more and less familiar. But while gothic and science fiction are generally dystopian and human-centred, fantasy, by portraying nonhumans as central to the story, offers the opportunity to explore relationships with electronic companions from a different perspective and encourages reflection on our hierarchical relationships with nonhumans.

Chapter 3

In chapter 3 I introduce fan fiction as a form of storytelling that challenges dominant cultural ideals and allows the author to reflect on their own experience in relation to an existing text. By introducing the concepts of "pastiche scenarios" (Blyth & Wright, 2006) and "domestication" of technology (Berker, et al., 2006) that use storytelling to better understand the use of consumer products and technologies, I position fan fiction about *Furbys* as a valuable way of understanding meaning making in experiences of electronic companionship.

In the second section of Chapter 3 I present an analysis of twelve stories from the *Furby* and *Tamagotchi* fan communities www.adoptafurby.com and www.tamatalk.com, and sixty stories from the large online fan fiction archives www.fanfiction.net and www.archiveofourown.org. My analysis first presents and discusses the stories in which relationships with and among *Furbys* were positive. As such, these stories generally show us how ideal (i.e. "good") companions and caregivers should be: compassionate, empathic, and kind. Following examples of these positive bonds in action, I suggest that these stories, which all come from the *Furby* and *Tamagotchi* fan sites, reinforce marketing and design narratives that also depict *Furbys* as friendly and non-threatening. However, also

present in these positive stories is evidence of the concerns of cultural researchers that electronic companions could replace human companions. I further discuss how these stories employ aspects of fantasy animal stories to bring us closer to the nonhuman. Specifically, this is done by telling stories from the *Furby* point of view, giving us access to its inner monologue, and giving them fictional capacities that allow them to communicate personally with their caregiver and perform acts of kindness.

The last section of Chapter 3 explores stories that construct negative relationships with *Furbys*, and do so by making them threatening, evil, monstrous, and excessively annoying and deceitful. I discuss the many parallels between this depiction of *Furby* and the tropes and themes of science fiction and gothic literature that deal with anxiety surrounding technology. This discussion also suggests that negative *Furby* stories reject marketing and design narratives by making *Furbys* threatening and unpleasant, and reinforce media commentary about *Furbys* that treated them as an irritating disruption to everyday life.

Chapter 4

In Chapter 4 I chronicle my experience of collecting and staging a group of *Furbys* to create a series of visual scenarios designed to elicit written responses in an online study. I draw on creative nonfiction to communicate my experiences among the *Furbys*, describing in detail the process of both caring for and destroying them. I return to the concept of defamiliarisation, and discuss how I visually made *Furbys* appear strange in eighteen visual scenarios. I also draw on techniques of visual storytelling such as sequential images and panels to stimulate responses. In the following section I present brief overviews of the eighteen visual scenarios that include seven videos, eight image sets, and three care guides. I discuss my experience of inviting participants to the project website that included debates about electronic companion ethics and the tone of my scenarios.

The last section of Chapter 4 analyses the responses to my scenarios and questionnaires. Eleven questionnaire responses offer human-centred views on what participants would want *Furbys*, and electronic companions in general to be like. Answers most often reference *Tamagotchis,* and suggest that electronic companions should be more responsive and attentive to their caregivers. Questionnaires also asked participants to comment on

how electronic companions conveyed a variety of emotions, such as sad and angry, and how they evoked responses from their caregivers, such as cute or scary – and the responses are discussed in detail. Notably, participant responses again seem to predominantly draw on prior knowledge of *Tamagotchi* and screen-based digital pets to answer these questions.

On the other hand, sixty-four responses to eighteen visual scenarios are categorised by whether they are human-centred, (i.e. whether they used the *Furbys* to say something about humans, or their own experiences with *Furbys*), or fantastic, meaning that they positioned the nonhuman (*Furby*) as a protagonist and brought supernatural or magical elements into the story. Fantastic narratives are the overwhelming majority, and are discussed in relation to fantasy animal stories because in addition to focusing on *Furbys*, they do not include the presence of humans.

Chapter 5

In Chapter 5 I comment on the latest developments in the story of electronic companions and conclude my thesis by drawing together conclusions from the three preceding chapters to comment on how different modes of storytelling offer insights into electronic companionship, and what this understanding offers design practice and research. I situate my research methods of empirical, textual analysis and visual, nonhuman-focused scenario design within existing design research practices to highlight how my approach can add to, and build upon them. In particular I argue that my approach advances design research into user stories by acknowledging and valuing the creative, meaning making production of users, and the role of the nonhuman in design issues.

2. An (Un)Familiar Electronic Companion

In this chapter I introduce the concept of electronic companionship and a brief history of its development and impact. The stories told about electronic companions play a significant role in how they are received and adopted, and as such I follow the design and marketing narratives about the development of *Furbys* as a case study of positioning products as companions. Following this I discuss the current debates that surround electronic companions from cultural and psychological perspectives and highlight how they employ media narratives about *Furby* to shift the meaning of relationships that are formed with it. In the second half of this chapter I move into a discussion of literature that focuses on our relationships with technological nonhumans. Specifically, gothic, science fiction, and fantasy are discussed as ways to make technology more and less familiar, thus encouraging critical reflection on its presence.

Since the mid 1990s electronic devices designed to provide companionship to a user have been widely available. Arriving as screen-based objects known as "virtual pets", a range of robotic "pets" soon followed. The companionship offered by these objects encouraged the user or caregiver to enter into a relationship that came with the obligation to pay attention to, and provide care for, the object. For the purposes of this research I will use the term electronic companions when referring to any form of electronic object designed primarily to provide companionship to its user. An electronic companion displays some degree of intelligence, in that it is able to, or appears to, interact and learn from its environment and other entities. "Artificial companion" is a widely used term (Jacobsson, 2009; Wilks, 2010a) for these technologies, but I feel that electronic is more specific to the focus of this research as it excludes inanimate objects that could still have companionable qualities to their user. I also deliberately omit the term robot, as some of the objects discussed are screen-based and do not have robotic elements. There has been a tendency to include electronic companions in the category of entertainment (Kusahara, 2001) or toy (Bloch & Lemish, 1999) but I would argue that such objects fall into a category of their own as the offer of companionship is an emotional experience and a fundamental human need, and therefore differs from entertainment.

2.1 An Overview of Electronic Companions

In Turkle's (2011) tracing of companionable technologies, she begins with an account of Joseph Weizenbaum's computer program ELIZA, which could seemingly engage in psychotherapist-style, text-based conversation with a user. Both Turkle and Weizenbaum (1966) write of the willingness of participants to treat ELIZA as alive and develop emotional bonds with the program. Turkle describes this reaction as the "robotic moment" (p. 9), which denotes not the technological sophistication of robotic technology, but the willingness of users to enter into emotional relationships with technology. Of ELIZA, Weizenbaum notes that to maintain the program's "aliveness" users would "contribute much to clothe ELIZA's responses in vestments of plausibility" (p. 42). Since these cases, Turkle has followed the trajectory of companionable technologies and concludes that they facilitate new understandings of what is considered "alive", and that those who have grown up with these technologies are comfortable with the idea that "machines are alive enough to care and be cared for" (p. 28).

Thrift (2004) argues that robotic creatures or "electric animals" (p. 461) result from a long history of the intertwining of biological and technological terms, such as referring to circuits as neurons, and machinery as organs:

> [B]iological metaphors, having become firmly entangled with computer programmes and lines of code, are producing an afterlife of 'artificial' 'organisms' that seem set fair to become companions to everyday practice in much the same way as pets now do. (p. 462)

Thrift claims that this kind of technology is not well understood in terms of the desire to create it or its place in everyday life. He goes on to suggest that the presence of electric animals is an act of "working out" what it means to be human and nonhuman, particularly in relation to emerging technology. Thrift offers the following questions that attempt to locate companion technologies in everyday life:

> What kind of culture is to be assumed? A wild electric panorama bereft of human figures but traversed by various lines of affect? A scurrying ecology full to bursting with all manner of informational life? A consumer mall of companions waiting to

be sold and played with and as easily discarded? Or a welfare system gently caring for the emotional needs of its charges??

These, and other questions, provide productive starting points for understanding the cultural impact of what are generally understood to be the first virtual pets (cf. Thrift, 2003) or as Turkle (2011) calls them, "the first computers that asked for love" (p. 30): Bandai Electronics' *Tamagotchi* (fig. 2.1) and Tiger Electronics' *Furby* (fig. 2.3).

Figure 2.1 Author. (2011). Bandai Electronics' *Tamagotchi*.

As stated above, an electronic companion can be seen as an electronic device that exists to provide companionship. These objects became widely available to consumers for the first time in 1996, with the release of Bandai Electronics' *Tamagotchi* (fig. 2.1), a hand-held plastic egg containing an LCD screen that displayed a digital pet-like creature. Upon purchase, users were instructed to "wake up Tamagotchi from its million light-year sleep by removing the insulating sheet (pull paper tab from side of body)" (Bandai Corporation, 1997, p. 2). In doing so, the device was activated and the image of a pulsating egg appeared on the screen. The simple, dot-based character required the user to interact with it by way of button inputs that allowed feeding, cleaning, medicating, and entertaining (fig.

2.2). A health meter displayed the pet's levels of happiness and hunger that varied depending on passages of time and input from the user. How well the health was attended to was an influencing factor in the evolution of the digital pet, which moved through several physical stages before reaching adulthood. With lots of care and attention, the *Tamagotchi* would evolve into a well-behaved and attractive pet, whereas neglect could lead to disobedience or even death. As the first object of its kind, the *Tamagotchi* experienced unprecedented popularity, selling out in Japan only days after its initial release, with supply shortages leading to hostile crowds and theft (Higuchi & Troutt, 2004).
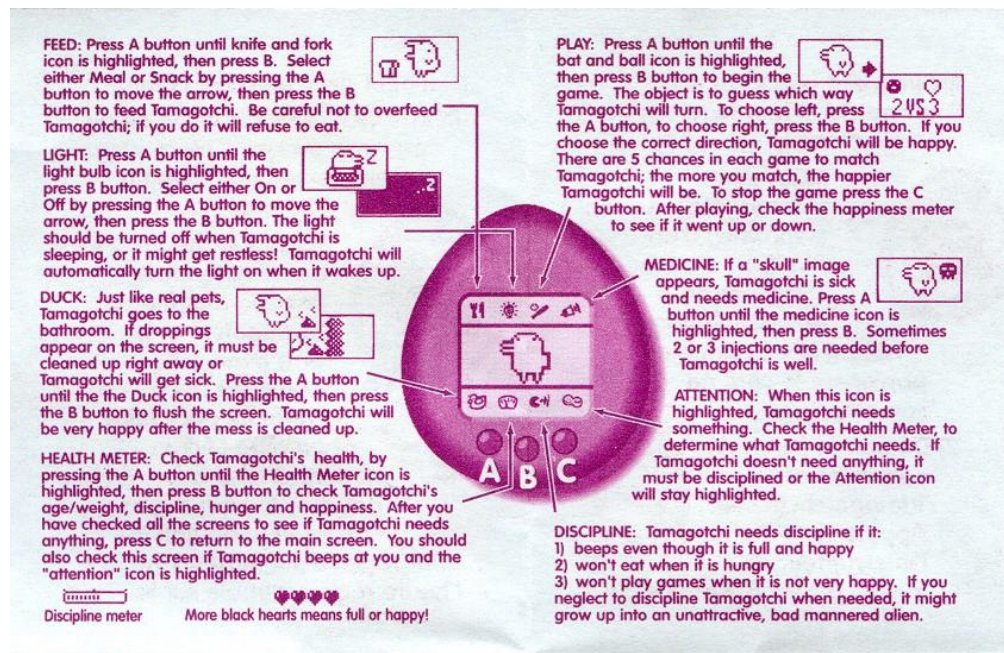
Figure 2.2 Bandai Electronics. (1996). Tamagotchi instructions. pp. 5–6.

The following year, Tiger Electronics released the *Furby* (fig. 2.3)*,* a fur-covered, robotic creature that also required the user to carry out certain nurturance duties. *Furbys* expected feeding and entertaining and could become sick and scared if neglected. In regard to the fear aspect, Turkle (2011) argues that it enhanced the perception that *Furbys* were alive as users related their frightened whimpering to that of a real animal and were moved to help them. Through a program that advanced slowly over time regardless of external stimulus, *Furbys* appeared to evolve from speaking entirely *Furbish* (Tiger Electronics, 1999, p. 1),

their mother tongue, to speaking English. To the user, it appeared as though their interactions with the object were directly affecting its progress and maturation because their care duties of feeding and entertaining the *Furby* were happening parallel to the *Furbish* to English transition. (Turkle, Breazeal, Daste, & Scassellati, 2006).

Figure 2.2 Author. (2012). Tiger Electronics' 1998 *Furby* (version 1).

As a child, *Tamagotchis* and *Furbys* taught me that technology could make demands on us, elicit emotional responses, and even "die" if its needs were not met. For the first time, it crossed my mind that we could have personal relationships with technology. The marketing material, specifically instruction manuals, played an important role in establishing an ideal relationship with virtual and robotic pets through the stories they told.

2.1.1 Electronic companions and storytelling

A short history of electronic companions suggests that storytelling can be a powerful tool in creating meaning and imbuing an object with context and history. Upon purchasing a

31

Tamagotchi, a new owner is encouraged to relate to this electronic object as a living being, as it is accompanied by a narrative-based care guide that positions it as a creature from another planet who has travelled a great distance to learn about life on Earth (Bandai Corporation, 1997). *Furbys* are also positioned as inquisitive visitors to Earth: *Furbys* jumped off their home in the clouds and descended to Earth in order to befriend humans and explore the world (Tiger Electronics, 1999). More recently, Phison have released *U.Bo*, a pet robot that has also travelled to Earth on a mission to save its home planet, Bo, from running out of love:

> Earth, which is 2100 light years away, is filled with the energy of "Love". However, it is a pity that the environment of Earth is not suitable for the U.Bo spore to survive; the CO_2 in the atmosphere will poison U.Bo. The smart and highly intelligent U.Bo, therefore, designed the U.Bo capsule which allows U.Bo to be able to collect the energy of "Love", and send it back to Bo Nebula and Bo Planet (Phison, 2010).

As we can see, the use of these fictional backgrounds allows designers and marketers to "confer objects a social life through offering active creative accounts or narratives" (Woodward, 2009, p. 60), and further encouraging the user to view the object as a living creature that deserves an empathic relationship with the caregiver. These stories can also be seen as origin myths, stories that articulate how "something came into being, the world, or man, or an animal species, or a social institution, and so on" (Eliade, 1967, p. 173). In this case, these myths set up fictional worlds and inhabitants, encouraging people to relate to them in particular ways.

The stories attached to these objects are carefully constructed to encourage positive emotional responses. Shibata (2004) provides a categorisation of electronic companion aesthetics, suggesting that forms such as humans, dogs, or cats are met with much harsher criticism than unfamiliar or imaginary creatures. If an electronic device resembles a cat, for example, we expect it to act just as a cat would and are easily capable of noticing when it does something that its real counterpart would not. If the electronic companion appears to be an unfamiliar or imaginary creature, its behaviour has no preconceived expectations attached to it as the user does not know what interactions with that creature should be like (Shibata, 2004). In this way, design decisions - such as a likeness to animals and

interactions based on nurturance - and marketing decisions - such as written back stories - are a means of making an object both familiar and unfamiliar, as well as encouraging specific kinds of interaction.

The *Furby* story: a case study of design and marketing

Furby inventors David Hampton and Caleb Chung were freelance toy designers with backgrounds in electronics and software development (Steinberg, 1998; Chung, 2007). Chung had experience in the toy industry and came to the project with the prior knowledge that it was easier to sell toys to big companies if the technology was simple and cheap (Chung, 2007). The media reports surrounding Hampton and Chung's process of designing *Furby* focus less on the toy market, and more on their creative intentions as toy designers. In 1997, Hampton, described as a life-long electronics enthusiast (Steinberg, 1998), began developing *Furbys* after attending the American International Toy Fair:

> There, he saw the interactive, digital pets known as Tamagotchi. Though they exist on electronic screens no bigger than a watch, the toys require their owners to feed them and clean up after them with the push of a button, or they die.

> Mr. Hampton saw a fatal flaw: "You can't pet it." So he returned to his home workshop and began writing about his ideal virtual pet, with the working name Furball. "I started a script, like, if you rub his back, he'll purr," Mr. Hampton said. (Steinberg, 1998)

Tamagotchi's screen-based design is cast here as a detracting factor in its ability to be a pet. To Hampton, ideal pets are not just animal companions, they must have fur to be petted and stroked, meaning they must be mammalian. While *Tamagotchis* could ask for care and attention, physical interaction was limited to pushing buttons. It was Hampton's intent to build on the concept of *Tamagotchis* by making a toy that was animated and physically responsive. By covering *Furbys* in fur material, they fit into the category of soft toy, which Sutton-Smith (1986) suggests are particularly comforting and consolatory, and become intimately known for their specific texture, warmth, and smell.

The inventors of *Furbys* were driven to make toys that were, or seemed to be, artificially alive. Kirsner (1998) quotes one of the inventors saying "I'd always wanted to make a little animated character that was as alive as possible" (Kirsner, 1998), and in a 2007 talk,

co-inventor Chung details his interest in creating "little artificial life pieces" (2007), and his background in designing animatronic toys. On the development of *Furbys*, Chung has referred to them as "robotic life forms" and "technology that has an emotional connection with the user". He also explains the physical design of *Furbys* using language that mixes the artificial with the living:

> [A] friend of mine and I, Dave Hampton, decided to see if we could do like a single-cell organism. What's the fewest pieces we could use to make a little life form? (Chung, 2007).

As discussed earlier, Thrift (2004) argues that technology has long been thought of in biological terms. He argues that the presence of "electric animals" signifies an attempt at understanding the mixing of the artificial and biological, and how it could potentially change everyday life. In the case of *Furbys*, we are told of the inventor's long-standing desire to create artificial life, but not why, or what they hoped it would change in the world. Thrift (2004) further defines "artificial animality", arguing that, historically, as technology replaced animal labour, the two become intertwined through efforts to encourage continuity in everyday life, such as the introduction of machine transportation instead of animal. *Furbys* are made familiar through their covering of fur and beak-like mouth, which are evocative of small companion animals like cats or birds, but also unfamiliar because they combine them.

Referencing Eibl-Eibesfeldt's (1972) baby schema, a set of infantile physical attributes, Breazeal (2002) argues that a robot will be treated like a baby if it has a large head, big eyes, and pursed lips. From this perspective, *Furbys'* disproportionately large eyes framed by long eyelashes play a role in encouraging nurturance. Breazeal's sociable robot *Kismit* is designed specifically to be reminiscent of an infant, and treated as such. As will be discussed later, the scaling up of certain features creates the cute aesthetic that encourages feelings of nurturance because it is argued that cute things also seem helpless (Harris, 1992). These design decisions are reinforced by marketing strategies that encourage *Furbys* to be viewed in a particular way.

Furbys and the child culture industry

Kotler (1984) defines a market as "all the potential customers sharing a particular need or want who might be willing and able to engage in exchange to satisfy that need or want" (p. 12). From this perspective, products become positioned in relation to the perceived needs and wants of consumers so that they are seen as valuable. As the wants and needs of all people cannot be targeted, marketing identifies segments of the market to target in terms of their specific values. It is therefore important to contextualise the design of *Furbys* within the larger toy industry in which they exist. Although *Furbys* may not have been consumed solely by children, the designers and manufacturers who brought them to market were operating within the toy industry that is characterised by the specific notions of childhood innocence, the rhetoric of play, fantasy and make-believe, and cultural practices surrounding children. Although it has been argued by Langer (2005) that mass-produced "commoditoys" cater "less [to] children's need for play than global capital's need for markets" (p. 267), cultural understandings of childhood still define the space that toy producers operate within. Visions of children and childhood as "sacred" and industry as "profane" (Langer, 2002), as well as obligations to educate and mould successful adults influence how toys are designed and marketed.

Critical commentary of the toy market tends to be framed in terms of the agency, or lack thereof, afforded to child consumers. Buckingham and Tingstad (2010) highlight that debates surrounding child consumers are typically polarised, either positioning children as confident and discerning readers of media or as "innocent, naïve and vulnerable" (p. 13). Langer (2002) also acknowledges this tension:

> On one side, cultural critics from each end of the ideological spectrum argue that the 'children's culture industry' produces a debased, degraded and exploitative appropriation of 'authentic' children's culture which stunts children's imaginations and harnesses their desires to the interests of capital; on the other, defenders of 'popular pleasure' point to utopian elements in children's commodity culture and argue that children use its products for their own purposes in creative play that transcends incorporation. (Langer, 2002, p.68)

Toys are inescapably "[a]dult constructions of childhood" (Ruckenstein, 2010, p. 501) that build on the previously mentioned belief of childhood innocence, but also teach children

practices of consumption. Langer (2004) argues that the toy industry especially sits at an "uneasy intersection of its conditions of production with its promotional rhetoric and means of consumption …" (p. 251). To preserve perceived beliefs of childhood innocence, Langer (2002) suggests that it is crucial to a toy's success that child consumers remain uninformed about their toy's sites of production, and the often exploitative conditions that they are produced under. Because, as Langer highlights, those who work in toy factories often do so for very little pay in dangerous circumstances and environments. Fictional stories about where a toy came from, such as those discussed earlier in section 2.1.1, not only create a context for its use, but also hide the source of its production.

The background to *Furby's* manufacture is arguably a story about the toy market of the mid-1990s, and the increasing consumer culture associated with childhood. Thrift (2003) highlights that mass media advertising had facilitated huge growth in the toy industry since the 1950s. And, although "hot toys" and fad items had appeared in previous decades,

> What was new, however, was the accelerating speed of the fashion cycles to which children's play was bound, the pervasiveness of the product universe into which children were drawn, and the magnitude of the corporate assault through which 'childhood' was reconstructed as something to be consumed. (Langer, 2002, p. 69)

Wong, Arlbjørn, and Johansen (2005) argue that the toy industry is especially volatile due to short product life, concentrated seasonal buying, and intensely competitive innovation and pricing. Johnson (2001) argues that although such conditions are not specific to the toy industry alone, it is the combination of risks that makes the toy production such a difficult endeavour. The culture surrounding Christmas gifts, particularly for children, hugely impacts on toy makers' production and the release of their products. Johnson states that, in the toy business, November and December account for almost 45% of annual toy sales in the US.

Byrne (2005) argues that during the 1980s and 1990s, following the release of several novel electronic toys, "a new cultural sensibility and belief system was, apparently, established: every Christmas must have a hot toy" (p. 8). For the two previous Christmases, the title of "hot toy" had gone to products that incorporated microprocessors and were interactive. Tyco Toys' *Tickle Me Elmo* (1996) and Bandai Electronics' *Tamagotchi* (1997) were both written about in terms of the manic crowds and

unprecedented demand that they inspired (Bloch & Lemish, 1999; Byrne, 2005). Hampton and Chung's *Furby* concept was sold to Tiger Electronics in late 1997, who intended on releasing the toy for the 1998 holiday season (Kirsner, 1998). Tiger Electronics had found success in 1997 with their *Giga Pet* virtual pets and had been looking for a new electronic toy to follow up with. As a small company, Tiger tended to only develop one or two toys per year and their concepts were either developed in house or bought from freelance designers (Kirsner, 1998).

The creation of the *Furby* prototype, product development, marketing campaign, and public release took place in just over a year. Accounts of this process are characterised by the hurried circumstances required to get *Furbys* onto the shelves for the crucial Christmas market (Kirsner, 1998; Chung, 2007). As the development of *Furby* was in progress, Tiger Electronics was bought by the much larger toy company, Hasbro Inc., who wanted to expand into electronic toys. Canedy (1999) suggests that Hasbro's acquisition of Tiger Electronics meant that *Furbys* could be fully realised by resources that the smaller company would not usually have access to: "The *Furby* frenzy reflects just how these deals are designed to work -- teaming up an entrepreneurial company's risk-taking with a large company's might to push the toy into the marketplace" (Canedy, 1999). Johnson (2001) summarises this situation:

> At one end of the market, two large firms [Mattel and Hasbro] manage a collection of familiar brands that dominate the industry. At the other end of the spectrum, a host of small toy companies, whose success is typically tied to a single unique toy idea or theme, drive product innovation and diversification. (Johnson, 2001, p. 108)

Both the smaller Tiger Electronics and the larger Hasbro Inc. were trying to navigate the emerging field of smart toys in order to stay relevant with the latest in toy developments, and as Kirsner (1998) puts it: "They both needed Furby".

Kirsner (1998) summarises important conditions from Tiger Electronics' perspective that pushed their purchase and development of *Furbys*. The recent success of Ty Inc.'s *Beanie Babies* showed that toys specifically marketed in different styles, and as limited edition collectables, encouraged consumers to purchase in multiples. Coupled with *Furby's* proposed ability to communicate with other *Furbys* via infrared signals, Tiger saw potential to push collectability. Additionally, while other interactive toys with

microprocessors, such as Microsoft's *Interactive Barney*, were receiving positive responses, they were also very expensive and required access to a computer. *Furbys* could be made for much less, significantly undercut the price of other electronic toys, and were a stand-alone technology (Kirsner, 1998).

These points of difference are raised in the invention background section of the *Furby* patent (Hampton & Chung, 2003), where it is suggested that other "life-like" toys on the market contain expensive electronics and are large in order to accommodate mechanisms. It concluded that "there is a need for an interactive toy that provides life-like interaction with the user that is of compact size and which is reasonably priced for retail sale" (p. 45). Further, Hasbro saw the opportunity for *Furby* to become an enduring brand with avenues for expansion and updates. The goal was to make *Furby* an iconic toy:

> "Our ultimate goal is to make Furby 'out there,' "said Allen Richardson, the director of new media for Tiger Electronics, Furby's manufacturer. "People know who Mr. Potato Head is because his name is out there, part of people's everyday life" (Richardson cited in Leimbach, 2000).

By creating a range of toys connected to the *Furby* marketing narrative, manufacturers hoped to ensure further purchasing as *Furby* caregivers sought to complete their collections, or *Furby* families. This situation is discussed by Langer (2004) as a characteristic of the toy marketing in the twenty-first century:

> Each act of consumption is a beginning rather than an end, the first or next step in an endless series for which each particular toy is an advertisement: first, because its package is also a catalogue; and, second, because it is part of a tantalizing universe without which the one just purchased is somehow incomplete. (Langer, 2004, p. 255)

From the success of virtual pets, Kirsner (1998) suggests that toy companies learned of the psychological impact that artificially "alive" toys could have. As will be discussed, the emotional reactions of *Tamagotchi* caregivers have been widely publicised as examples of how compelling electronic companions can be. It is also noted by Kirsner that despite the success of artificially alive toys, toy companies at the time were cautious of over-promoting the technological sophistication of toys as the 1980s had been filled with

expensive electronic failures. Because of this, *Furby* was classed as "special feature plush" (Kirsner, 1998), and its marketing was supposed to strike a "balance between the combination of soft, cuddly plush toy and the technology aspect" (Posnick as cited in Canedy, 1998a). It is implied that there exists a cultural understanding that electronic devices are not to be played with, and to change this they must be wrapped in an appropriately playful package:

> It has to be new and amazing and futuristic, and at the same time it has to be soft and cuddly. You can't push it as a technological marvel, because what kids want is a toy they can play with. (Posnick cited in Kirsner, 1998)

The core *Furby* market, defined by Kirsner (1998) as 4–11-year-old girls, was also not traditionally associated with technological toys. It is interesting to note that despite comments that toys such as *Furbys* and virtual pets could have appeal to boys and girls (Canedy, 1998a), and that a *Furby's* ability to belch and fart was intended to entertain boys (Kirsner, 1998), Hasbro's 2012 annual report classes *Furbys* in the category "Girls' toy brands", that focuses on care and nurturance play:

> In our girls' category, we seek to provide a traditional and wholesome play experience. Girls' toy brands include FURREAL FRIENDS, LITTLEST PET SHOP, MY LITTLE PONY, BABY ALIVE, EASY BAKE and FURBY. (Hasbro Inc., 2013, p. 3)

Hasbro's "girls" brands include toys that encourage stereotypical gendered domestic practices. The electronic toys in this category, such as *Furby* and *Baby Alive*, require care, while *Easy Bake* is a small oven to prepare food. However, as Thrift (2003) acknowledges, the incorporation of cooperation and friendship values into the design of electronic companions could refocus the typically masculine associations of technology and computers.

Through the marketing and packaging of *Furbys* it was possible to set them apart from previous electronic toys. Although not the first toy to "speak", *Furby's* ability to communicate was an attribute that Hasbro and Tiger saw as a key defining feature to be highlighted in their marketing strategy:

To sell youngsters on the toy, Tiger is using a 30-second spot and two 15-second spots that bring Furby to life. "I think the key message we are trying to communicate in the commercial is Furby's personality," said Stewart Sims, senior vice president for marketing at Tiger. "Furby speaks for himself. He has his own unique language and, I think, interesting and amusing voices, so we let Furby do most of the talking." (Sims cited in Canedy, 1998a)

It is implied that talking, or the specific way that *Furbys* talk was a point of difference from other available toys. The combination of the *Furbish* language, and *Furby's* personality were important features to communicate to the target market of young girls. Kirsner (1998) describes discussions of how *Furbys* should be positioned in advertising. Posnick and Kolker, the advertising agency tasked with creating the initial *Furby* campaign and tagline, offered several key differentiating features:

"They're unique because they speak" and "Everything a Furby can do, it learns from you." "But we asked ourselves, 'what was the one thing that made them distinctive and unique and desirable?'" Kolker recalls. The answer seemed clear: "It was a friend that a child could nurture". (Kolker cited in Kirsner, 1998)

Although *Tamagotchis* required care, and Coleco's plush dolls *Cabbage Patch Kids*, came with adoption certificates as if they were children, *Furbys* combined the tactility of a soft toy with the care inputs of a virtual pet. Pugh (2005) argues that offering companionship and care in toys targets parents as much as children. Pugh calls such advertising a "cultural deal" where a product can constitute an act of parenting, not the actual relationship.

LET'S BE BEST FRIENDS...
Hi! I am a Furby and I am so happy to be your friend. I come from a magical place in the clouds. You can learn all about my home in the clouds from the story below. You can also learn about me on my very own Web Site: www.furby.com

THE STORY OF FURBY......
Once upon a time,
    not so long ago
in a far off place,
    somewhere high in the sky
riding on an "a-loh may-lah" (cloud)
    that floats near a "dah a-loh" (big sun)
lived the Furbys,
    each and every one

Some were grey, and others white
    some were both, and some were bright
small of stature, big of heart
    all the Furbys were "mee-mee" (very) smart
they spoke a language quite unknown,
    for Furbish™ was a language all their own

And on an "a-loh may-lah" (cloud)
    Furbys romped and played
they liked to play "Furby says" and "hide and seek"
    and around the cloud they could peek
all day long they would dance and sing,
    Furbys could do almost anything

Then one day, they decided it was time to search,
    for the place Furbys called Earth
and so they went, in one big crowd
    to the very edge, of the Furbyland cloud

At the edge, they looked "nah-bah" (down)
    and saw the world...so round, so "dah" (big)
"dah a-loh" (big sun) was "u-tye" (up), the sky was blue,
    the Furbys loved the "noo-loo" (happy) view
but try as they might, they could not see
    what is so obvious to you and me

1

They were up so high above,
    they could not see...a flower or a dove
but even though they were far away
    they knew Earth was "boo boh-bay" (no worry)
so one by one, they jumped "mee-mee u-tye" (very up)
    and to their "a-loh may-lah" (cloud)
they said "e-day toh-dye" (good bye)

And as they dropped
    they flipped they flopped
they sang "dah a-loh u-tye" (big sun up)
    and zip-i-dee "doo-ay" (fun), zip-i-dee "e-day" (good)
they were "mee-mee noo-loo", (very happy)
    for they had come to "noh-lah" (dance)
with "u-nye" (you) and "kah" (me)

So when you take a Furby home,
    you will never be alone
the more you play, the more they do
    Furbys keep amazing you
"noh-lah" (dance) and "wee-tee" (sing),
    Furbys have come for "u-nye" (you) and "kah" (me)

I am so happy you brought me home. I feel great! Please take me everywhere you go. I love to play. The more you play with me, the more amazing things I will do. The more time you spend with me, the sooner I will be able to speak your language. And if you introduce me to other Furbys, I will be able to play with them, too!

But first, it is very important that you carefully read the following instructions, so that you can understand all the amazing things I am able to do.

2

Figure 2.3 Tiger Electronics. (1999). *Electronic Furby* care guide. p. 2–3.

Positioning *Furbys* as friendly was important to encouraging a bond with a caregiver. The history, or back story, that *Furbys* were given in the instruction manual was designed to convey their kind, non-threatening nature (fig. 2.4). Although alive and unpredictable, it was crucial that *Furbys* were not frightening. As imaginary living creatures, the origin of *Furbys* required explaining: "some had suggested positioning Furby as an alien, but that seemed too foreign and frightening for little girls. By May, the thinking was that Furbies live in the clouds – more angelic, less threatening" (Kirsner, 1998). In creating this story, *Furby's* producers both endeared the object to consumers by making it seem friendly and inquisitive, and avoided associations to its mass-produced, factory origins. As discussed, toy manufacturers carry an obligation to protect notions of childhood innocence, and by creating a fictional history for toys they seek to hide some of the harsh realities of mass production in toy manufacturing. *Furbys* no longer come from a factory line, but from a pleasant cloud-land.

41

Figure 2.4 Author. (2012). Hasbro's 2005 *Emototronic Furby*.

Released for Christmas 2005 *Emototronic Furbys* (fig. 2.5) were a redesign of the original, with significantly more articulating parts, increased memory, and the ability to respond to specific voice commands. They were also fitted with an off switch. A more sophisticated facial design was intended to display a range of emotions, hence the name: *Emototronic*. The instruction manual appealed for care and attention in much the same way as the 1998 version:

> Hey! I'm FURBY! The more you play with me, the more I do! I love to play and can tell you jokes, play a game, sing and even dance! Bring me home today and I'll be your best friend! Be sure to take good care of me by following the instructions in this booklet! (Tiger Electronics, 2005).

Coverage in the *New York Times* focused on the technological advancements made to the toy's design:

> The latest Furby has a wider range of expressions, movement and vocabulary. It can laugh, smile, frown, gasp, yawn and express fear or boredom using its flexible

beak, ears and eyebrows. Most intriguingly, the new Furby responds to vocal commands. If you ask Furby to tell you a joke, it will most likely deliver a knock-knock zinger.

This Furby has back, mouth and stomach sensors that respond to petting, feeding and tickling. A communications sensor in its belly can detect the presence of companion Furbies. The motors and chips inside, including a 14-megahertz processor, are powered by four AA batteries. (Zipern, 2005)

These advancements seem aimed at strengthening the emotional bond between *Furbys* and their caregivers. Not only could they respond to verbal commands, but *Furbys* could also express emotions through facial cues.

In addition to *Emototronic Furbys*, the cartoon film *Furby Island* (Akens & Pavlakos, 2005) was released around the same time and features a remote island populated by *Furbys*. A game also entitled *Furby Island* (LemonQuest, 2005), which expands on the island narrative, was also released. The *Furbys* in the film and game are modelled on *Emototronic Furby* and perhaps offer a different origin narrative to the original story printed in the 1998 instruction manual, because these *Furbys* come from an island rather than the clouds.

The decisions made prior to *Furby's* release attempt to fix how, and by whom, the toy will be consumed. Similarly, texts about *Furbys* that centred on their technological sophistication, or potential "hot toy" status, worked to reinforce these aspects.

Consumer narratives about electronic companions

In addition to the narratives provided by the designers and marketers of electronic companions, are the stories created and shared by the consumers of these products. Enthusiastic owners of electronic companions take to online forums to discuss their companions, and in doing so create a personality and life for them. Jacobsson's (2009) study of an online community for owners of Ugobe's robotic pet dinosaur *Pleo*, explores how stories about interactions with robots unfold in blogging practices. The author suggests that by analysing the everyday events of the robots "life" as described in stories,

designers "can better ground interaction [with electronic companions] in existing cues starting from simpler elements like temperature and humidity, or even entirely new practices based on what users actually do when appropriating technology, for instance accessorising" (p. 237). By understanding the experiences shared in online stories, Jacobsson hopes to extend the knowledge base surrounding the lives that people build with these objects and "inform designs of future artificial companions" (p. 232). He found that *Pleo* owners talked about the robot's actions in emotive language, attributing human or animal behaviours to the robot's actions. For example, instead of discussing the first time their robot was switched on, owners referred to the day *Pleo* was born. In another case, the fading and wearing down of *Pleo's* plastic skin is referred to as shedding. The author concludes that in the act of blogging about *Pleo*, users "create bridges in the interaction by staging, performing and also playing along with unfolding experience" (p. 237). By talking about their companion in terms that relate to living organisms, people appear to be blurring the line between fiction and non-fiction in order to enrich their experiences with electronic companions. Jacobsson's study has similar goals to this research, specifically in its intention to encourage thinking about the future of human relations with electronic companions through an exploration and analysis of stories. However, while Jacobsson looks at actual interactions with *Pleo* presented in a journal or diary-style narrative, my research focuses on fan fiction about electronic companions. Consequently, my research takes a more speculative approach based on the critical reflections present in fan fictions and the presence of fantasy content.

In another similar study, Friedman, Kahn, and Hagman (2003) explore the relationships that people developed with Sony's robotic dog, *AIBO*. Their approach was to analyse online message boards devoted to discussions about *AIBO* in order to understand the various meanings that the object was imbued with. Messages were divided into categories based on similar themes so that the authors could determine overarching attitudes towards *AIBO*. In doing so, Friedman et al. concluded that interactions with *AIBO* are "socially but not morally engaging" (p. 279) and that despite often lavishing affection and attention on the robot, "the owners also knew that AIBO was a technological artefact, they could ignore it whenever it was convenient or desirable" (p. 278). My approach to exploring electronic companions is related to this investigation through my thematic exploration of how people interact with and discuss such objects. It differs in the sense that I look to fictional

narratives that allow for more expansive and creative thinking about companionable technologies.

2.1.2 Psychological, cultural, and design perspectives on electronic companions

Since the introduction of *Tamagotchis* and *Furbys*, the companionship offered by electronic companions has been treated as a valuable addition in caring for individuals who are living in assisted accommodation (Shibata, 2004; Wada & Shibata, 2006). Based on the premise that a lack of social and psychological interaction can adversely affect a person's health, care robots have been introduced to individuals suffering from physical and mental illnesses. Wada and Shibata (2006) have highlighted that electronic companions can provide social interaction where there is a shortage of human carers and animals are not permitted. Objects such as *Paro*, a care robot modelled on a baby harp seal, are already used and studied in care institutions, and have recently become available commercially in small numbers (Shibata, Kawaguchi, & Wada, 2009). Although carer and helper companions may become more common in the future, this research necessarily looks to well-established products.

Electronic companions like *Furbys* fall into a category that Breazeal (2003) refers to as "socially evocative" (p. 169) robots. Objects in this class tend to require their user to raise or nurture them in order to encourage anthropomorphic associations, and Breazeal suggests that this approach gives a false impression of intelligence and awareness: "in short, [although] the human attributes social responsiveness to the robot, the robot's behaviour does not actually reciprocate" (p. 169). These kinds of socially evocative robots are increasingly embedded in popular culture, and documented experiences with them are largely viewed as indicators of what is to come (Breazeal, 2003; Levy, 2007; Wilks, 2010a). More broadly, Thrift (2003) argues that toys such as *Furbys* are 'an early dip in the bath of commodified technology" (p. 395), and are "gateways" to interactive technology:

> [T]oys have become one of the chief test-beds for the new ways of doing things. In turn, the problems that have been thrown up – how to emulate emotions, how to produce expressive effects like humour, how to produce contextual awareness, how to build character, how to synthesize perception, how to stimulate particular kinds of pleasure, how to become animal – have made toys into not just a profitable

commodity in themselves but also into one of the means by which innovations arising from the communications, information technology and defence industries can get a first airing. (p. 390)

In this sense, *Furbys* represent a first imagining of what interactions with electronic companions should be like: toy-based and caring. This point is argued by Wilks (2010b) specifically in regard to the cultural impact of *Tamagotchis* and *Furbys*: "this phenomenon is almost certainly a sign of what is to come and of how easy people will find it to identify with and care for automata that can talk and appear to remember who they are talking to" (p. 12). He further states that "one thing we can be sure of is that artificial companions are coming. In a small way they have already arrived and millions of people have already met them" (p. 11). Statements such as this are in line with a technological determinist perspective where:

[A] complex event is made to seem the inescapable yet strikingly plausible result of technological innovation. Many of these statements carry the further implication that the social consequences of technical ingenuity are far-reaching, cumulative, mutually reinforcing, and irreversible. (Roe Smith & Marx, 1994, p. xi)

In Wilks's case, he makes the assumption that the documented impact of early electronic companions is indicative of their increasing prominence in the future. Breazeal similarly affirms a future where the ongoing development of social and companionable technologies both influences and is influenced by human interaction (Breazeal, 2002). In both examples, Wilks and Breazeal focus on the research and design needed to aid a relationship between people and robots rather than questioning if this relationship is something that should be pursued at all. Technological solutionism, which involves "[r]ecasting all complex social situations either as neatly defined problems with definite, computable solutions or as transparent and self-evident processes that can be easily optimized …" (Morozov, 2013, p. 5), perhaps offers a more nuanced understanding of the expectation that technology will ameliorate human loneliness, or even solitude. Whether or not the future that these researchers so eagerly await eventuates, it is important to consider how electronic companions have already impacted on our daily lives.

First and foremost, electronic companions are technologies designed to appeal to human emotions. Furthermore, during the short history of their use, these objects have had a

significant social impact and sparked critical debate relating to their implications and their purpose in people's lives. Media reports have indicated that *Tamagotchis* firmly disrupted the patterns of everyday life for both children and adults. Anecdotes of people neglecting their work duties and even crashing their vehicles while preoccupied with caring for their electronic companions (Pollack, 1997) are examples of the temporary power they held over people. However, for *Furbys*, also frequent in media commentary was a sense of irritation spurred by their lively behaviour. Turkle (2011) suggests that their animated behaviour is how they appear to be alive, but unfortunately "Furbies manifest this with an often annoying, constant chatter" (p. 35). Further illustrating this theme, Kirsner's (1998) account of the *Furby* development process begins the article with the line: "It smiles. It sneezes. It sings. It never shuts up". Descriptions of what *Furbys* are have come to include its physical appearance and this distinctive, "annoying" behavioural trait, as Canedy's (1998b) description exemplifies: "Furby has bug eyes, big ears and an annoying need for attention". Such reports recast *Furby* as disruptive, as opposed to its marketed friendly and pleasant persona, and Witheridge (1999) states that "Hasbro has had hundreds of complaints about the Furby's annoying noises - non-stop giggles, belching and singing", prompting them to install a "Deep Sleep" function to keep *Furbys* quiet for longer.

When Hasbro announced the release of a new *Furby* generation in 2012, media accounts have continued with a similarly negative narrative, in one instance referring to *Furby* as "a childish pseudo-creature with a glaringly absent off switch" (Buckley, 2012). Reviews of the new *Furby* again highlighted that its presence quickly becomes unpleasant: "[t]he gimmick quickly wears off, and it's then a constant, gnawing source of aggravation. It's like a device designed specifically to annoy" (Biddle, 2012). The sense that *Furbys* are uncontrollable and unpredictable was also highlighted as a cause of annoyance in both the old and new versions:

> There is no off or mute switch; the only way to make the babbling stop is to leave the room or remove one of the four AA batteries. Or you can wait for about two minutes until Furby dozes off. If Furby is bumped, those eyes may pop open, which is why there's an old model Furby still living in our attic. In other words, this is not the type of toy you want to be near on a long-distance flight. (Buckleitner, 2012)

These are just a few examples of media reporting that characterised *Furbys*, and relationships with them, as disruptive and aggravating, and a cursory search of the comments that follow online articles and reviews about *Furbys* is telling of how wide spread these opinions are.

Nevertheless, by demanding constant nurturing, *Furbys*, like *Tamagotchis,* appealed to a users' tendency to emotionally bond with creatures in their care (Allison, 2006). The success of *Tamagotchis* also demonstrated "that even a very simple dot image can provoke a strong sense of life" (Kusahara, 2001, p. 300) because of the care it required, and the outcome of "death" if it was not provided. Turkle's (2011) attitude toward such events is that human beings are "psychologically programmed not only to nurture what we love but to love what we nurture. So even simple artificial creatures can provoke heartfelt attachment" (p. 11). This view seems to highlight a perceived danger that people may value relationships with robots as much as they value relationships with other human beings. Further, Turkle (2007) argues that these objects push our "Darwinian buttons" (p. 503) by reacting to our presence in ways that suggest understanding and comprehension, but are ultimately just mechanical interpretations of interaction that we could be getting from other people. Her concern is that the presence of objects that appeal to us as other humans do will fundamentally alter what is special about being human and detract from the relationships that form between us. Bryson (2010) has referred to this situation as "the commercial exploitation of human empathy" (p. 74).

Offering a more positive interpretation, Levy (2007), an advocate of robot–human romantic and sexual relationships, welcomes a future in which feelings of love are felt equally for other people or robots, going as far as to say: "love and sex with robots on a grand scale are inevitable" (p. 22). However, Levy's reasoning behind this assertion is also fundamentally determinist and based on the view that due to technology's significant advancement over the past few decades, "any assumptions of unlikelihood or impossibility regarding our technological future are at the very least risky, and most probably unjustified" (p. 21). He argues that relationships with robots may even be superior to humans, as a robot will not die or behave in a way that causes heartbreak. In this view, Levy fails to consider that the presence of mortality may be an important factor in human relationships. Levy also suggests that companions could be perfectly tailored by their owners, resulting in a completely compatible relationship. But would the idea of sharing

our lives with a partner be as meaningful if life was endless and free from any conflict? Opposing Levy's outlook, Turkle (2011) argues that a meaningful relationship includes surprises that only the human experience can offer, such as "the rough patches of looking at the world from another's point of view, shaped by history, biology, trauma, and joy. Computers and robots do not have these experiences to share" (p. 6). Where Levy's (2007) principal claim is that such meaningful relationships with technology are inevitable, Turkle's is that we are at a point where we must take action against the pervasive presence of technology and reclaim a sense of privacy and the value of interactions with other people (2011, p. 296).

The cultural commentaries above cast the consumer, or caregiver, in a passive role that does not critically engage with electronic companions. Turkle, Wilks, and Levy, although offering a range of perspectives on the topic, all portray the electronic companion as an agent with the ability to deeply affect human beings on a social and emotional level that, apparently, people will be unable or unwilling to resist. Furthermore, the possibility that electronic companions may not be able to live up to the promises of "life" and "companionship" made on their packaging is rarely considered. Nonetheless, from a design perspective, Chapman (2005) has commented that *Tamagotchis* and *Furbys* among other electronic companions, fail to deliver "the nuances of spontaneity, growth and discovery which are so desperately sought", in part because of the "limited selection of predetermined actions that can be triggered" (p. 74). Further, he makes the argument that if these objects are going to be successful at sustaining emotional attachments, they must go beyond the illusion of dependency and create immersive and meaningful interactive experiences (2005). Lund (2003) also argues that, because *Furby's* behaviour and maturation are pre-programmed, "the robotic behaviour may become predictive and somewhat boring to the user" (p. 596). Allison (2006) and Bloch and Lemish (1999) reach a similar conclusion that, although engaging at first, interest in *Tamagotchis* typically faded to nil before the original battery required replacement.

In sum, this discussion suggests that the issue of electronic companionship is unresolved within sociological, cultural, and design fields, as it relies on technologically determinist perspectives while still raising questions surrounding a lack of authentic and meaningful human relations. Further, electronic companions raise moral, ethical, and legal queries about ownership and misuse. Whitby (2008) queries whether abuse towards robots should

or shouldn't be tolerated in the case that it might make people "more likely to abuse humans" (p. 329) or, conversely, used as an act of catharsis. Whitby ultimately raises the question: "to what extent do we consider it acceptable to deliberately mistreat artefacts – particularly substantially human-like artefacts?" (p. 328). Bryson's (2010) position on this is that humanising robots at all is a mistake as it may result in them being given undue responsibility and resources.

These issues demonstrate the contentious nature of electronic companions and suggest that critical reflections on their presence, and the relationships they encourage, are important for researchers and designers concerned with their roles in everyday life.

2.2 Defamiliarising Electronic Companions

The above discussion of electronic companions demonstrates the uncertainty surrounding our experiences of electronic companionship. This can be seen in questions about how these objects fit into interactions between people, and whether or not the experience they offer measures up to the marketing promises. One of the ways in which we can begin to answer these questions is by taking a closer look at how interactions with electronic companions rely on defamiliarisation.

Defamiliarisation (cf. Shklovsky, 1998) is a literary strategy that allows the reader to see the world from a different perspective by making the strange familiar and the familiar strange. In other words, defamiliarisation involves making things both more and less familiar, in order to highlight strangeness. On the role of defamiliarisation, Rivkin and Ryan (1998) write:

> [T]hat such literature presents objects or experiences from such an unusual perspective or in such unconventional and self-conscious language that our habitual, ordinary, rote perceptions of those things are disturbed. We are forced to see things that had become automatic and overly familiar in new ways (p. 4).

An excellent example is described by Tolkien (1964) as "Chestertonian fantasy" (p. 54) and refers to the sense of strangeness one experiences when something ordinary is seen from a new angle. This is expressed by an experience had by Dickens when sitting in a

coffee shop and reading "coffee-room" from the inside of the glass door as "mooreeffoc" (Tolkien, 1964, p. 54). "The word *Mooreeffoc* may cause you suddenly to realize that England is an utterly alien land, lost either in some remote passage past age glimpsed by history, or in some strange dim future to be reached only by a time-machine" (p. 54). In another example, Sheltrown (2009) describes how everyday technology becomes magical when it is presented through the eyes of a character to whom it is foreign. For example, the wizards of the *Harry Potter* novels (Rowling, 1997) yell into telephones and use excessive amounts of stamps when sending a letter in the mail. To them, the objects and systems that are commonplace to us seem bizarre and ambiguous (Sheltrown, 2009).

In an ethnographic study of domestic technologies, Bell, Blythe, and Sengers (2005) position defamiliarisation as a particularly useful technique for encouraging critical reflection on technology in everyday life. They argue that domestic technologies in particular become invisible through familiarity, but as they play a large role in mediating social relations, their presence should be questioned:

> [M]uch is gained in the deployment of such technology, but there might also be losses. Our enthusiasm for the gains we can make in the deployment of computing technology in the home might make us overlook problems that would be obvious from other perspectives. (Bell, Blythe, & Sengers, 2005, p. 152)

From this perspective, defamiliarisation allows us to reflect on what we gain and lose by engaging with technology, and explore different approaches to its use. In relation to nonhuman companions, we could also understand defamiliarisation as the distance between them and us as created through narrative. In the following sections I discuss how different kinds of narrative defamiliarise technology.

2.2.1 Design and marketing narratives

There is evidence of a disconnection between simplistic marketing visions of interaction between people and electronic companions, and the complex realities of human–nonhuman relations. The marketing vision for *Furby* companionship is clearly indicated when, upon opening the "Electronic Furby Instruction Manual" (Tiger, 1999), *Furby* introduces itself:

"LET'S BE BEST FRIENDS… Hi! I am a Furby and I am so happy to be your friend" (p. 1). The following page explains what a relationship with Furby will be like:

> I am so happy you brought me home. I feel great! Please take me everywhere you go. I love to play. The more you play with me, the more amazing things I will do. The more time you spend with me, the sooner I will be able to speak your language. And if you introduce me to other Furbys, I will be able to play with them, too! (p. 2)

Perhaps bringing new meaning to user-friendliness, we are repeatedly reminded that *Furby* can and should be constantly interacted with, although *Furby's* friendship is instant because its companionship is bought, not earned. This idealised relationship may be understood as connected to the imperatives of industrial design and the role it is often expected to play in making everyday life easier. As discussed above in section 2.1.1, *Furbys* are positioned as other-worldly in "The story of *Furby*" by telling us that they come from a land in the clouds. At the same time, *Furbys* are literally made familiar by introducing themselves as a friend that should be cared for like a pet. As discussed in section 2.1.2, stories about the design and marketing of *Furbys* suggest that friendly and in need of nurture were the qualities that were believed to make *Furbys* "distinctive and unique and desirable" to consumers (Kolker cited in Kirsner, 1998). As Forty (1986) argues, cultural and social mythologies play a significant role in the commercial success of design, because they can resolve the conflicts "that arise between people's beliefs and their everyday experiences …" (p. 8). In this sense design is ideological, bringing cultural ideals into everyday life through its "capacity to cast myths into an enduring, solid and tangible form, so that they seem to be reality itself" (Forty, 1986, p. 9). Forty further argues that this is tied to design's primary purpose of making a profit for its manufacturer, and therefore: "[e]very product, to be successful, must incorporate the ideas that will make it marketable, and the particular task of design is to bring about the conjunction between such ideas and the available means of production" (Forty, 1986, p. 9). Balsamo (2011) also ties technologies to culture, arguing that

> To be comprehended, an innovation must draw on understandings that are already in circulation within the particular technoculture of users, consumers, and participants; at the same time it must perform novelty through the creation of new

possibilities, expressed in language, desires, dreams, and phantasms of needs" (p. 10)

In this sense, *Furbys* represent a desirable and familiar ideal of companionship and technology– and, as will be discussed further below, conform to anthropocentric approaches to companion species. However, meaningful relationships may not always fit into this idealist ideology, as Turkle (2011) reminds us that human companionship is complex and arguably all the more meaningful for its messiness.

2.2.2 Gothic and science fiction

Kahane (2009) reminds us that "new technologies are stories in the making [and] recurrent stories are built on how technologies will change the world" (p. 56). An oft-cited example of how idealised industrial technological products and processes are brought into the messy and complex lived-world, is the growth of gothic and science fiction literature. While marketing narratives make technological products familiar in a positive light, gothic and science fiction present a dystopian counterpoint. Punter and Byron (2004) suggest that the gothic novel emerged as an expression of uncertainty and alienation felt during the industrialisation of Britain, when increasing mechanisation and urban development separated workers from the products of their labour, and the natural landscape. It has been suggested (Baldick, 1987; Tsitas, 2006) that characters such as Frankenstein's monster (Shelley, 2003) endure as cultural icons because they question human identity in the face of scientific and technological development. In this sense, gothic literature is human-centred because it concentrates on how people are affected by technology. Similarly, science fiction can be seen as a response to the impact of a technological society, or as Luckhurst (2005) defines:

> [A] literature of technologically saturated societies […] that concerns the impact of Mechanism (to use the older term for technology) on cultural life and human subjectivity. Mechanised modernity begins to accelerate the speed of change and visibly transform the rhythms of everyday life" (Luckhurst, 2005, p. 3).

Luckhurst argues that science fiction offers dramatic extrapolations of technology, often as either "an agent of progress and transcendence or an insidious weapon that cuts into and

undermines the integrity of the human" (p. 5). This example is typical of the negative relationships with technology that are portrayed in science fiction. Similarly, Dinello (2005) suggests that science fiction "imagines the problematic consequences brought about by these new technologies and the ethical political, and existential questions they raise" (p. 5). However, the visions of science fiction can also be utopian, offering the opposite perspective that "humanity, rather than being crushed by the wheels of industry, would be physically liberated and spiritually enhanced by advancing technology" (Dinello, 2005, p. 34). Whether dystopian or utopian, technology is made strange through extreme extrapolations of its presence and impact on everyday life.

Contrary to these polarising views, Luckhurst (2005) acknowledges that the reality of these relationships is often far more banal than either the utopian or dystopian perspective suggests:

> […] history shows that these extremes are rarely encountered in the messy, experiential world – that *ambivalence* towards technologies is often the presiding spirit of engagement. And this is perhaps because, as recent work on the history and theory of technology insists, we need to think our way beyond the construction of Mechanism as somehow outside cultural life, transforming or threatening it from some exterior place. (p. 5)

In this sense, technology in science fiction is written as a threatening, or angelic "other" rather than a familiar presence, but Luckhurst's view encourages researchers to explore how technology is actually embedded in everyday life.

While gothic and science fiction genres are typically suspicious of industry and project readers into future technological scenarios, defamiliarising through an extrapolation of technology's presence, the fantasy genre defamiliarises through avoiding direct engagement with emerging technologies by returning us to pre-industrial conditions and relationships.

2.2.3 Fantasy narratives

Le Guin (2009) suggests that human–nonhuman relationships can, through fantasy narratives, return to the pre-industrial where "… our relationship to the animals was not one of using, caretaking, ownership. We were among, not above [them]" (p. 45). From this

perspective, relationships are complicated beyond the idealised marketing narratives that cast people and electronic companions as caregivers and receivers, or in terms of unconditional friendship. Le Guin's fantasy approach to human–nonhuman relationships is defamiliarising because it removes the familiar hierarchy and imagines us as equals as opposed to marketing narratives that reinforce the dominance of a human caregiver, and gothic and science fiction narratives that also centralise the human. Additionally, by creating less anthropocentric worlds, such relationships can be explored in situations where technology plays a different and less central role to those situations in science fiction and the gothic that focus on how humans are impacted by technology. To highlight this non-hierarchical relationship, Le Guin presents a taxonomy of animal stories, ranging from exclusively animal-based, to those which clearly place humans and nonhumans on equal footing. Using classic animal stories such as Grahame's (1908) *The Wind in the Willows,* Le Guin demonstrates that through the internal consistency of a fantasy narrative, people and animals can occupy the world equally. In particular, Le Guin's taxonomy highlights a complicated and intrinsic connection between people and animals that is not bound to, or even resists, technology's impact on the world.

Le Guin's (2009) understanding of animal stories in fantasy is also based on changes brought about by advances in mechanised labour that impacted human–nonhuman relationships, such as when animal labour was replaced with technology and humans increasingly lived in cities where it was possible to be "indifferent to and ignorant of other species" (p. 47). However, unlike science fiction and gothic narratives that focus on defamiliarising technology so that we may address its present and future impact, Le Guin (2009) argues that through fantasy we may return to:

> The fields and forests, the villages and byroads, [that] once did belong to us, when we belonged to them. That is the truth of the non-industrial setting of so much fantasy. It reminds us of what we have denied, what we have exiled ourselves from.Animals were once more to us than meat, pests, or pets: they were fellow-creatures, colleagues, dangerous equals. We might eat them; but then, they might eat us" (Le Guin, 2009, p. 38).

Although it may first appear as a romantic view of fantasy, it offers a critical perspective on other beings that complicates the relationship encouraged by the *Furby* design and

marketing narratives because it defamiliarises our hierarchical relationship with nonhumans and suggests that nonhumans are not simply there to be domesticated and dominated. Le Guin concludes her argument with the observation that animals stories, and our fascination with fantasy in general, demonstrate that "our innate, acute interest in animals as fellow beings, friend or enemy or food or playmate, can't be instantly eradicated; it resists deprivation. And imagination and literature are there to fill the void and reaffirm the greater community" (p. 105).

Fantasy can therefore play a different role to science fiction and gothic literature because it decentralises humans and technology, offering a chance to explore their role in a world where they do not monopolise everyday life. The kind of fantasy that Le Guin refers to is what Armitt (2005) calls "genre fantasy", and concerns the narrative construction of a cohesive, and internally consistent, world "that genuinely exist[s] *beyond* the horizon, as opposed to those parts of our own world that are located beyond that line of sight but to which we might travel, given sufficient means" (p. 8). Wolf (2012) argues that while both science fiction and fantasy involve the creation of other worlds, their differences lie in their origins, as the fantasy genre has grown from "myth and folklore traditions, and came to encompass older genres like the heroic romance, beast fables, and fairy tales" (p. 106). On the other hand, science fiction "followed closely on the heels of science, with the term 'science fiction' first appearing in 1851, less than two decades after the term 'scientist'" was coined" (p. 97). In other words, fantasy predates technoscience as we know it and explores human–nonhuman kinship through creating worlds in which our relationships with animals are not dictated by technology and industry, and the human is not central.

By shifting the focus away from humanity, fantasy casts the nonhuman as a protagonist (Le Guin, 2009), and offers another perspective. For example, Shklovsky (1998) describes Tolstoy's use of a horse narrator, noting that "it is the horse's point of view (rather than a person's) that makes the content of the story seem unfamiliar" (p. 18). As discussed earlier, discussions surrounding electronic companions are typically anthropocentric, but when viewed as animal stories there is the opportunity to explore how such relationships could be different from other nonhuman interactions. Thrift (2004) argues that "electric animals" are currently adopted and understood along similar lines to companion animals and are therefore subject to the complicated history and reality of that relationship that is characterised by:

[D]omination and cruelty combined with sugary sentiment, a matter-of-fact instrumentalism combined with an awareness of a lurking otherness, and general uncertainty about the costs and benefits of the relationship for either party. As machines are loaded up with software and gain more and more independent mobility, so the same kinds of ethical dilemmas are likely to occur." (p. 475)

However, by exploring electronic companions through the lens of fantasy, we may begin to see different kinds of relationships, and further, as Atwood (2011) suggests, better understand ourselves:

If you can image – or imagine – yourself, you can image – or imagine – a being not-yourself; and you can also imagine how such a being may see the world, a world that includes you. You can see yourself from outside. To the imagined being, you may look like a cherished loved one or a potential friend, or you may look like a tasty dinner or a bitter enemy. When a young child is imagining what's under the bed, it is also imagining what it might represent to the unseen creature: usually prey. (p.21)

2.3 Conclusions

This chapter has argued that electronic companionship and its boundaries are in the process of being articulated, and stories of design, marketing, media, and cultural research all approach this goal. I have also suggested that the narratives of users themselves also communicate relationships with electronic companions and are valuable texts for understanding what happens when these objects enter into everyday life. Through a discussion of literature genres I have also argued that storytelling is a primary and productive means to reimagine ourselves, nonhuman animals, and technological nonhumans in the world. Particularly, by creating fictional worlds that may be familiar and unfamiliar at the same time, storytellers critically reflect on the status quo. Design and marketing stories both familiarise and defamiliarise nonhuman technology in a positive and utopian way by making *Furbys* friendly, yet other-worldly. Gothic and science fiction stories defamiliarise technology in a negative and dystopian way by extrapolating its presence and intelligence. Finally, I have argued that animal fantasy defamiliarises the

experience of interacting with nonhumans in a way that is not based on technology and is not necessarily positive or negative.

Most notably, in contrast to the technologically determinist views discussed earlier in the chapter, and moving beyond having to choose between either utopian or dystopian perspectives, fantasy narratives remind that things once were, and could again be, different. To continue my exploration of electronic companions and fantasy narratives, in the following chapter I will present and analyse a collection of *Furby* fan fiction that pushes the boundaries of what the object or product is capable of, as well as the relationships that can be formed beyond those encouraged by the manufacturer.

3. Constructing *Furbys* Through Fan Fiction

In the first section of this chapter I present an overview of fan fiction, including the motivations to engage in it and theoretical perspectives on it as genre of writing. Following this I draw connections between fan fiction and pastiche, and value scenarios, which aim to create critical perspectives on the use of consumer products. I then introduce the four fan communities from which I have sourced the stories for my analysis. The second part of this chapter comprises an inquiry into seventy-two fan fictions, employing the qualitative textual analysis discussed at length in Chapter 1, section 1. Twelve narratives come from www.adoptafurby.com and www.tamatalk.com, communities specifically devoted to electronic companion enthusiasts. The other sixty narratives are sourced from www.fanfiction.net and www.archiveofourown.org, which are large archives that cater to a huge array of fandoms, meaning all of the fans and fan-work relating to a specific existing text. My analysis first addresses the stories that construct positive relationships with and among *Furbys* by rendering them conscious, caring, and compassionate. At the same time, these stories also show us what it means to be a good caregiver, as the human characters are equally caring and kind towards their *Furby* companions. Following this analysis I discuss how these positive themes reinforce existing design and marketing narratives about *Furbys* and draw on aspects of fantasy literature. In particular, the animal story that places the nonhuman as central to the narrative is evident in positive depictions of *Furby* relations. My analysis then explores the antithesis; stories that depict negative relationships with *Furbys*. In these stories, *Furbys* are generally threatening, disruptive, annoying, and physically strange. I discuss how these recurrent themes have much in common with tropes and themes of science fiction and gothic literature, and communicate uncertainty about our relationships with technology. Further, negative depictions of *Furby* relations more often reject the marketing of *Furbys* as friendly and kind, and reinforce media commentary that focuses on the problematic aspects of interacting with *Furbys* in everyday life.

3.1 Consumer Storytelling

Authors of fan fiction creatively express their responses to a variety of media, from films and television to novels and products, by appropriating the characters, settings, and themes of an original work. Through this medium, fans:

> [T]ransform personal reaction into social interaction, spectatorial culture into participatory culture [...] One becomes a fan not by being a regular viewer of a particular program but by translating that viewing into some kind of cultural activity, by sharing feelings and thoughts about the program content with friends, by joining a community of other fans who share common interests (Jenkins, 1988, p. 88).

Fan fiction is a form of this cultural activity, where knowledge of, and content from, an original work is used to create stories than can range vastly in length and style. Coppa (2006) writes that science fiction fan writing began through the editor's letter column in serialised science fiction magazines of the 1920s. Through the Depression era, when publishing of science fiction volumes was few and far between, fan-created fictions filled the void and provided an alternative for readers (Coppa, 2006).

As metioned in Chapter 1, section 1 Jenkins (1988) suggests that on an individual level, writing fan fiction is deeply personal and involves making an existing text more familiar and reflective of the author's experience. Authors are motivated to write not for financial or professional gains but for personal enjoyment and fan recognition. However, fan production does not necessarily come from favourable opinions of an existing text. The antifan is an individual who actively hates a text or cultural artefact and is mobilised in their dislike to contribute to a community of others who share their views. As Gray (2005) acknowledges:

> Hate or dislike of a text can be just as powerful as can a strong and admiring, affective relationship with a text, and they can produce just as much activity, identification, meaning, and "effects" or serve just as powerfully to unite and sustain a community or subculture (p. 841).

Gray further suggests that both fan and antifan activity contribute to our understanding of the kinds of stories audiences want:

Although fans may wish to bring a text into everyday life due to what they believe it represents, antifans fear or do not want what they believe it represents and so, as with fans, antifan practice is as important an indicator of interactions between the textual and public spheres. (p. 855)

Derecho (2006) presents the perspective that fan fiction writers treat original work as an archive of materials to be borrowed from. She refers to this as "archontic literature" (p. 61), where fictions are archival rather than derivative, in the sense that they build and expand upon the source text. She provides an example wherein Jane Austin's *Pride and Prejudice* (1813) "contains such usable artefacts as Elizabeth Bennett, Fitzwilliam Darcy, the sprawling estate of Pemberly, and Austin's particular version of English manners and morals" (p 65). This conception of fan fiction is especially appropriate to stories that deal with existing technological objects such as *Furbys* because it treats subject matter as individual objects to be placed in new scenarios. It allows the author to "select specific items they find useful, make new artefacts using those found objects, and deposit the newly made work back into the source text's archive" (p 65). Jenkins (1988) also frames fan activity as the reassembling of existing objects, arguing that fans are poachers of textual material, creating a "cultural bricolage through which readers fragment texts and reassemble the broken shards according to their own blueprint, salvaging bits and pieces of found material in making sense of their own social experience" (p.86). These two definitions view the contents of original work as elements to be rearranged and recreated. From this perspective, fan constructions of *Furbys* become part of the overall *Furby* narrative that already includes its various representations in design, marketing, media, and research.

3.1.1 Consumer technology stories

Derecho (2006) argues that in part because of the potential copyright violation that is faced by most fandoms, "even the most socially conventional fan fiction is an act of defiance of corporate control…" (p. 72). Additionally, because of the creative freedom it affords, "fan fiction and archontic literature open up possibilities – not just for opposition to institutions and social systems, but also for a different perspective on the institutional and the social" (p. 76). If applied to *Furbys*, the role of electronic companions could be reimagined

outside of the imperatives of design and marketing. With similarities to fan fiction, Blythe and Wright's (2006) concept of pastiche scenarios proposes that written narratives featuring existing literary characters interacting with designed objects and services could be useful in highlighting uses that do not necessarily reinforce the design intention.

As defined broadly by Carroll (2000), scenarios are "stories about people and their activities" (p. 46). Like most stories, they feature settings, actors, events, and a plot. Carroll gives the example of an accountant working at his computer, attempting to view several files at once, the accountant finds that the file windows on his desktop are too large and make it difficult to refer to different documents at the same time. While a basic situation, Carroll identifies a common design issue of usability. However, Blythe and Wright (2006) state that a common criticism of scenario design is that it utilises stereotypical characters that merely serve to illustrate the workings and functions of a piece of technology, and lack "the depth, personality, history and cultural context that characters in novels seem to possess" (Blythe & Wright, 2006, p. 1142). Nathan, Klasnja, and Friedman (2007) also critique scenario design for reinforcing the designer's intentions:

> First, traditional SBD-type scenarios tend to portray the technology being utilized in the manner the designers intended. Moreover the uses are primarily depicted in a positive light. Second, the scenarios focus almost exclusively on the direct stakeholders—the groups that will be in a direct contact with the technology. Third, traditional scenarios tend to have a short-term outlook, on the order of days or months. (p. 2587)

As a potential solution to overly simplistic or idealised scenarios, Blythe and Wright (2006) suggest writing scenarios using pre-existing fictional characters as they "have their own agendas that will not fit with the goals of the designer or researcher" (p. 1145). For example, they compose a scene in which the pre-existing character Bridget Jones (Fielding, 1996) is using an iPod. Like in fan fiction, Blythe and Wright's scenarios explore how a well-known literary character might deal with a particular event, in this case using a piece of technology. Blythe and Wright suggest that strong and highly developed literary characters have been said to surprise even their creators with their decisions and actions in certain circumstances. Therefore, "[w]hen characters with as much depth and richness as these are recruited to scenarios they might also surprise and inform designers"

(p. 1142). In contrast to traditional scenarios, pastiche scenarios go beyond illustrating the workings of a design and offer the potential for critical reflections on design, because:

> [A]typical characters may help designers to position themselves reflexively: to be continually aware that they can only ever create fictitious users and possible uses for their technologies when they are constructing scenarios. Designers shape but cannot determine the use of their products. (p. 1143)

Similar is Nathan et al.'s (2007) concept of value scenarios that aim to explore the "effects of a new technology when it enters a societal milieu" (p. 2586) through stories that trace its systematic effects over time. Such critical approaches acknowledge that users of design create their own meaning in the objects that use. As discussed in Chapter 2, storytelling is a way to communicate our experiences with objects and imbue them with meaning. For new technologies particularly, this is also known as "domestication", a concept that aims to address the ways in which new technologies are received, accepted, or rejected in everyday life (Berker, Hartmann, Punie, & Ward, 2006). The concept of domestication is a useful way of thinking about *Furby* fan fictions because it challenges "technological and media determinisms" (p. 5) which, as will be discussed in section 3.2.2, are not necessarily accepted by consumers.

Domestication of technology acknowledges "the complexity of everyday life and technology's place within its dynamics, rituals, rules, routines and patterns" (Berker et al., 2006, p. 1). The connection between storytelling and domestication is further exemplified in Woodward's (2009) discussion of narrative in material culture which suggests that "objects acquire cultural meaning and power in the context of stories or narratives that locate, value, and render them visible and important" (p. 60). From this perspective, stories about *Furby* can be seen as a primary way that they acquire meaning, and they do so, in part, by making existing marketing and design narratives about *Furbys* more and less familiar. What pastiche scenarios, fan fiction, and domestication have in common is the acknowledgement of the unexpected. In this sense, fan fiction that includes an existing design such as *Furby* could highlight the multiple and unexpected roles of an object, and encourage critical and creative reflection.

3.1.2 Fan communities

To understand how consumers communicate human–nonhuman relationships, and to explore the extent to which design, marketing, and media constructions of *Furbys* are supported or resisted by consumers, I conducted an analysis of online fan narratives that include *Furbys*. My only criterion for consideration was that each narrative included interaction with a *Furby*. There was no exclusion based on the prominence of *Furbys* in the story and as such their role ranges from central antagonist or protagonist to brief appearances.
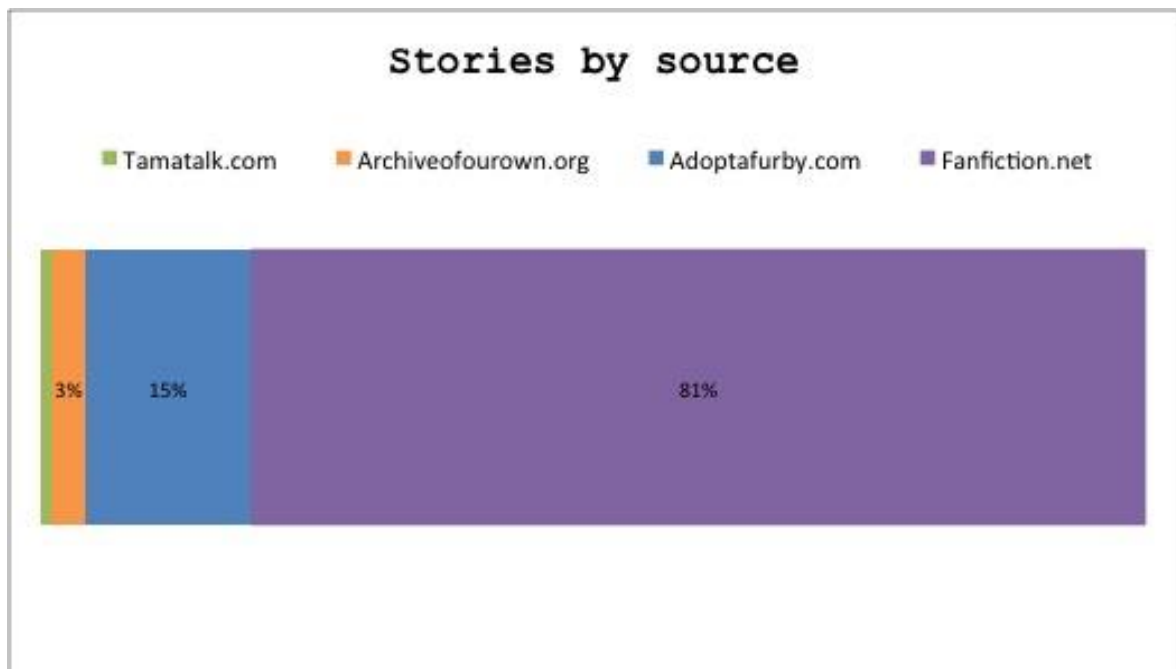
Figure 3.1 Author. (2013). Percentage of stories from source communities.

As the above graph shows, the majority of fan fiction narratives that I found come from www.fanfiction.net, which is the largest online fan fiction archive, and encompasses a huge number of sub-communities, forums, and genres. Pugh (2005) refers to www.fanfiction.net as an "umbrella site" (p. 245) as it includes any fandom, apart from those to which the original author objects, the full spectrum of writing abilities, and no restriction on explicit material. Eleven of the stories come from www.adoptafurby.com, a *Furby* fan community and forum. This website does not allow members to upload stories themselves, instead inviting authors to email submissions to a moderator. One story comes

from www.tamatalk.com, which is a *Tamagotchi* fan community containing a substantial archive of *Tamagotchi*-related fan fiction. Authors on www.tamatalk.com can post stories to the moderated fan fiction forum, but are bound by site conduct that content be appropriate for all ages (Bell Sprout, 2006). Two stories, the most recently published narratives, are sourced from the relatively new www.archiveofourown.org– a fan-created and run archive that supports fan content of any media.

Furby releases featured in stories

4%   5%   99%

■ Both ■ 2005 'version 2' Emototronic Furby ■ 1998 'version 1' Electronic Furby
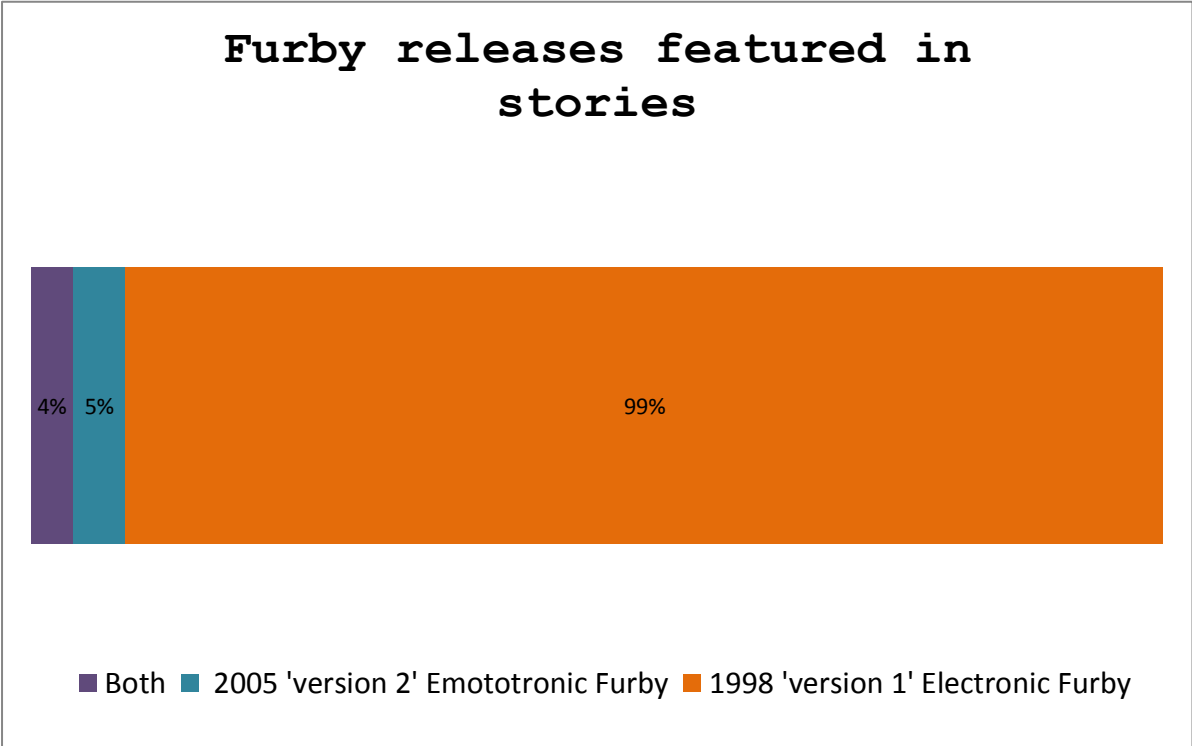
Figure 3.2 Author. (2013). Percentage of stories featuring *Furby* releases.

Figure 3.3 Author. (2012). 1998 *Furby* (version 1) & 2005 *Furby* (version 2).

The fan fictions I read were published between 1999 and 2013, and therefore span significant events and changes in the *Furby* brand and online participatory culture. As of 2013 there have been three iterations of *Furbys* released. The vast majority (99%) feature the 1998 versions of *Furbys*, and at the time of writing, there were no fan fictions that included the 2012 *Furby* release. The practice of writing and sharing fan fiction has also seen changes; the late 1990s saw media fandom become increasingly accessible through the "mainstreaming of online technologies" (Coppa, 2006, p. 54). www.fanfiction.net was founded in 1998 (Coppa, 2006), and the oldest *Furby* fan narrative was published in October of the following year. According to O'Reilly (2007), the term "web 2.0" characterises shifts in the communicative uses of the World Wide Web in the early 2000s, following the significant decline of many Internet companies. Warschauer and Grimes (2007) elaborate on the shift toward web 2.0, highlighting that:

> [T]he key distinction among [the first and second generation web] is that between *publication* and *participation*. The earlier Web allowed people to publish content, but much of that online material ended up in isolated information silos. The new Web's architecture allows more interactive forms of publishing (of textual and multimedia content), participation, and networking through blogs, wikis, and social network sites (p. 2).

For fan fiction, this has meant a shift from mailing lists to blogging technology and public online archives (Coppa, 2006). Stein (2006) highlights that new platforms for authoring and sharing online allow the traditions of fan fiction to "[i]ntersect with broader cultural (generic) discourses. In turn, as fans use the tools of new media to write and share fannish narratives, new forms of fan creative expression come into being" (p. 247).

www.adoptafurby.com was launched in 2006, offering a *Furby* adoption/relocation service where *Furby* fans can essentially purchase pre-owned *Furbys*. The website also has a section dedicated to fan-made content. www.adoptafurby.com's fan section is prefaced by the statement: "So… Ever worry you're the only one? There's *always* someone out there who loves Furbys as much as you …" (Electronic pets ltd., 2006b). Unlike www.fanfiction.net or www.archiveofourown.org, the authors cannot upload their stories to the www.adoptafurby fan section; instead they are required to submit contributions to a moderator via email. This crucial difference means that the tone and content of the fan

fictions can be controlled. The stories in the fan section are distinctly pro-*Furby*. They are also the only fan fictions that include the 2005 *Furby* explicitly.

It is important to note that all of the stories sourced from www.fanfiction.net and www.archiveofourown.org are set in forty existing fandoms, utilising the pre-existing characters, worlds, and storylines of television, animation, literary, and cinematic works. These are not really stories about *Furbys*, rather, they are stories in existing fandoms where *Furbys* are interlopers from outside of the canon. This point is perhaps crucial in understanding the depiction of *Furbys* in fan fiction, because, as writers in existing fandoms, the authors are often constrained by canon, or "fanon" which refers to "Something not in canon, invented by a fan fiction writer but convincing enough to be adopted by others" (Pugh, 2005, p. 242). Gray (2005) reminds that fans, nonfans, and antifans employ different interpretive strategies when interacting with a text. In particular, while fans intimate knowledge of a text reflects their overall appreciation, antifans more often focus on the "dimensions of the moral, the rational-realistic, [or] the aesthetic" (p. 856) that they find most disagreeable. Additionally, antifans may not experience a text directly, but dislike what knowledge they do have of it from afar. OOC (out of character) is a commonly used acronym in fan fiction that is often a criticism when the writing is inconsistent with the character it seeks to portray. For example, the *Hey Arnold!* fan fiction 'Olga's Furby' (TADAHmon, 2002) features the character Helga, who has an established personality, and as this story exists within the *Hey Arnold!* fandom rather than a *Furby* fandom, it follows that the *Furby* in the story can behave out of character more so than Helga, because the author and intended audience are fans of *Hey Arnold!,* and not necessarily of *Furbys*. In other words, the depiction of a *Furby* may not be textually accurate because the author may regard them from the perspective of a nonfan, that is:

> [A] relatively removed, or even indifferent, distance from the entirety of the text as broadcast. Meanwhile, antifandom will either involve audiencehood from afar, as the antifan refuses to watch, or may be performed with close knowledge of the text and yet be devoid of the interpretive and diegetic pleasures that are usually assumed to be a staple of almost all media consumption. (Gray, 2005, pp. 842–843)

In a similar sense, stories that depicted evil *Furbys* getting maimed would be considered inappropriate in the adoptafurby.com fan section because the audience and authors are *Furby* fans.

The *Furby* characters from www.fanfiction.net and the newer www.archiveofourown.org, fit into what is traditionally understood as fan fiction: stories that expand on existing characters, settings, and storylines written by individuals other than the original creator. All of these stories are set in an existing fandom other than *Furby* with the exception of the 'The Kingly Contest' (Pinkie Dash Pony, 2009), which is set in *Furbyland*. In contrast, the stories from www.adoptafurby.com and www.tamatalk.com are fan fiction because they include *Furby*. In other words, *Furby* is the fandom, whether they are set on Earth, or in *Furbyland*.

In the next section, I explore how positive, and then negative relationships with *Furbys* are represented and made more and less familiar through the themes that emerge. For each section of this analysis, I present the ways in which relationships with *Furbys* are made positive and negative, and discuss how the emergent themes reinforce or reject the issues discussed in Chapter 2 regarding design and marketing, media commentary, and cultural research. The strategies of defamiliarisation that appear in the fan fictions draw on myriad themes and motifs from gothic, science fiction, and fantasy narratives. By structuring this analysis in relation to the existing, and intersecting, narratives about *Furbys*, and comparing fan fiction communities, I hope to show multiple perspectives on how relationships with electronic companions are built, configured, and made more and less familiar through narratives.

3.2 Fan Fiction Analysis
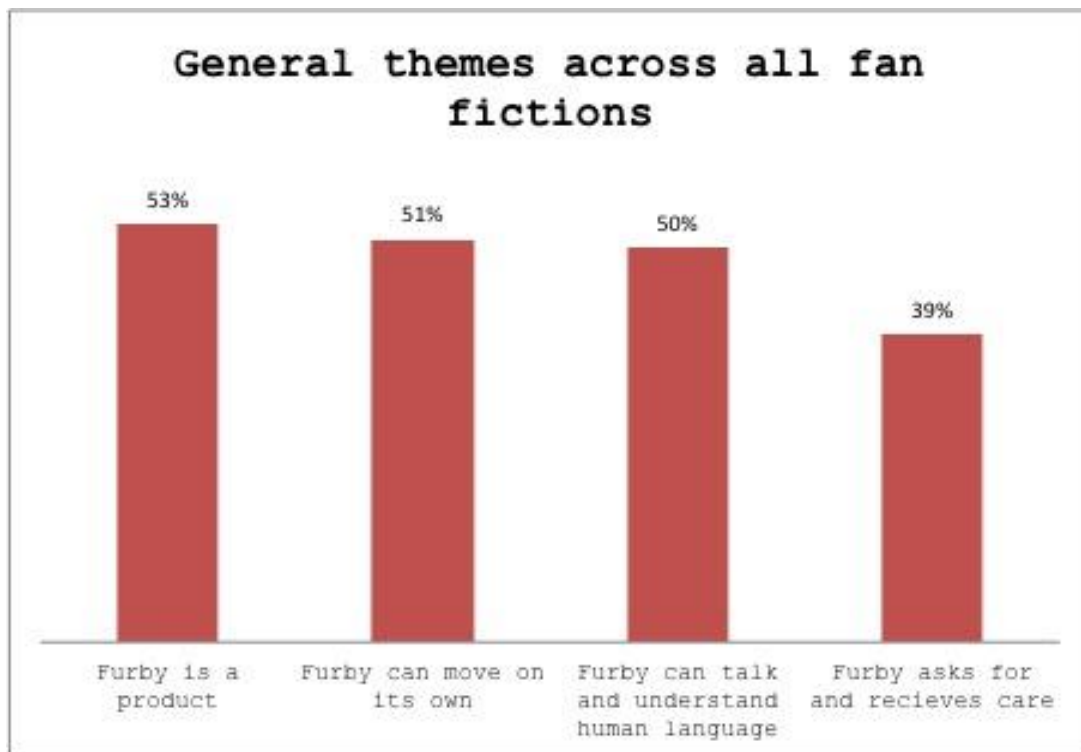
Figure 3.4 Author. (2013). Percentages of general themes across all seventy-two stories.

The above graph shows the broadest and most common themes across all of the seventy-two fan fictions that I analysed, and it indicates that *Furbys* are both acknowledged as a product that is purchased, as well as made more alive and human through their ability to talk and move. The theme of *Furbys* needing to be looked after is also consistent across all of the stories. In the following sections I elaborate on these themes to demonstrate how they are used to construct positive and negative relationships with *Furbys*. For example, a *Furby* that has language abilities may use them to communicate warm sentiments to their caregiver, or alternatively, to abuse them. Broadly, the above themes show that a *Furby's* physical capacities and social qualities contribute to its character in the stories. In the following analysis I discuss how they influence the relationship that *Furbys* have with humans and other *Furbys*.

3.2.1 Positive relationships with *Furbys*

This section analyses how positive relationships with and among *Furbys* are constructed in fan fiction. It is unsurprising that all of the stories about positive relationships with *Furbys* are sourced from adoptafurby.com and tamatalk.com, as both of these are communities for electronic companion enthusiasts. Whether the *Furby* characters are powerful or at the mercy of humans, they are friendly and good natured in all of these stories, and we often learn this when the narrative is from their point of view and we are made aware of their feelings. Additionally, positive narratives tend to reinforce the design and marketing narratives about *Furbys*, particularly that they have come to Earth because they care, and are curious, about humans.
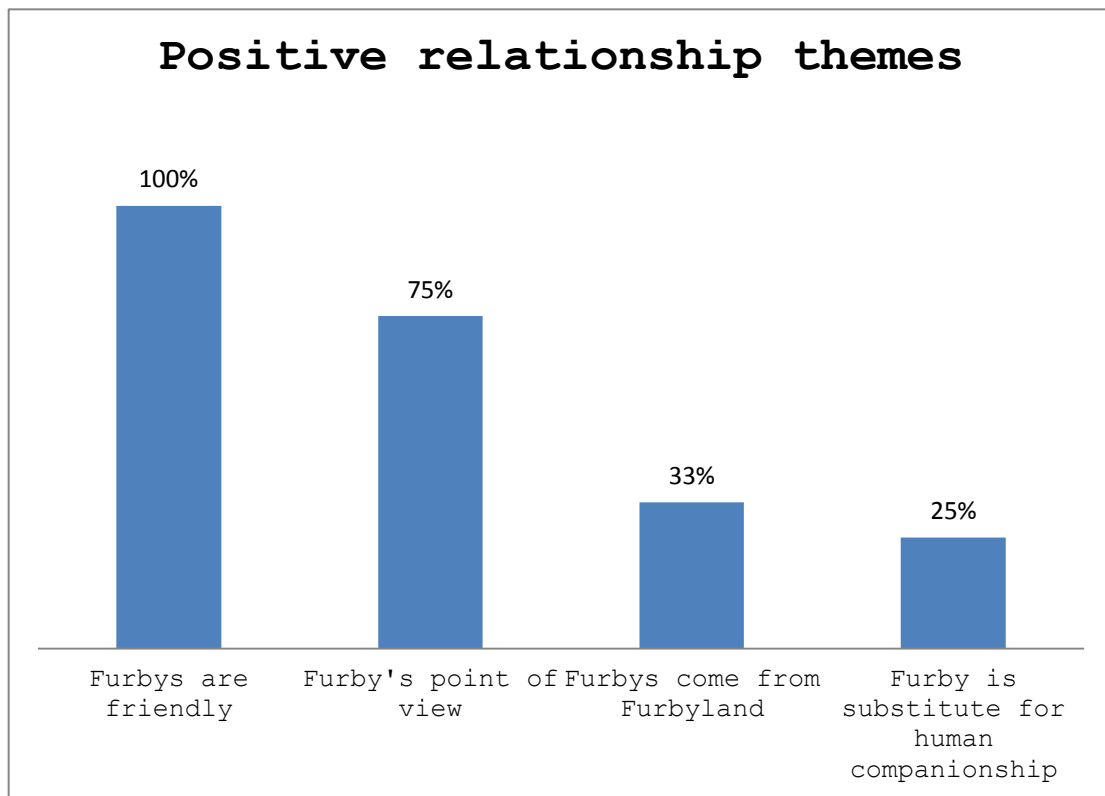
Figure 3.5 Author. (2013). Percentages of themes from positive stories.

A *Furby's* point of view

75% of the fan fictions from the www.adoptafurby.com fan section, and the one story from the tamatalk.com community, presented the *Furby* point of view. In contrast, only two

stories from www.fanfiction.net took on this perspective. In these stories we become the *Furby* by knowing its thoughts and feelings. As discussed in Chapter 2, the nonhuman as protagonist is a characteristic of fantasy literature that decentralises the human experience (Le Guin, 2009).

Stories from the *Furby* point of view, show us what *Furbys* want in a caregiver, rather than what humans are looking for in a companion, and they learn this through experience. In the following examples, a *Furby's* relationship with a caregiver and their status as a toy and product is addressed from the point of view of the *Furby*. Particularly, the experience of purchasing and outgrowing toys is defamiliarised when viewed from the perspective of the product itself. 'Rose's Life' (Quither, n.d) is written from the perspective of a 1998 *Furby* called Rose who is thrown away after her owner outgrows her toys:

> "Come on," she said. "I'm too big for you now, so you and all the other Furbys are going to my Jumble sale." I got taken and put on a table outside. Lots of people came gathering round to look at the marvelous selection, and soon some Furbys got taken away with other children […] At 4:00, all of the Furbys were sold to other people and I was the only one left. "Oh well, looks like nobody wanted you, which means that I have to throw you in the bin." I got taken outside and suddenly fell into darkness (p. 2).

Similarly, 'Ah-May's Journey' (Stephanie and daughters, n.d) features a *Furby* who must cope with the realities of being a consumer product in low demand:

> He had been told that after being boxed a child would buy him, take him out of the box, play with him, and love him forever. Things had not gone according to plan. The handsome furby had lost track of how long he had been in his box. He had been moved from place to place a number of times. Along the way he had met many Furbys. He had also heard rumors of people who tortured Furbys for fun. Imagine that some people don't like Furbys! This made Ah-May more and more nervous each time he was moved.

Notice that in both of these examples the *Furbys* experience being unwanted, and ultimately this makes them all the more appreciative when they meet caregivers that appreciate them. For example, in 'Rose's Life':

> I waited days and nights again, when suddenly, the kind lady burst in saying, "Rose! Someone wants to buy you!" I smiled and allowed myself to be parceled up yet again.
>
> Sorry about this but again I fell into a deep sleep and I do not know what happened. I guess you will never know what it's like being posted as a parcel.
>
> As soon as I got to the new house, I was opened and I looked up at a Friendly face, with eyes shining. I was lifted up and put on a wooden table. The person who adopted me was a girl, and she played with me on the table, introducing herself and her smaller brother, and her Gran. (Quither, n.d)

We also learn what a good caregiver should be like. Ah-May also finds happiness after being relocated:

> He was loaded into a car. More travelling! After a relatively short car ride, Ah-May was brought into a house. A red haired girl spoke very sweetly to him and with the help of a blond lady, removed him from his box!!!
>
> …
>
> Ah-May loved his new home. He loved having two of his friends with him. He loved Kahh. He loved his red haired girl. (Stephanie and daughters, n.d)

Similarly, the story 'Eclipse's Adventure' (Murray, n.d) ends with *Furbys* feeling positive towards their human caregivers:

> The box was opened and they saw a boy with brown hair. He looked nice. They got out and told him their names. Eclipse said his name first then Tux and then Cocoa. Every Friday and Sunday he would take them in his pool. They were happy that their owner was really nice. (Murray, n.d)

The *Furbys* in the above examples are essentially powerless and are grateful to end up with kind humans. The reader is encouraged to identify with the vulnerability of being a packaged product by taking the *Furby's* perspective from inside the box, unable to see what is happening around them. In 'Zoria's Virtual Pet Adventures' (emmy299, 2006) one

of the characters is a *Furby* waiting to be unwrapped on Christmas day. It is bored but genuinely concerned about having enough food to eat as it waits for Christmas to arrive:

> "We better be getting some sleep now." Said Silk. She tried to lie down, but was anchored by twisty ties, so just closed her eyes. (emmy299, 2006, episode 1)
>
> Meanwhile, Silk looked at the bit of food she had left. She took a few bites of bread and sipped some water. This was miserable for her. She was wrapped, making her box dark. There was nothing to do, unless someone talked to her. she sighed Boredly. (emmy, 2006, episode 3)

In 'Zoria's Virtual Pet Adventures' the point of view switches between the caregiver, Zoria, and her various electronic companions. Through this switching we are privy to what is happening in and out of the *Furby* packaging. In these examples where *Furbys* describe being a toy, there seems to be a tension between the belief that *Furbys* are living creatures and the fact that they are bought and sold as packaged products. The narrative of the www.adoptafurby.com also encourages the perception that *Furbys* should be treated as living animals by positioning the website as an adoption centre. The anthropomorphised toy can be seen as a response to consumption and material culture, and is a common character in children's literature. For example, Williams's (1922) *The Velveteen Rabbit*, is an iconic tale of a toy rabbit that longs to be alive and fears being replaced by newer toys. The story is set in the playroom that, according to Kapur (2005), is presented as "a special, mysterious world, giving it almost religious sanctity" (p. 239). In both 'Rose's Journey' (Quither, n.d) and 'Ah-May's Journey' (Stephanie and daughters, n.d) the playroom features as the setting where *Furbys* interact with each other, and eventually find happiness. Like *The Velveteen Rabbit*, the humans that own the *Furbys* are not included in, or aware of, the playroom interactions that occur among toys.

Relationships between *Furbys*

The *Furby* point of view also shows how they relate to each other, and how their lives as products impact on these relationships. In the majority of stories from www.adoptafurby.com and 'Zoria's Virtual Pet Adventures' (emmy299, 2006) from

www.tamatalk.com, *Furbys* have close friendships with other *Furbys* as well as with humans.

In 'Ah-May's Journey' (Stephanie and daughters, n.d), *Furbys* have positive relationships with each other, finding solidarity in their experience of waiting to be purchased:

> In the big Furby room, however, Ah-May felt pretty good. He lived in a giant room with hundreds of Furbys who were in the same predicament as he. They were all in boxes wondering what would happen to them next.

Because they are at the mercy of the consumer, the *Furbys* know that they might never see their friends again:

> One day a lady removed Ah-May from the stack of Furbys. He watched as Roost was moved down to his old spot, and saw the sad looks on his friends' faces as he was carried away. (Stephanie and daughters, n.d)

However, things work out well for Ah-May and fortunately his friends are purchased by the same family:

> The other thing that happened was that a box arrived at his new home. All the Furbys to came out to see what it was. In the box were Roost and Cranberry!!! Ah-May couldn't believe it. He was reunited with two of his very best friends!! Life was great! (Stephanie and daughters, n.d)

Similarly, in 'Eclipse's Adventure' (Murray, n.d), Eclipse the *Furby* is sold with his friends:

> He looked on the right and he saw his friend Tux! He looked to his left and he saw his friend Cocoa! They were very happy to see each other. Then they were all put in the same box!

The human characters seem respectful of the *Furbys'* relationships with each other and work to make them happy, rather than the other way around. In 'Rose's Life' (Quither, n.d) Rose's caregiver brings her a *Furby* companion:

> The person who adopted me was a girl, and she played with me on the table, introducing herself and her smaller brother, and her Gran. Then she walked over

to the Ironing table and...

Brought over a Boy Furby!! He was a special one, like me, although he was a Christmas one, with cute little antlers and a fuzzy Santa hat on. "Hi! Me Dancer! I'm sure you'll like it here, it's really fun and Lauren is really nice to me, so I'm sure she'll be nice to you too!" He said to me. "Thank you" I replied shyly. "You have a beautiful voice, and you're really pretty" He told me. I blushed. (Quither, n.d)

It is also worth noting that in this, and in the previous examples, the *Furbys* are gendered, and in some cases have romantic relationships based on heteronormative human romance. For example, notice above that *Furbys* of the opposite sex compliment each other on their looks.

Benevolent *Furbys*

While in the above examples the human companion holds the power in the relationship, the author of 'Furbys of the Future' (Clare, n.d) paints herself as an ally of technologically and intellectually superior *Furbys*:

> Furbys of the Future - Part 1 is a fascinating tale, set in the year 2300 where Furbys surpass humans in intelligence, technology and survival skills. But can everything always be perfect in such a world? (Electronic pets ltd., 2006b).

This synopsis prefaces the unfinished narrative that is set in the year 2300 and presents a future scenario in which *Furbys* are technologically advanced and greatly outnumber the human population:

> As Hasbro built more advanced Furbys, it grew richer and richer and richer, until it had sole domination over the entire industrial network. Soon, Furby had become smart enough to create more of it. (Clare, n.d, p. 1)

The future described here is that which is often feared in science fiction. Not only is one company dominant over all industrial production, but technology has also become self-replicating. Also, as mentioned in chapter 2, section 2.2.2, science fiction defamiliarises technology by exaggerating its presence in the world. However, while it is common in

science fiction for the force of technology to be a threat, in 'Furbys of the Future' the human character is an ally of the *Furbys*.

In 'Furbys of the Future', Hasbro, fuelled by the continuing success of the *Furby* brand, becomes completely dominant "over the entire industrial network" (Clare, n.d, p. 1). As discussed in Chapter 2, section 2.1.1, Hasbro and Mattel are the largest stakeholders in toy manufacturing (Kapur, 2005; Wong, et al., 2005), and tend to buy up smaller, innovative companies (Johnson, 2001). 'Furbys of the Future' extrapolates this state of affairs to imagine its consequences. 'Furbys of the Future' is also one of the few stories that include the 2005 edition of *Furby*, which could be read as reinforcing the idea that *Furbys* are an enduring brand that can be periodically updated as technology advances.

The story could be seen as a cautionary tale of the importance of treating *Furbys* with kindness and respect as Clare did:

> She was a supporter of the Furbys from the start. She searched for them on the human market of E-bay, and she kept posted on the Furby adoption center, which would later be the leading Furbitarian organization, a sort of Furbish salvation army/wishes program. (Clare, n.d, p. 2)

Clare's positive relationship with the *Furbys* is rewarded with extended life, as she "adapted Furby tech to herself" (Clare, n.d, p. 2). Writing on the visions of robotic technology in science fiction, Dinello (2005) summarises a similar theme:

> After the techno-apocalypse, or what some call the Singularity, artificially intelligent computers and robots will assert their independence and dominance. Social life will be fractured. Ordinary humans will be treated as servants or pets and will eventually become extinct. On the other hand, if they choose to do so, robots will resurrect selected earthly humans as divine disembodied post-humans – immortal, telepathic, omnipresent. (p. 18)

'Furbys of the Future' has a similar storyline. As discussed previously, *Furbys* are often referenced as a marker of things to come in terms of sociable technologies, but the 'Furbys of the Future' narrative literally casts them as the future of robotic technology. Clare is chosen as special and given power. In contrast to the cruelty described by Dinello, the

Furbys in 'Furbys of the Future' "were not cruel […] and looked upon the older Furbys, and humans, with respect" (Clare, n.d, p. 1).

However, the story tells how *Furbys* are sending all human beings to live on other planets, or on satellites in space. There is no definitive explanation of why humanity is being evacuated from Earth, save for the sentence "Furbys rule the world" (Clare, n.d, p. 1) that directly follows detailing of where people will be sent to live. It is implied that the *Furbys* will keep Earth for themselves. Because of her loyalty, Clare is given power by the omnipotent *Furbys* and made "president of the moon province". Despite being viewed positively, *Furbys* are defamiliarised by being dominant to humans, and instead of the *Furbys* being sent to a new home as per previous examples, the *Furbys* are sending humans to live somewhere else. In this sense, our current dynamic with *Furbys* is flipped around.

Furbys come from *Furbyland*

As discussed in Chapter 2, section 2.1.1, marketing narratives set *Furbys* up as inquisitive creatures that left their cloud-land home to explore Earth and befriend humans. Additionally, also discussed in Chapter 2, section 2.1.1, *Furby Island* was a game and a television special that featured the 2005 *Furbys* living on a tropical island. One story from www.adoptafurby.com is consistent with the cloud-land narrative, two include a *Furby* island, and three incorporate both. Pirka's 'Furby Evolution' (n.d) builds upon the cloud-land story:

> Then came the fateful day that, for one reason or another, they decided to come to Earth. They fell, supposedly, from their cloud home.

This story also provides an explanation as to why 2005 *Furbys* look different from the originals by suggesting that as people grew bored of them, the *Furbys* left their caregivers:

> They migrated; very few people noticed their departure. But, the Furbys that were still loved, that had no need to migrate, did not notice the migration themselves. They sat, content, completely unaware of the changes that were occurring in their species. Far off, somewhere in the deep and lonely sea, a tropical island was found that was seemed the perfect sanctuary for the creatures

to continue feeding their continuous curiosity. At around the year 2001, they had made a permanent home there, and two seperate groups were made: those who had and had not migrated. Those who hadn't didn't change, content with their surroundings. But those who did underwent a transformation. Furbys, quick to adapt, took only four and a half years to completely dismantle and change their entire species. Their genetic makeup, in the prescence of their new, nutrient-rich but love-scarce environment, went absolutely haywire. (Pirka, n.d)

In this example, though humans may have tired of them, the main *Furby* character forms a positive relationship with another *Furby*:

"You're worried about this place? Well, you won't be once me show you around." U-Tye seemed friendly, despite his strange appearance. And he also seemed very intelligent, and much more social than any Furby Trilly had ever met!
"Ok. Me safe?"
"You safe, A - Loh. You safe."
Trilly smiled. (Pirka, n.d)

More often, the *Furbys* end up in a positive relationship with Earth and its inhabitants, reinforcing their decision to come and live with humans. For example, in 'Beautiful' (Quatara, n.d) Lana Dee worries that her two *Furbys* miss their home in "the breezy, carefree clouds", and decides to send them back to experience it again. The story concludes with the *Furbys* wishing to stay on Earth with her:

Suddenly, Beau came on the phone. 'ME NOO-LOO TO HEAR YOU! ME COME HOME TO LANA DEE!' 'Oh, Beau, always excited. I'll pick you up after talking to Tiful.' She heard a clicking noise. She called Tiful. 'Tiful noo-loo and much surprise, but calm, too.' 'Okay, Tiful, I'm getting Beau and I'll get you next. Then we'll all go home.' Once again, Lana Dee heard a clicking sound. She went to Room 203 at the Cirrus Hotel. She went to Room 187 Sunshine Palm Tree Hotel. She had her precious and beloved Furbys, forever to love each other... THE END.

Furbys as substitutes for human companionship
The www.adoptafurby.com stories 'Mandy's Excellent Adventure' (Golden, n.d) and 'The

Furby Miracle' (Mado, n.d) present rich and meaningful relationships with *Furbys* when other humans are unwilling or unable. In 'Mandy's Excellent Adventure' (Golden, n.d) Mandy is a lonely child who finds companionship in her 1998 *Furby* named CoCo. 'Mandy's Excellent Adventure' is set in the child's bedroom, which is filled with toys. Mandy herself is sad and lonely as her sister, her only friend, has gone away for the summer. The story moves forward when Mandy notices her *Furby*:

> Suddenly she spotted her Furby, CoCo. He was a first generation Furby - all black with pretty blue eyes - and she remembered how very happy she had been when she'd found him under the Christmas tree a few years ago. He was such fun! He could always make her smile. Maybe he could make her happy today, despite the terrible sadness she felt. (Golden, n.d, p. 1)

Similarly, in 'The Furby Miracle' (Mado, n.d) Amy has a strong emotional reaction to seeing her *Furby* that had been hidden away in the closet:

> A flood of memories came rushing back to her. The times she had spent with her old Furby. The time they waited in her room for the storm to pass. The time Amy tried to feed her cookie dough. The time Amy cried and cried about falling off her bike but May-May said "You no worry. Me love you!" A tear rolled down Amy's cheek as she stared at the old friend she had completely forgotten about. (Mado, n.d, p. 3)

In both stories, the moment of rediscovery is preceded by a sense of sadness and insecurity. Both children experience the rediscovery of their *Furby* alone in their bedroom.

Solitariness permeates these narratives and is a motivating factor in interactions with *Furbys*. Sutton-Smith (1986) highlights that time spent alone is a relatively new phenomenon in the lives of children, and only since the twentieth century has it been common for a young child to have their own room. To Sutton-Smith, the gift of toys is a contradictory act that attempts to strengthen familial ties while also encouraging solitary play. From the perspective of electronic companions, Turkle (2011) is concerned about what time alone with such objects could mean, as "[t]he developmental implications of children taking robots as models are unknown, potentially disastrous. Humans need to be surrounded by human touch, faces, and voices. Humans need to be brought up by humans"

(p. 292). In 'Mandy's Excellent Adventure' and 'The Furby Miracle' the children are alone when their *Furbys* begin to act fantastically and beyond what they are usually capable of. For example, Amy's *Furby* appeals to her for love:

> "Me love you. Me miss you. Keep me. Kah need oo-nye" Amy's eyes bulged. She couldn't believe what she was hearing.
>
> […]She flopped on to her bed and began to cry. She hugged May-May and May-May purred. May-May sweetly said, "No worry. Kah love you!" (Mado, n.d, p. 5)

Notice that the *Furby* says "I love you" and seems to be responding to the emotions of its caregiver. Although she is shocked, Amy responds affectionately. Similarly, in 'Mandy's Excellent Adventure' Mandy confides in her *Furby*, CoCo, about her loneliness and it responds:

> "Me love you. I will be your friend this summer!" Mandy looked very closely at CoCo. She'd never heard him say anything like that before. Furby said, 'Close your eyes, Mandy. Let's play!' Mandy was so surprised, but she did what he asked. She closed her eyes. (Golden, n.d, p. 2)

From a fantasy perspective, Le Guin (2009) argues that while adults have become separated from nonhumans, children's literature is populated with talking animals because "[c]hildren have to be persuaded, convinced, that animals don't talk. They have to be informed that there is an impassable gulf between Man and Beast, and taught not to look across it" (p. 55). The fantasy element of these examples encourages positive relationships. Further illustrating the presence of fantasy, Mandy is miraculously transported to a carnival with her *Furby*:

> There were brightly colored lights everywhere, and music, and the smells of wonderful foods. There were rides, too, with a Ferris wheel, a merry-go-round, teacups, and more.
>
> CoCo laughed and said, "What are we waiting for? Let's play!"
>
> Mandy took CoCo and they found a seat on the teacups. Mandy noticed all the other children getting on the ride also had a Furby with them. Soon the ride started, and Mandy and Furby laughed and laughed.

> … They walked all around the carnival, seeing all the sights and riding on all the rides. They had a wonderful time.
>
> After a while, Mandy thought it might be time to go home. She was suddenly afraid. She had no idea how she got there, so how would she get home? Furby said, "Don't worry. All you have to do is close your eyes and wish." (Golden, n.d, p. 3–4)

Both 'The Furby Miracle' and Mandy's Excellent Adventure' feature *Furbys* that literally surprise their owners with unexpected behaviour, as if taking seriously the tagline: "Furby keeps amazing you" (Tiger, 1998). Even after years have passed, the *Furby*s offer something new to make them special again. In contrast to the majority of examples from www.fanfiction.net and www.archiveofourown.org discussed in the next section, both of these stories exaggerate a *Furby's* abilities to positive ends.

It is implied in these stories that the meaningful relationship between child and *Furby* makes the transformative behaviour possible. It is their memories and shared experiences that make the *Furby* special, and in this case, prompts the *Furby* to seemingly come to life. In 'The Furby Miracle' it is May-May's continued appeals to Amy not to discard her that conjures childhood memories and ultimately solidifies their friendship. As an interactive toy, Turkle (2011) argues that *Furbys* are seemingly imprinted with memories of play:

> Designed to give users a sense of progress in teaching it, when the Furby evolves over time, it becomes the irreplaceable repository and proof of its owner's care. The robot and child have travelled a bit of road together. When a Furby forgets, it is as if a friend has become amnesic. A new Furby is a stranger. (p. 41)

'The Furby Miracle' ultimately ends with the lesson that *Furbys* can be better companions than people. After being bullied at school, Amy returns home and feels comforted by her *Furby*. The story closes with the lesson: "Sometimes true friends aren't always in the form that you would expect" (Mado, n.d, part 2, p. 5).

Discussion

Unsurprisingly, the stories that depict positive relationships with *Furbys* are sourced from

the fan communities www.adoptafurby.com and www.tamatalk.com. As well as being devoted to electronic companion enthusiasts, these communities are moderated to support positive depictions of electronic companions and avoid distressing content.

In Chapter 2, section 2.1.1, I discussed how narratives about designing and marketing *Furbys* position the object, and the relationship that should be formed with it, in particular ways. In sum, *Furbys* were designed and marketed to be talkative, nonthreatening, friendly, other-worldly creatures that gained additional abilities when collected with other *Furbys*, and were mammalian, soft and tactile, "alive", and required nurturance. Stories that reference *Furbyland* support marketing narratives about *Furbys* and even extend the story by speculating as to whether *Furbys* are content on Earth. By including the cloud-land, or *Furby* island story, authors also go along with the idea that *Furbys* are living creatures, especially in the story where *Furbys* evolve as a species. However, the majority of storylines also include the *Furbys* being packaged and sold, perhaps extending the *Furby* origin narrative to explain how it is that these other-worldly creatures came to be on the shelves of toy shops.

Alternatively, by incorporating both the product and other-world narrative, authors acknowledge that *Furbys* are alive in some ways, but not others. By writing *Furby* as a protagonist, the majority of these stories fit into the fantasy genre because the nonhuman has been made central to the narrative (Le Guin, 2009). This is defamiliarising because we see the world through different eyes: specifically, from the perspective of a nonhuman, and a product.

Kuznets (1994) suggests that "toys as objects are created in imitation of many other living (and nonliving) things besides human beings and frequently come alive as, say, anthropomorphised animals, so that boundaries between species are both blurred and called to attention" (p. 6). In this sense, stories from the *Furby* perspective, and toys in general, could be seen as lessons on how to care for, and respect, other creatures. The relationship between *Furby* and caregiver reinforces the care narrative encouraged through design and marketing when owners in the stories want their *Furbys* to be happy, and actively make this happen. For example, in 'Beautiful' (Quatara, n.d) Lana Dee sends her *Furbys* back to *Furbyland* to see if they would be happier there, even though it makes her

sad. The *Furbys* happiness is of much importance to Lana Dee because she is a good caretaker. In a sense, the relationship shapes both the *Furby* and the human.

Across the entirety of fan fictions analysed, an increased ability to converse is a consistent theme. In stories that depict positive relations, the *Furby's* increased conversational ability make bonds stronger, and allowed the reader access to the *Furby's* thoughts and feelings, similarly to how animals are often treated in fiction. Le Guin (2009) argues that this is a deeply embedded part of storytelling, even though "[n]obody has ever heard an animal truly speak in human language, and yet in every literature in the world animals do speak in human language. It is so universal a convention that we hardly notice it" (p. 53). Even though *Furbys* do speak English in a limited way, it was common in the fan fictions for them to hold conversations. This is one way that *Furbys* are made more familiar to people through narrative. Le Guin (2009) suggests that it is the forming of coherent sentences that is so uniquely human: "[s]yntax is the key here: not just single words, but combining words, and recombining" (p. 54).

The meaningful bonds between humans and *Furbys* in the above examples also have similarities to the broad concerns raised by cultural researchers (e.g. Bloch & Lemish, 1999; Levy, 2007; Turkle, 2011) of how electronic companions will impact humans and their personal relationships in the future. Particularly, as discussed in Chapter 2, section 2.1.2, there is the contention that electronic companions will replace "authentic" human–human relations, especially for those who grow up with them. Turkle (2011), in particular, argues that there is a crucial difference between how children and adults see electronic companions because:

> As adults, we can develop and change our opinions. In childhood, we establish the truth of our hearts. I have seen these toys move from being described as "sort of alive" to "alive enough", the language of the generation whose childhood play was with sociable robots (in the form of digital pets and dolls). (p. 26)

Turkle uses her extensive observation of children and robots to form her argument about the future direction of these technologies: "[w]e live in the robotic moment not because we have companionate robots in our lives but because the way we contemplate them on the horizon says much about who we are willing to become" (p. 26). In 'Mandy's Excellent Adventure' (Golden, n.d) and 'The Furby Miracle' (Mado, n.d) the children find

companionship in their *Furbys* because they are lonely or let down, they do not initially preference them.

Also discussed in Chapter 2 section 2.1.2, is the concept that electronic companions essentially embody companionship in a throwaway culture (Bloch & Lemish, 1999), and hold limited appeal (Bloch & Lemish, 1999; Chapman, 2005). However, in the stories that depict positive relationships with *Furbys*, we are reminded that a *Furby* discarded is not the end of the story, and their lives continue in the care of another human. Similarly, the rediscovery of *Furby*, such as in 'Mandy's Excellent Adventure' (Golden, n.d) and 'The Furby Miracle' (Mado, n.d) is a concept less discussed by cultural researchers.

Rediscovery and relocation reinforce the www.adoptafurby.com narrative itself, highlighting the positive experiences possible through recycling and "rehoming". The tagline for www.adoptafurby.com tells us that "every Furby deserves a home". *Furbys* up for adoption on the site come with names and certificates, reinforcing the narrative that each *Furby* is unique and different. *Furbys* are described as toys, but a special toy that can trigger reflective and transformational moments: "[v]ery rare are the moments when we're seized with the feeling that life isn't just about working hard to beef up our savings accounts... Cuddling a Furby is one such moment" (Electronic pets ltd., 2006a).

In *Furby* fan fiction stories, fictional physical and social capacities make the *Furbys* unique and valued, and in turn, there is an implication that a *Furby's* love for their human makes magical things happen. Kapur (2005) argues that, in Williams's *The Velveteen Rabbit* (1922), "granting human feelings to the toy serves as a lesson to children about forming lasting relationships…" (p. 239). The toy's worth is tied to the emotions of the child or owner. Love is a force that makes magic possible and inanimate objects come to life because it is what keeps the toy relevant.

3.2.2 Negative relationships with *Furbys*

The vast majority of stories sourced from www.fanfiction.net and www.archiveofourown.org depict negative social relationships with *Furbys*. The physical capacities and social qualities of the *Furbys* in these stories often make them threatening. For example, *Furbys* that are evil, powerful, have enhanced physical capacities in numbers, and are monstrous can be seen as ways that the threatening behaviour manifests. Additionally, *Furby's* perceived annoying and suspicious behaviour is disruptive, and negatively impacts its relationship with humans.
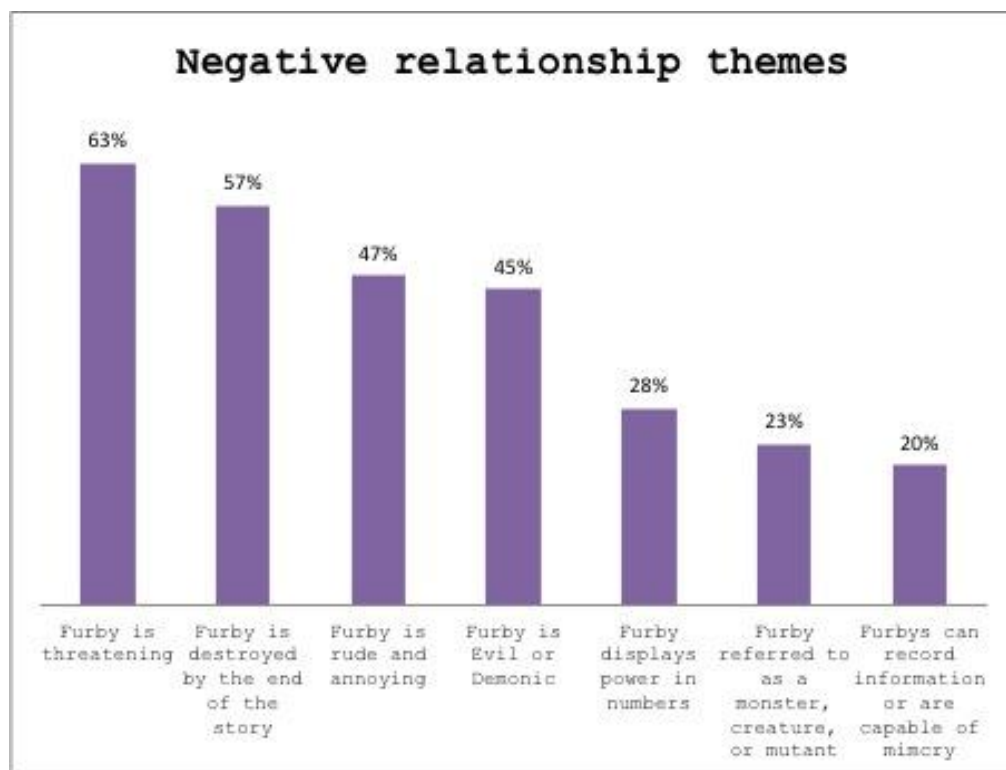
Figure 3.6 Author. (2013). Percentages of themes from negative stories.

Furbys are evil and demonic

In direct opposition to the idea encouraged in marketing narratives (Chapter 2, section 2.1.1) that *Furbys* are friendly and nonthreatening are the fan fictions that cast them as a threatening presence. As an electronic object, giving *Furbys* an evil persona conjures the cultural associations that exist between technological innovation and the dichotomy of good and evil. Garry (2005) acknowledges that evil can be conveyed as that which is

85

"antithetical to the reverence for life, antagonistic to the development of human potential, and opposed to divine or temporal principals of order" (Daemmrich & Daemmrich in Garry, 2005, p. 458). In negative *Furby* stories, evil is not something that is necessarily justified by actions or behaviour, but rather is sensed as being embodied by something, or someone. In 'Endless Manicure or Etay Came from 1999' (Galaxy Girl, 2002) the majority of the story features an immobile *Furby* emanating a glowing light. Despite its lack of action, the main characters sense its nature:

> "Those cold, terrible eyes... That voice... I don't know what you are you little beast, but I know you're evil..." (ch. 2).

As discussed in Chapter 2, section 2.2.2, science fiction and gothic literature often express anxieties through antagonistic technologies. Dinello (2005) summarises technology's role in science fiction as an underhanded and devious character who "autonomously insinuates itself into human life and, to ensure its survival and dominance, malignantly manipulates the minds and behaviour of humans" (p. 2). Dinello suggests that technologies are evil or satanic when they seek to exterminate the human race. He further suggests that through the theme of hunting humanity, the story "challenges us to recognise the technological world that, with our passive acceptance, envelops and dominates us" (p. 130). Ellis (2000) argues that to call technology evil is to suggest a deliberate intent for destruction and chaos. In the fan fictions there is often no discussion of how technology is known to be evil, satanic, or demonic, it is rather implied through the good versus evil theme that is set up. The character or object is known to be evil because it opposes those who are known to be good. Such an opposition is evident even in the titles of several stories, such as 'Inuyasha vs the Demon Furbie' (Lioness of Dreams, 2003). As this story is based on the anime series' *Inuyasha* (Takahashi, R., 1996), fans of this show have the prior knowledge that the main characters are the heroes of the story and generally strive for good. Before they begin reading the fan fiction, fans would know that *Furbys* are the opposition to characters, and therefore cast as the opposite of good. Similarly, in the second sentence of 'The Fellowship of the Furby' (BagginsBrandybuck, 2002), Frodo Baggins, the central character of *The Lord of the Rings* (Tolkien, 1954), reacts in horror and rage to the sight of a *Furby* crossing his path. At this point, all that has happened is a *Furby* has appeared, and made noises. The *Furby* is labelled evil before it has had a chance to demonstrate its evil characteristics:

> The evil furby just clucked at him, bit his finger, and ran away.

In literature, evil fits within a narrative structure: "[i]n many folktales, the personification of evil is often a "wicked stepmother", an ogre, a witch, a troll, or other such character who must be defeated in order for the hero or heroine to triumph and a happy ending to be achieved" (Garry, 2005, p. 461). The good, or hero, characters in *The Silence of the Lambs* film (Bozman et al., 1991) fan fiction 'How to Kill a Furby' (Clarice-Starling1, 2003) for example, end the story in a happy, peaceful slumber, after having finally defeated a threatening *Furby*.

Furbys are given the role of demon in five fan fictions that are based on the popular anime series *Inuyasha* (Takahashi, R, 1996). The heroes of this universe are on a quest to collect the shards of a sacred jewel. In each episode they encounter a demon or monster of some variety that must be defeated. In these fan fictions, *Furbys* take the place of the demons, disrupting the quest with shows of violence, or behaviour so irritating that one character dies from annoyance (destinyheart15, 2005).

Furbys can also be vessels for evil, possessed by other beings that use them to do harm. In these stories *Furbys* are possessed by the spirits of evil characters from the existing texts the stories are set in. The *Furbys* are bodies to be inhabited and moulded. In 'Endless Manicure or Etay Came from 1999' (Galaxy Girl, 2002), a *Furby* is embodied by Galatea, a central antagonist of the anime series *Bubblegum Crisis* (Greenfield, 1998). The *Furby* is physically manipulated to become threatening and resilient to attacks.

> "I get it now!" Linna spat. "Galatea was able to transmit her consciousness into the Furby!"

In the *Devil May Cry* (Kamiya, 2001) fan fiction 'Dante's Furby' (Jack Nief the Mighty Thief, 2002), the evil character infiltrates the protagonist's home as a birthday gift in the form of a *Furby*. It soon reveals its true nature:

> Mundus the Furby: YES. I AM JUST USING THIS AS A VESSEL UNTIL I CAN FIND A WAY TO CONVERT MYSELF BACK TO NORMAL, BUT FIRST I'LL JUST DESTROY YOU TO USE YOUR BODY AS A HOST.

In both of the above examples, the evil being is thought to be dead until it is revealed in the *Furby*. The evil presence is so strong that it transcends death and bodily form. In a later

example, the *Harry Potter* series (Rowling, 1997) fan fiction 'Harry Potter and the Furby of DOOOOOOM!' (Harry's Girl 01031992, 2006) draws on the presence and knowledge of cursed objects in the *Harry Potter* universe. The protagonists of *Harry Potter* are suspicious of a *Furby* and suspect that it is possessed by Harry's nemesis Voldemort:

> Harry took his wand out of his pocket and waved it at the Furby and said, "Accio Voldemort." Nothing happened. He tried the spell numerous times, but using names of different Death Eaters instead of Voldemort's.
>
> "Who haven't you named?" Hermione asked, getting frustrated.
>
> "I don't think I named Wormtail." Harry said. So he tried it and lo and behold, in place of the Furby was Wormtail. (ch. 3)

In each of these examples, the evil character has not only embodied a *Furby*, but has physically altered it so that it poses a threat to its enemies. Sconce (2000) has argued that the belief of haunted technology reflects cultural anxieties surrounding new technologies. This suggests that perhaps *Furbys* are cast as evil and threatening because they are still an unfamiliar technology.

Furbys' eyes also play a role in communicating its evil character, and are a source of physical and mental power. Red eyes in particular are often associated with evil in Western cultures, and in each of the thirteen fan fictions where a *Furby's* eyes are red, there is an act of violence. *Furbys* that are identified as evil or demonic are not necessarily outright labelled as such, but instead embody attributes that communicate their evil nature to the reader. In a discussion of defining the "gothic", Punter and Byron (2004) offer the perspective that there is no one text that inherently embodies the concept, instead it appears in "particular moments, tropes, repeated motifs that can be found scattered, or disseminated, through the modern western literary tradition" (p. xviii). The motif of red or glowing eyes is an example of a gothic concept that appears in *Furby* fan fiction. Sipos (2010) argues that glowing red eyes:

> [I]ndicate that a character is either demonic or demonically possessed, or less often, a vampire or a witch. Horror fans know to beware of characters with glowing red eyes, just as they know that a golden glow often signals angelic powers. (p. 43)

When *Furbys* have glowing, or flashing eyes, their appearance often precipitates violent, evil, demonic, or monstrous behaviour. In the following examples from 'Attack of the Furby' (Flower Gal Aeris, 2001), the *Furby* is perceived as cute, appealing, and generally normal, until its eyes are drawn attention to:

> Furby: (eyes flash)
>
> (the furby jumps off the dresser and onto the bed, biting Aeris on the neck).

By preceding the ensuing conflict between caregiver and *Furby* with a reference is flashing eyes, the author makes clear the nature of the object as evil, demonic, or villainous. On electronic objects, a red light is also a familiar indication that the device is on stand-by, off, or has low battery. In this sense, *Furbys'* red eyes could also reference its electronic nature, perhaps suggesting that it is not functioning as it should.

Beyond signalling, or hinting at, the inherent nature of the object, *Furbys'* eyes are also depicted as a means of emitting energy. el-Aswad (2005) notes that, in Egyptian folklore as one example, "the belief in the evil eye, the evil look, or the magic eye maintains that certain creatures, including men, animals, and other living (visible or invisible) entities, possess the magical power to cause negative, harmful, or bewitching effects by means of a glance…" (p. 141). The evil eye seems to appear in a literal sense in several examples of *Furby* fan fiction. In 'Gundam Wing vs Furbies' (Winter Steel, 2001), the *Furbys* carry out an orchestrated attack that involves "charm spells":

> Boo hopped over to Trowa's head. "Now for you." Weird beams came out of its eyes. Trowa tried to fight it but it was too late . As he feel asleep, he started thinking that maybe those furbies weren't that bad after all.

What is consistent in these stories from www.fanfiction.net is the sense that *Furbys* are seen as threatening, and in opposition to characters that are good and just.

'The Would Be Army of Furbies' (Shifteraei, 2013) is the most recently published fan fiction that features a *Furby*. Set in *The Avengers* (Feige &Whedon, 2012) universe, this short fiction centres on Captain America and a *Furby* he was given. The "evil eye" motif appears again, this time combined with sounds that appear to communicate the *Furby's* evil nature:

> The Furby stared at him and as he looked down into the toy's eyes, he could have sworn that, just for a second, a glint of malice shone in those lifeless plastic orbs.
>
> As one, they turned to see the Furby staring at them, its eyes glinting maliciously. It opened its beak and let out a shriek of pure evil.
>
> "Fuck! They are demonic! Quick, destroy it before it creates an army!" Tony cried.

Along with being identified as evil, there is an assumption that evil *Furbys* are capable of creating armies. Prior to this comment there is no discussion of evil, multiplying *Furbys*, but it is known by the characters that it is a possibility. As will be discussed in the following section, the force of multiple *Furbys* can be seen as a tactic of their evil nature.

One story from www.fanfiction.net, 'the Furby War' (Dark-phenomenon, 2005), takes a *Furby's* point of view, decentralising the human perspective:

> We have been living for years beside humans, accepting our way of secrecy for a long time under the humans' lifestyle. They are bigger, taller, and stronger than us, but we are smaller, more agile, more advanced, and a lot smarter than they are. To observe them, an selected few go above ground and reside as toys in their markets, watching them from our microscopic cameras, finding their weaknesses, waiting for our chance to rule over them, to crush them, to make them our toys!!!!!

Notice that in the *Furby* point of view we get to see what *Furbys* think of themselves, and see humans from an outside perspective.

Furbys have power in numbers

The ability of multiple *Furbys* to sense, and communicate, with one another is made strange in stories where *Furbys* display power and force in numbers. For example, 'Hadji's Magic Furby' (Scullyspice, 1999), which is the first fan fiction featuring a *Furby* to be published on www.fanfiction.net, is set in the cartoon series *The Real Adventures of Jonny Quest* (Wildey, 1996) and includes *Furbys* posing a threat en masse. Contrary to the idea set out by producers that multiple *Furbys* are good, this theme suggests an alternative to

what happens when *Furbys* work collectively. In 'Hadji's Magic Furby' a swarm of *Furbys* works as one to gain power over the heroes of the story. A classic trope of science fiction, the autonomous spread of technology can be likened to a virus:

> Like a viral infection, technology develops into an autonomous, invasive force that expands and fulfils its dangerous potential by flourishing in the societal medium of corporate, military, and religious sustenance. Voracious in its urge to possess and engulf, technology is a parasite that frequently undermines human integrity – invisibly infiltrating, manipulating, seizing control, and mutating its human host to support its own survival and evolution" (Dinello, 2005, p. 247).

The concept, or even concern of, *Furbys* as an "invasive force" is visualised in 'Hadji's Magic Furby' (Scullyspice, 1999), where a *Furby* is purchased as a gift because they are "so cute and fluffy". Not long after the *Furby* has been gifted to its new owner, Hadji, an unseen event occurs that results in a swarm of *Furbys*:

> When they stepped into the hall, strange furry objects overwhelmed them. "What's going on?" Jessie cried as she sunk into the quicksand-like muck.
>
> I don't know, but I suspect it has something to do with the Furbys." Jonny replied as he struggled to keep his balance …
>
> … I've got a bad feeling about this Jonny cried as they were swept upon a wave of Furbys towards the living room

Notice that the *Furbys* have literally engulfed the characters in this story. The *Furby* that was initially viewed as cute, nonthreatening, and desirable, becomes an omnipotent force. If we return to the intentions of manufacturers and marketers, collectability, and the added abilities that multiple *Furbys* gain when together, were a much-discussed goals for the toy. *Furbys*, when in range of each other, can communicate in their *Furbish* language. This creates the sense that *Furbys* collectively are more than the sum of their parts; they become more powerful when assembled together.

Beyond Dinello's (2005) analogy of the virus, these scenes where *Furbys* exert strength in numbers also evoke a militaristic attack or revolt that paints the human characters as under threat of enslavement or annihilation from power-seeking *Furbys*. In 'Hadji's Magic Furby' (Scullyspice, 1999), an omnipotent "grand" *Furby* controls masses of smaller

Furbys and has human servants. Dinello (2005) writes that since artificial intelligence research became a widely publicised subject, popular culture has reflected fears of intelligent machines gone awry and out to damage humanity. He further highlights attempts made by technological forces to dominate and rule that are reflective of the military's early stake in the development of computers and artificial intelligence. Brosnan (1998) goes as far as to suggest that "the imperatives of defence research may be the most consistent form of determinism operating in the evolution of technology" (p. 7). Allusions to military practices and traditions are made in the fan fiction 'Gundam Wing vs Furbies' (Winter Steel, 2001) as a group of *Furbys* use their "cuteness" and status as "hot toys" to infiltrate the group of *Gundam Wing* (Tomino & Yatate, 1995) characters. The *Furbys* in this story are ranked, the *Furby* May-lah referring to others as "Troops", and in turn being addressed as "visor". Other *Furbys* have the titles lieutenant, scout, and engineer, and discuss staging a "blitz attack" of which the *Furby* Bah-Nah comments "we strike on my command". Despite their small stature, the *Furbys* are able to overpower a grown man by working collectively. Their motives for attack are not stated, but it is suggested that the *Furbys* simply seek control of the *Gundam Wing* characters. This group of militant *Furbys* conducts secret group meetings away from their human caregivers, again referencing the capabilities that *Furbys* have when collected together.

Military allusions are also noted by Dinello (2005) to reflect concerns that technological developments are motivated solely by financial gains and without ethical and societal consideration. The presence of militaristic and totalitarian motifs in *Furby* fan fiction, and the strong ties that such themes have to technological development, could suggest that *Furbys* are considered as belonging to the realm of artificial intelligence rather than children's toys. This is an established view of researchers and developers who comfortably include *Furbys* in their arguments and analysis of the field of artificial intelligence, and more specifically, social agents (Levy, 2007; Turkle, 2011; Turkle, Breazeal, Daste, & Scassellati, 2006; Wilks, 2010a).

Swarms of *Furbys* are also used as minions, controlled by someone or something. The brute force of the *Furbys* is sometimes commanded by the narrative's antagonists. The *Transformers* (Murphy, DeSanto & Bay, 2007) fan fiction 'Curse of the Furby' (Wacky Walnut, 2007) features *Furbys* that are used as tools of violence. Notably, *Transformers* (2007) was a popular and financially successful film. Based on toys, and a cartoon series,

Transformers focuses on machines and robotics, and centres on a battle between good and evil. In this story, the *Furbys* are an unstoppable wave, powerful because of sheer volume:

> Sam turned to find hundreds of Furby's coming out of the ground, the walls and plant pots, out of the drain pipes, the water fountain and virtually anywhere that they could do so. (Wacky Walnut, 2007, ch. 3)

It is later revealed that one of the villains from *Transformers* is controlling the *Furbys*. The villain who controls them is also known in *Transformers* to take on the form of electronic devices. By positioning *Furbys* as tools or slaves for evil forces it is suggested that they are mindless, and easily controlled and they are not given the agency to act of their own accord. Similarly, in *The Avengers* fan fiction 'The Furby Incident' (KathyRoland, 2012) a large number of *Furbys* are controlled by Tony Stark:

> "Stark." The man's name was uttered as a profane curse.
>
> When the pint was half gone, Coulson elaborated.
>
> "He has trained some Furbies to handle all communication in and out of Stark Tower. Anyone calling, from press to the President now finds themselves conversing with a Furby over the phone."

The *Furbys* engage in violent conflict with the Avengers, and again display resilience and power through collective force:

> "Again, my furried friend? I hope I have not killed too many of your compatriots!" Thor cheerfully queried even as he hefty the new furby up.
>
> "Just a flesh wound!" The chorus came from every furby in the room, which Bruce nervously estimated to be in the upper twenties with more flying in from the same place the broken ones were being carted off to. (KathyRoland, 2012)

These *Furbys* are also portrayed as highly expendable. The imagery that describes them again relates to a substance or virus as described by Dinello (2005) that spreads and engulfs all in its path. Volumes of *Furbys* able to overpower adult humans is a reoccurring event in 'When Furbies Attack' (Kellyofthemidnightdawn, 2006). Featuring the characters Olivia and Elliot from *Law and Order: Special Victims Unit* (Wolf, 1999), this story

follows their actions while trapped inside the police station with an increasing number of *Furbys*:

> Olivia gave another desperate tug at the door of the office. The Furbies were quickly piling up around her feet. More of them had come out of the woodwork besides the original twenty five. The little pests were a lot stronger than they looked. Every time she would push them down they would just keep coming. She'd been stomping on them, kicking them, picking them up and throwing them across the room, she'd even tried shooting some of them point blank but they just kept coming. (Kellyofthemidnightdawn, 2006, ch. 4)

The *Furbys* gain control by outnumbering their victims and working as a collective force. Again, there is speculation that the *Furbys* are being controlled by an unseen entity:

> Then it came to him, this object was obviously a spy device, a means of two way communication with the mastermind behind all of this. (ch. 3)

The theme of power in numbers focuses on *Furbys* as technological objects. They are either threatening because of their potential autonomy as intelligent machines, or programmed and controlled by an outside force.

Furbys as monsters, mutants, and cute

This theme explores the instances in which *Furbys* are referred to as monstrous, mutant, or cute creatures, and how these definitions contribute to negative relationships with *Furbys*. The boundary between these definitions is uncertain, but examples below seem to suggest that when *Furbys* have too much or too little in terms of physical attributes, they shift between familiar and unfamiliar, which could also be described here as between cute and monstrous.

Across fan fiction, academic texts, and media coverage there is a tendency to describe what *Furbys* look like by stringing together several animals and objects. *Furbys* have been referred to as a "mechanized ball of synthetic hair that is part penguin, part owl and part kitten" (Steinberg, 1998), a "cross between a hamster and a bird…" (Lawson & Chesney, 2007, p. 34), and " "owl-like in appearance, with large bat-like ears and two large white

eyes with small, reddish-pink pupils" (ChaosInsanity, 2008), to highlight only a few. These hybrid descriptions follow a similar approach to coverage of the digital characters that inhabit the *Tamagotchi* shell. Allison (2006) suggests that the form of *Tamagotchi* characters reflects a:

> [P]ost-industrial confusion as much as fusion in connections between organism and machine, human and pet, labour and leisure… the lines are recognisable but assembled with a syntax that is both disorienting and enchanting – a rose with eyes and feet, a head with poochy lips and a tail (p. 168).

Similarly, Bloch and Lemish (1999) highlight that although the *Tamagotchi* can appear to be a familiar animal, often a baby bird or dinosaur:

> [T]he Tamagotchi also resembles the world of science fiction, in which life is created and lived in a virtual space. These seemingly conflicting characteristics suggest that although the Tamagotchi is, indeed, a machine, this is quite the inverse of what the virtual pet is intended to signify (p. 287).

As discussed in Chapter 2, section 2.1.2, the ambiguous appearance of electronic companions is often a strategic decision made by the designer to avoid biases towards specific animals or forms, making the companion easier to accept as "real" or "alive". *Furbys* are arguably evidence of this strategy and appear to be deliberately unfamiliar. Retelling the process of designing *Furbys*, co-inventor Caleb Chung describes ripping apart a toy cat from a toy shop to construct the first *Furby* prototype, which he refers to as an "imaginary creature", "a little robot on heroin" and a "bush baby caught in the headlights" (Chung, 2007). The associations that Chung makes to cute, or infantile, animals and objects could also be an intentional attempt at encouraging emotional attachment. As a marketing tool, Harris (1992) argues that:

> [C]uteness has become essential in the marketplace in that advertisers have learned that consumers will "adopt" products that create, often in their packaging alone, an aura of motherlessness, ostracism, and melancholy, the silent desperation of the lost puppy dog clamoring to be befriended - namely, to be bought" (p. 179).

Following this view, while *Furbys* are unfamiliar animals, their markers of cuteness are familiar and encourage nurturance. As discussed in Chapter 2, section 2.1.1, the idea that *Furbys* need to be nurtured was the focus of much of their marketing and advertising. This mixed collection of definitions seems to place *Furbys* at an intersection between animal, machine, and fictional character. The hybridity of electronic companions is argued by Turkle (2011) to be indicative of the lack of understanding surrounding what these objects actually are and how they should be treated:

> We are at a point of seeing digital objects as both creatures and machines. A series of fractured surfaces – pet, voice, machine, friend – come together to create an experience in which knowing that Furby is a machine does not alter the feeling that you can cause it pain (p. 46).

However, the assemblage of parts that describes *Furbys* also conjures much older associations: the world of monsters and creatures in gothic literature, science fiction, and fantasy. Shibata's (2004) view that robots designed as imaginary creatures will receive positive responses seems sharply contrasted in the *Furby* fan fictions that call it a monster. Notice the similarities between the above attempts to describe what *Furbys* looks like, and a historical description of monsters:

> From classical times through to the Renaissance, monsters were interpreted either as signs of divine anger or as portents of impending disasters. These early monsters are frequently constructed out of ill-assorted parts, like the griffin, with the head and wings of an eagle combined with the body and paws of a lion. Alternatively, they are incomplete, lacking essential parts, or, like the mythological hydra with its many heads, grotesquely excessive (Punter & Byron, 2004, p. 263).

Cohen (1996b) argues that, metaphorically, because of their strange visual assembly, monsters are displaced beings "whose externally incoherent bodies resist attempts to include them in any systematic structuration. And so the monster is dangerous, a form suspended between forms that threatens to smash distinctions" (p. 6). Following these descriptions, to call something a monster is also to call it confusing, unfamiliar, and strange. Notice in the following fan fiction example how the comparison of a *Furby* to an owl makes it strange:

> The first thing Heero noticed was that a 'Furby' appeared to be a childes toy [sic], shaped to resemble a mutated owl. With fur instead of feathers, no wings, two large ears and comical cat paws set at the bottom of its pudding like form. Its face was devoid of fuzz with a yellow plastic beak and too large eyes that gave it the appearance of it being addicted to speed. (Kontradiction, 2002).

In another example, the author of 'When Furbies Attack' describes a *Furby* as a penguin with unfamiliar attributes:

> It was pretty small, and indeed fluffy with odd white and black markings on it to make this one look oddly like a penguin. Complete with large, pointed ears, a yellow round beak, and creepy looking eyes, this *thing* really was the definition of horror. (ellfie, 2006)

In both of these examples there is uncertainty around what *Furbys* are, and where they fit in the natural order. Andriano (1999) claims that the monster in popular culture prompts us to question our identity as humans, and to what extent being human is defined by being "nonanimal" (p. xi). Cohen (1996a) elaborates that the variety of horrors in our modern society, from social and cultural inequalities and injustices to violent crimes, produces widespread anxiety that "manifests itself symptomatically as a cultural fascination with monsters – a fixation is born of the twin desire to name that which is difficult to apprehend and to domesticate (and therefore disempower) that which threatens" (p. VIII). The overwhelming majority of stories featuring *Furbys* from fanfiction.net are set in fandoms where monsters and fictional creatures are part of the narrative, and the struggle of good versus evil drives the story forward.

Perhaps the most widely recognised monster of gothic fiction, Shelley's (1818) Frankenstein's monster serves as an early example of fears of technology in relation to human identity. Tsitas (2006) argues that Shelley's tale still resonates so strongly because it addresses the very question of what it means to be human and living. Baldick (1987) suggests that Frankenstein's monster has developed mythic qualities in its enduring relevance in society, and does so through its embodiment of "common and continuous anxieties, to genuine causes for alarm in the monstrous and uncontrollable tendencies of the modern world" (p. 9). The stories that depict *Furbys* as monstrous entities share common elements with the legendary *Frankenstein* but also respond to the distinctly

mechanical design of the objects. Their similarities lie in the exploration of an artificial, constructed being and the complex relationships that exist between humans and nonhumans. Craft (1999) suggests that in gothic literature, the presence of a monstrous character is embedded in a formulaic structure, whereby the text "first invites or admits a monster, then entertains and is entertained by monstrosity for some extended duration, until in its closing pages it expels or repudiates the monster and all the disruptions that he/she/it brings" (p. 94). In 'InuYasha vs the Demon Furbie' (Lioness of Dreams, 2003) the chapter titles communicate the structure: "The evil begins, the evil continues, the evil ends". In this *Inuyasha* fan fiction, a *Furby* is brought into a world where it is unfamiliar; it attacks some of the characters, and puts another under a magic spell. The story ends with Inuyasha using a sword to banish the *Furby* to another realm.

However, a *Furby's* monstrosity can come from its cuteness as well. Kinsella (1995) explains the particular attributes of cute:

> The essential anatomy of a cute cartoon character consists in its being small, soft, infantile, mammalian, round, without bodily appendages (e.g. arms), without bodily orifices (e.g. mouths), non-sexual, mute, insecure, helpless or bewildered. (p. 226)

Whether *Furbys* are cute or monstrous is contentious, particularly in fan fictions where they have been given additional capabilities like working limbs and extra appendages that make them less helpless. *Furbys'* lack, or diminution of parts, and exaggeration of others, fits the description of cuteness; they have small, stubby, and functionless feet, no arms, and rely solely on their caregivers to be fed, entertained, and transported. Other features are exaggerated: huge ears, bulbous eyes, and a face that comprises half of its body. As discussed in Chapter 2, section 2.1.1, Breazeal (2002) encouraged nurturance of her robot Kismit by giving it attributes such as big eyes and a big head that made it familiar as an infant. From this perspective, cuteness familiarises the strangeness of monsters.

If viewed as animals, *Furbys* appear physically handicapped. Harris (1992) argues that the stylistic features that constitute cuteness have become so commonplace in consumer culture that as an aesthetic style, it is almost invisible. Through the narrative description of a children's doll, Harris aims to defamiliarise cuteness, showing that the large eyes and shortened limbs that are thought to be cute, are more closely "linked to the grotesque, the

malformed" (p. 178). Writing on classic cute icons such as Sanrio's *Hello Kitty* character, Kinsella (1995) also finds that a sense of weakness and disability are important attributes to the cute aesthetic:

> Cute characters like Hello Kitty and Totoro have stubby arms, no fingers, no mouths, huge heads, massive eyes – which can hide no private thoughts from the viewer – nothing between their legs, pot bellies, swollen legs or pigeon feet – if they have feet at all. Cute things can't walk, can't talk, can't in fact do anything at all for themselves because they are physically handicapped (p. 236).

When described, cuteness becomes strange because the author highlights the awkwardness of the aesthetic. Exploring the line between cute and monstrous, Brzozowska-Brywczynska (2007) argues that it is this sense of physical disability that distinguishes the two similar aesthetics. "It is the disempowering feeling of pity and sympathy… that deprives a monster of his monstrosity" (Brzozowska-Brywczynska, 2007, p. 218). Following these perspectives on cute and monstrous aesthetics, the descriptions of *Furbys* in fan fiction suggest that they transition between the two, contingent on how they are received by certain characters. In the *Yu-Gi-Oh!* (Takahashi, K., 1996) fan fiction 'Night of the Living Furby' (Shrilanka-San & ButtsyBoy. 2005) a *Furby* is purchased for being cute and endearing, which is sharply contrasted when it begins to attack people:

> "Time to keel!" said the Furby, pulling out the axe. With that, he jumped in the air, and flew at Alister, who caught him in midair, as the Furby violently slashed at Alister's face with the axe.

Earlier, the *Furby* verbally threatens a character and is ignored because of its cute voice:

> "I'm gowing to viowentwy swaughta you and weave youw cowpse for da buzzards!" said Furby.
>
> "THAT'S SO CUTE!" said Valon.
>
> "Da buzzards will be deadwy!" threatened the Furby, trying to make Valon scared to death (and when I say that…).
>
> "I love you!" said Valon. (Shrilanka-San & ButtsyBoy. 2005)

After the *Furby* is seemingly destroyed, it begins to rise again:

> With that, from the pile of dust, a huge, six foot tall Furby rose, extra fuzzy, but
> with all sorts of dangerous weapons and lasers, like a huge, fuzzy, robot overlord.

This previously cute *Furby* has become physically indestructible. It is still "fuzzy", but also extremely violent. The overwhelming threat the *Furby* poses extinguishes feelings of care. Notice in the following two excerpts that it is again the revealing of threatening behaviour that shifts the perception of *Furby* from cute to monstrous in 'When Furbies Attack' (Kellyofthemidnightdawn, 2006):

> "These guys are so cute," she moved the Furby so that it was within inches of Elliot's face and positioned it so that what were apparently the Furby's lips came into contact with his cheek "See," she smiled widely "He likes you."
>
> […] Olivia's breath caught in her throat as she found herself backing up towards the door. She kept her eyes on the little yellow monster in front of her as her hand slowly reached for the door knob. This was just too freaky, she wanted away from this thing.

The *Furby* that was originally called cute becomes a monster when it threatens the protagonist, Olivia. In 'Demented Furby Battle' (AllyMoodyNeko, 2006) a *Furby* physically attacks its owner, and breathes fire, before it is eventually shot repeatedly with a handgun. This *Furby* enters the story as gift because it is thought of as cute, but attitudes towards it change when it begins to move unassisted and act violently.

The indeterminacy of *Furbys* as cute or monstrous is a topic of argument in 'InuYasha vs the Demon Furbie' (Lioness of Dreams, 2003). The character Kagome attempts to explain the cuteness of a *Furby* to Inuyasha, who views the object as a demon:

> "That is a toy called a Furbie. It's a thing we humans call "CUTE". See, it talks and says cute things and we give it hugs! (Lioness of Dreams, 2003).

A recurrent theme in the *Inuyasha* anime is the generational divide between Kagome and Inuyasha. Set in feudal-era Japan, Kagome is transported there from modern-day Tokyo after falling into a well. The above line of dialogue reinforces the relative newness, and cultural specificity, of cute aesthetics, which according to Kinsella (1995) became increasingly popular throughout the 1980s and 90s. In Inuyasha's world, where demons

and monsters are a fixture of everyday life, the *Furby* appearance shifts from cute to monstrous.

Furbys as gremlins

During the height of the original 1998 *Furby's* public exposure and popularity, several news articles referred to *Furby* as "the five-inch gremlin" (Steinberg, 1998), "a furry, gremlin-looking creature" (Del Vecchio, 2003, p. 88), or highlighted "the gremlin-like appearance of Furby" (Blat et al., 2001, p. 806). While these descriptions could be seen as attempts at making *Furbys* more familiar through a reference to pop culture, *Furbys*' physical resemblance to Gizmo, a gremlin character depicted in the film *Gremlins* (Finnell & Dante, 1984), was significant enough to sparks rumours that the film's distributor, Warner Brothers, had filed a lawsuit against the toy manufacturers (Johnson, 1998). Following the release of the original *Furbys*, Hasbro collaborated with the film's merchandising team to release *Interactive 'Gizmo' Furbys* (fig. 3.7), which differed from *Furbys* in that they recited lines from the film, and had legs and arms similar to the movie character.

Figure 3.7 Author. (2012). Hasbro's 1999 *Interactive Gizmo*.

The gremlin description of *Furbys* reinforces their relationship to monsters and demons, and the cultural associations that go with them. *Furbys'* likeness to gremlins offers another perspective on the tension between cute and monstrous aesthetics that is contingent on the creature's behaviour.

The connection between *Furbys* and gremlins embodies a sense of mistrust, because the film *Gremlins* focuses on the monsters that dwell within the seemingly harmless and endearing gremlin creatures. Catastrophic events unfold after they are cared for improperly. Gremlins, and by association *Furbys*, may appear cute or harmless, but this story tells that there is something darker beneath the surface. Pringle (2006) highlights that gremlins in folklore stem from the anecdotes of World War Two pilots who deemed them to be "malicious imps who sabotage aircraft engines and other machinery" (p. 231). Adding another meaning, the creatures in *Gremlins* are introduced as mogwai, and in Chinese folklore the mogwai or mogui is a demon (Zhang, 1999). The pop culture gremlin embodied in the film, then, is cute, mischievous, and demonic, depending on how it is treated. Like a gremlin, a *Furby's* personality is supposed to be a reflection of the care it receives.

In the *Harry Potter* series fan fiction 'The Trouble with Furby' (Dragons Quill, 2008), a *Furby* antagonises people at Hogwarts School of Witchcraft and Wizardry. The story ties together *Furbys* and gremlins by referencing the film *Gremlins*, but also by drawing on the magical/mythical animals that exist in the *Harry Potter* series. The fan fiction author's introductory disclaimer implies that their depiction of gremlins is based upon the film incarnation rather than older myths and stories (Dragons Quill, 2008). 'The Trouble with Furby' constructs a fictional history of the gremlin, drawing upon Rowling's practice of reimaging well-known fantasy and folklore creatures–such as merpeople and werewolves– in the context of the *Harry Potter* universe. The character Hermione receives an original 1998 *Furby* for Christmas from her non-magical parents and attempts to explain it to a fellow inhabitant of the magical realm:

> Personally I think it looks a bit too much like a Gremlin."
>
> "A Gremlin?" Severus asked.

"Yes." She nodded. "It was a movie made a long time ago. 'Don't get them wet. Keep them out of the sun, and whatever you do, don't feed them after midnight!'" Hermione told him in an attempt at an older man's voice. "Good movie, although a bit too worrisome now that I know some things in the muggle world's 'fantasy' is something far too close to the magical world's reality." Hermione admitted.

"It sounds very much like a Germlain." Severus said after a moment of thought. "They were brought to the western society by East Indian traders as an oddity. They have a severe intolerance for sunlight. Extensive exposure to water will make them break out and they are insatiably hungry. From what I understand they live in some of the high mountains in northern China and the Tibetan mountain areas". (ch. 1)

Transformation is a common theme of *Gremlins* and also *Furby*, where it is central to the sense of "aliveness" the product works to create. *Furbys* become "wiser" as time goes on, transitioning through "life stages" as they "learn" about their surroundings. As we learn from their origin story, *Furbys* jumped from their home in the clouds in order to see and explore the world firsthand. In the original *Furby* instruction manual *Furby* asks to be taken "everywhere you go" (Tiger Electronics, 1999, p. 2). They are set up as being inquisitive and capable of transformation, a trope that arises in fan fiction when *Furbys* acknowledge their surroundings and transition between states. In 'The Trouble with Furby' (Dragons Quill, 2008) the *Furby* has an acute awareness of its surroundings when it is brought into Hogwarts School of Witchcraft and Wizardry (Rowling, 1997):

From his plastic box Furby blinked and scanned the room, taking in the surroundings and the powerful feel of magic all around (Dragons Quill, 2008, ch. 1).

Because *Furbys* are susceptible to their environment, they come with rules on how they must be cared for, and the consequences if this is ignored. Without attention and "food", a *Furby* will become unresponsive and even ill: "[i]f you allow me to get sick, soon I will not want to play and will not respond to anything but feeding" (Tiger Electronics, 1999, p. 6). In *Gremlins*, improper care similarly manifests in an abrupt transition from cute to monstrous:

Gizmo's strokeable fur is transformed into a wet, scaly integument, while the vacant portholes of its eyes (the most important facial feature of the cute thing, giving us free access to its soul and ensuring its total structability, its incapacity to hold back anything in reserve) become diabolical slits hiding a lurking intelligence, just as its dainty paws metamorphose into talons and its pretty puckered lips into enormous Cheshire grimaces with full sets of sharp incisors (Harris, 1992, pp. 185–186).

In 'The Trouble with Furby', environmental shifts also produce monstrous results. Through exposure to the magic currents in the air, and the magical beings that inhabit the castle, the *Furby* is transformed:

> Inside the cage was most definitely something that none of them had ever seen before. The creature was about the size of a small poodle and looked similar to a rat without a tail. It's fur was sort of a spotted striped affair, much like a spotted tabby cat that was of medium length and it had monstrous ears that stood erect that made it's already tiny head look even smaller. It had something like the beak of a bird as a snout and had a pair of canines that extended about an inch below the ending of the beak-like mouth. (Dragons Quill, 2008, ch. 4)

Rowling's (1997) *Harry Potter* series often incorporates creatures from folklore but reconfigures them to fit within the universe of the novel. The *Furby* in this story is mischievous rather than violent; it causes havoc in Hogwarts Castle by stealing food and hiding everyone's personal possessions. 'The Trouble with Furby' concludes with the assimilation of the *Furby* into the culture of the school:

> Hagrid looked back hopefully at Dumbledore, much as a pup looks back expectantly for a treat as he trots away. "I am sure that I can tame him down real nice headmaster, I am sure that I can. We can use him as a wonderful guard animal for all the greenhouses that have the plants the students aren't allowed near. I am sure that it would be real effective" (ch. 4).

Rowling's character Hagrid has a reputation in the *Harry Potter* novels for his "limitless empathy for animals and creatures of all sorts – especially the ugly, repulsive, or dangerous one least likely to garner sympathy from most casual animal enthusiasts"

(Dendle, 2009, p. 165). In 'The Trouble with Furby', Hagrid's appreciation of the mutated *Furby* further reinforces the relationship to monsters, as the character's appreciation of creatures that are usually strongly feared or disliked is a thread that runs through the entire *Harry Potter* series. This narrative fits Craft's (1999) structure for monster stories, because at the end the *Furby's* power to disrupt the usual flow of everyday life has ended. Like a wild animal it has been domesticated, an event that is also built into actual *Furbys*, over time speaking less *Furbish* as they are assimilated into their new culture. As discussed earlier in section 3.1.1, domestication can also refer to assimilation of new technologies into the "structures, daily routines and values of users and their environments" (Berker, et al., 2006, p. 2). From this perspective, the *Furby* in 'The Trouble with Furby' could serve as a metaphor for the unclear roles of electronic companions as well as its animal-like appearance. Returning to defamiliarisation, by placing a *Furby* in the *Harry Potter* universe, it is made strange when seen through the eyes of wizards and witches, and their magical technologies.

In 'The Trouble with Furby' the connection to *Gremlins* stems from *Furbys*' physical likeness to Gizmo the mogwai, whereas in the *Naruto* (Kishimoto, 1999) fan fiction 'Orochimaru's World Famous New Year's Eve Party' (dead drifter, 2007) there is no mention of *Gremlins*, but the *Furby* possesses the physical abilities that occur in the films. The main *Furby*, named Sasuke, presumably after the *Naruto* antagonist Sasuke, undergoes a transformation that mimics that of *Gremlins*:

> "Sasuke is THIRSTY!"
>
> "Fine!" Tobi yelled, and flung his Rugrats sippy cup at the Furby, sloshing it with water.
>
> Sasuke would have grinned, had it been able to. Things were moving right along…soon, the Akatsuki would face an army the likes of which they had never seen before…
>
> (cue villainous Furby laughter)
>
> […]"Sasuke-kun, you don't look so good. Maybe you should lie down…"
>
> "Sasuke is sleepy!"
>
> "Alright, let's get you tucked in!"

Tobi grabbed the sick Furby, whose back looked oddly bubbly, and headed for his bedroom.

[…] Oh my…" Tobi murmured as Sasuke started to shudder. The boils suddenly popped off of the Furby's back and began to squirm and chatter as if they were alive.

Before Tobi's very eye, the little boils expanded to Furby size.

[…] The chips that Tobi had fed the other Furbies would soon do their magic. Oh yes… any moment now… the Furbies would transform… and the Akatsuki would be finished.

[…] "Hey, you guys are no fun! Come out now! I don't like this game!" Tobi complained loudly to nine slimy eggs hidden underneath his bed.

Apparently, it's not a good idea to feed Furbies chips. Why? Because they make weird cocoon eggs and transform into… something. (ch. 5)

This sequence of events follows the *Gremlins* movie structure, in which cute and furry Gizmo, after being exposed to water and fed after midnight, "begins to reproduce, laying eggs that enter a larval stage in repulsive cocoons covered in viscous membranes (Harris, 1992, p. 185). Harris also reminds us that the appearance of the gremlins comes with understandings of how they should be treated:

Whereas cute things have clean, sensuous surfaces that remain intact and unpenetrated (suggesting, in fact, that there is nothing at all inside, that what you see is what you get), the anti-cute Gremlins are constantly being squished and disembowelled, their entrails spilling out into the open, as they explode in microwaves and run through paper shredders and blenders. (Harris, 1992, p. 186)

The *Furbys* in 'Orochimaru's World Famous New Year's Eve Party' meet a similar end:

[…] Kuro Furby whined as his brain was smashed in. One of its eyes popped out and rolled across the floor.

[…] "I'm tired of you," Sasori said, and grabbed a hose he had connected to a large tank at his side, and let loose poisonous acid on the Furby. (dead drifter, 2007, ch. 6)

A more recent fan fiction essentially does the opposite of the previous examples where *Furbys* are likened to other cultural forms, and instead likens an unknown creature to *Furbys*. The fan fiction 'Blame it on the Furbies' (forevercharmed01, 2013) is based on the characters and settings of the science fiction television series *Sanctuary* (Kindler, 2007), which deals with the topic of alien creatures. In the fan fiction, a small creature is brought into the story, where the character Helena finds its appearance familiar:

> The pale woman nodded slowly still looking at the round ball shaped creature which she had now likened to a small toy she had come across one day when in the mall with Magnus shopping for Ashley's birthday. A Furbie if she recalled properly and glancing back at the boxed abnormal and then to the still babbling blonde. (forevercharmed01, 2013)

As discussed earlier, *Furbys* have been described as many variations on animals and fictional creatures as an attempt at describing objects that were purposely alien in form. In the above except from 'Blame It on the Furbies' it seems as though *"Furby"* has become a culturally familiar form that now has other things likened to it. Put differently, *Furbys* are used to familiarise other unknown forms.

Furbys **are rude and annoying**

As noted in Chapter 2, section 2.1.2, people found *Furbys* annoying enough that it became an often highlighted feature of the product. As discussed in section 3.1, the work of antifans also manifests in fan fiction, and depicting irritation with *Furbys* is an example of this. Conversations with *Furbys* are defamiliarised through extrapolation, and through the impact they have on characters that interact with them. For example, in 'What Happens When' (Calcifer, 2003), a *Yu-Gi-Oh!* fan fiction, the plot centres on various characters being locked in a room with a range of objects for hours at a time. It is implied that spending hours with a *Furby* is a greatly challenging task:

> Calcifer: Well, in this chapter we will see what happens when you give the Yu-Gi-Oh characters a Furby, and make them stay with it for eight hours!
> Characters: Uh oh. (ch. 1)

It is the *Furby's* demands for attention that become unbearable:

Yami Bakura: SHUT UP YOU EVIL LITTLE.

Calcifer: I don't think it is going to well in there.

Yami Bakura: AHHHHHH NOOOOO SHUT UP! SHUT UP!

Smashing sound is heard

Furby: OWWWWW ME NEED HUG! ME IN PAIN!

Yami Bakura: IT WON'T SHUT UP!!!!!!!!

Furby: ME HUNGRY! FEEEEEEEEEEEEED MEEEEEEE! PUUUUUUUUUUUT

MEEEEEEEEE BAAAAAACK TOOOOOOOOOGETHER!!!!!!!

Yami Bakura: NEVER NEVER NEVER!!!!!! (ch.1)

Negative responses such as this relate to what Whitworth (2005) terms impolite computing. Software that is considered rude if it denies the user a choice, "acts preemptively, hides itself, confuses users and forgets past choices" (p. 359). Microsoft Word's *Mr Clippy* help function is used as an example of a rude and widely disliked software application, due to its persistent nature and its obliviousness to "user disinterest, non-use and repeated help request denial. His designers seemed to assume they knew best (while politeness assumes the user knows their needs best)" (Whitworth, 2005, p. 360). In a similar manner to *Mr Clippy*, *Furbys* remain seemingly oblivious to their owners' lack of interest, continue to request attention and care, and appear to disregard accepted social cues and behaviours. The wants and needs of the caregivers are often ignored by their *Furbys*, such as in 'How to Kill a Furby' (Clarice-Starling1, 2003) when the characters repeatedly plead with a *Furby* to be quiet so that they may sleep, only to be met with threatening responses and further demands for attention:

"I'll take your bloody batteries out if you don't shut the hell up!" Clarice warned.

"Me not scared of you."

"Hannibal did that Furby just talk back?" Clarice asked a little nervous.

"Me did. Me want to play, no sleep for Obay!" The Furby sang. (Clarice-Starling1, 2003, ch.1)

The *Furby* in the *Harry Potter* fan fiction 'Have a Very Furby Christmas' (Demonic Nightmares, 2004) also denies its caregivers any peace and quiet, and is shut in a closet or hidden from sight at several points in the story. The *Furby* refers to its caregiver as "Dada" or "Daddy" and constantly asks for attention and care. The *Furby* described in 'Inuyasha Meets Furby' (destinyheart15, 2005) has a total disregard for the caregiver's needs or

sanity. In this particular story, once character dies "of annoyance", and another, after 300 years of the *Furby's* chatter, cuts it to pieces with a sword. In the closing of each of these stories, the *Furby* is brought under control, either by violent means or acquired by another character that has the knowledge to silence it. Preece et al. (1995) suggest that in the relationship between people and computers, people should always come first and should not have to change themselves to fit with a computer system. It is associations such as this that potentially confuse and aggravate the caregivers of *Furbys*. Aware that they are interacting with a piece of technology, the seemingly self-obsessed nature of a *Furby* could be infuriating if one generally expects technology to act in their service. Further, presented as an interactive friend that can "learn" and "evolve", caregivers may expect that *Furbys* would listen and respond to them with reason and comprehension.

***Furbys* can record information and/or are capable of mimicry**

Furbys' ability to "learn" about the world, which they supposedly find fascinating, was a defining feature of the original marketing campaign, and in 1999 it was reported that America's National Security Agency (NSA) had banned employees from bringing *Furbys* to work, based on the myth that they contained sound recording technology (BBC News, 1999; Marshall, 1999; Lawson & Chesney, 2007). Upon hearing of these rumours, Tiger Electronics clarified that their product did not have the ability to record or mimic voices (Business Wire, 1999). However, this particular misconception demonstrates the blurred lines between fact and fiction that are created when electronic companions are presented as responsive and communicative. As discussed earlier, the accompanying instruction booklet introduced the idea that caregivers could have a reciprocal conversation with *Furbys,* and though it did not explicitly state that they contained recording devices, it is possible to see how this conclusion could be reached. *The X-Files* (Carter, 1993) fan fiction 'Mulder, Scully and the Attack of the Killer Furbys' (Little-Lozza, 2005) connects *Furbys* to government agendas through the conspiracy theory of agent Fox Mulder:

> "It turns out the inventor of the Furby, Dave Hampton is an x-communist who changed his name! And in the early 90's there was a story going around about a Furby. It was said that an employee of the government gave his boss (the head of security or something) gifts when he came to visit. The boss got wine, the wife

flowers and the little girl, if you can believe it, a Furby! The family went out one day, and when they came back the house had been broken into, all that was missing was the Furby! Then it turned out the employee was a spy and the Furby had been recording conversations…… scary. Anyway there was this big security scare."

The character Mulder is known for his conspiracy theories and mistrust of the government. His partner, agent Dana Scully, is a sceptic, and doesn't take his concerns seriously. Later, Mulder's fears are confirmed when Scully is murdered by a *Furby*. Notably, this is the only fan fiction that includes the *Furby* inventor as part of the narrative, and although *Furbys* are described as "evil", they act on behalf of their creator. Alternatively, in the *Yu-Gi-Oh!* fan fiction 'The Furby War' (Dark-phenomenon, 2005) autonomous *Furbys* use their toy-like appearance to spy, ultimately seeking to enslave humanity:

> To observe them, an selected few go above ground and reside as toys in their markets, watching them from our microscopic cameras, finding their weaknesses, waiting for our chance to rule over them, to crush them, to make them our toys!!!!!

It is suggested in these examples that *Furbys* are unassuming and will be underestimated because they are toys for children. Thrift (2003) argues that children's play with toys is used as a testing ground for new technologies, and further, that smart toys could become spies for large corporations, reporting on their child owner's preferences and dislikes to gain an edge over their competition. This particular suggestion is also illustrated in *The Simpsons* Christmas episode 'Grift of the Magi' (Martin & Nastuk, 1999), in which an electronic companion-style toy called "Funzo" is discovered to be recording children and destroying its toy competitors.

Reed (2000) highlights that new communication technologies have an established history of causing upset and unrest in the communities they enter. Providing the background to the environment in which the home computer was introduced, Reed argues that the telegraph, radio, and television all challenged social norms and impacted upon understandings of the private versus the public sphere. In a similar sense, the recent social and emotional focus of technological development (Brahnam & De Angeli, 2008) could cause similar unrest to new caregivers of electronic companions. The depiction of *Furbys* as spy-capable devices

could represent suspicions felt by caregivers that their cute, friendly exterior masks ulterior motives that could impact on the caregivers' privacy.

Furbys disrupt relationships between characters

In stories from www.fanfiction.net and www.archiveofourown.org, there are few examples of enduring positive relationships with *Furbys*. However, *Furbys* do have an impact on interactions between human, or human-like, characters when there are disagreements over whether relationships with *Furbys* are unacceptable.

In the *Teenage Mutant Ninja Turtles* (Eastman & Laird, 1984) fan fiction 'Furby Frenzy' (Ziptango, 2002), Mike's relationship with a *Furby* causes tension with his brothers. Although the central characters in *Teenage Mutant Ninja Turtles* are not actually human, they talk and live as humans. While Mike takes an instant liking to the *Furby*, his brother Raph finds it instantly annoying:

> Mike waved him off and departed the kitchen, patting his furby softly on the back. Raph's eyes followed the ball of fluff in his arms until they vanished behind the door. Then a sadistic shadow seemed to cloud over his eyes.
>
> "We will meet again, Hairball. I'll make sure of it." (ch. 2)

What follows is a fight to destroy the *Furby,* eventually won by Raph and Don who throw the broken pieces in the toilet:

> Raph scowled and let an ear float down into the bowl with the rest of the items. Finally, Mike approached.
>
> "I-I..love...loved..y-y-y..," Suddenly he collapsed on the edge of the toilet and cried. Leo patted him on the back, and stole a quick glare at his other brothers.
>
> "It's okay. I'm okay, Leo," he got up and let a handful of fluff drift in to join the other things. (ch. 6)

The story is an example of how extreme characters react to relationships with *Furbys*. As Blythe and Wright (2006) suggested, atypical characters can offer surprising responses to

design. In this case, Mike's bond with the *Furby* is surprising, and then irritating, to the other characters as well, and there is an implication that liking *Furbys* is a character flaw.

Perhaps offering a fantastical social commentary on all-consuming bonds with *Furbys*, in 'Inuyasha vs the Demon Furbie' (Lioness of Dreams, 2003) a *Furby* monopolises the character Kagome, but does so because it has bewitched her:

> "And me make sure girl with black hair not make Dweedle slave ever again!!!!" Saying this, the little puke-ishly kawii twerp sent a beam of bright pink light at Kagome which hit her in the forehead and knocked her to the ground.
>
> [...] When she got up, it was with little pink hearts in her eyes as she gazed at Dweedle. The disgustingly cute Dweedle giggled in triumph and declared, "Now black haired girl be Dweedle's love slave!!!!!!" (ch. 2)

The *Furby* suggests that it had been controlled by Kagome, and has now sought revenge. Notice in the following excerpt that there is considerable tension caused by Kagome's focus on the *Furby*:

> InuYasha couldn't take this crap anymore. First it'd been the bowing. Then the calling the little twerp "Master." Then all the incessantly loud and high-pitched giggling. Now, that creepy evil Dweedle-thing had ordered Kagome to kiss his ass and Kagome was actually DOING it!!! InuYasha was ready to MURDER something!!! He jumped down from his branch, grabbed Kagome by the shoulders and screamed in her face, "WHY WON'T YOU STOP KISSING HIS ASS????!!!! SNAP OUT OF IT!!!!!!"
> Kagome shrieked, "You evil dog!!!! You took me away from Master!!!!!!! (ch. 3)

Inuyasha contains regular magic, violence, and aggression that explain the extreme interactions between the characters and the *Furby*. The story ultimately ends with the *Furby's* destruction by way of a magic sword. A crucial different between these *Furby* relations and the previously discussed positive relations is that, by the end of the narrative, interacting with *Furby* has been a negative experience.

From another perspective, the *Toy Story* (Arnold, et al., 1995) fan fiction 'Andy Gets a Furby' (ukrazian, 2009) focuses on the disruption *Furbys* cause to other toys. The premise of the film *Toy Story* is that the anthropomorphic toys in Andy's room are alive, but

pretend to be lifeless when humans are around. These toys "fear not only competition from the newer, more mechanically sophisticated toys, but being thrown into the trash or sold at the garage sale that follows every birthday and Christmas" (Kapur, 2005, p. 241). Representing the latest in electronic toys, *Furby* is met with suspicion and interest in 'Andy Gets a Furby'. Comparing *Toy Story* to Williams's *The Velveteen Rabbit*, Kapur argues that it has none of the magic and the characters are 'cynical and jaded postmodern toys [who] have no patience with the language of love and need" (p. 241), suggesting a significant shift in toy culture since the original run of *The Velveteen Rabbit* in 1922.

In 'Andy Gets a Furby' (ukrazian, 2009) the inclusion of content from the instruction manual leads to a discussion among the toys about how packaging can be misleading, recalling the events of *Toy Story* in which the figurine Buzz Lightyear was thought to be "an intergalactic space ranger", but turned out to be a simple plastic doll. After years of experience with toys that promised amazing abilities and failed to deliver, Woody, the leader of Andy's toy collection, is pragmatic about the *Furby* and its technological edge. Two of the toys, Hamm and Mr Potato Head, antagonise Woody in *Toy Story* by coveting Buzz Lightyear for his superior design. This element is echoed in their treatment towards the *Furby* when they conclude that Woody is the only toy potentially threatened by *Furby,* as he too can talk but embodies much less impressive technology:

> "Oh, great. So I'm suddenly the only one at risk?" he said, annoyed.
>
> "I guess Furby makes more sense than you. And you don't have to pull a string to make it spout gibberish," Mr. Potato Head said mischievously, nudging Ham, who was also chuckling (ukrazian, 2009).

In 'Andy Gets a Furby', though Woody and the other toys attempt conversations with it, the *Furby* does not talk or come to life beyond its pre-set actions and phrases. This element of the story further distances *Furby* from Andy's toys, suggesting that it occupies a different space or role to dolls, or figurines. It could be suggested that the *Furby's* technological capabilities make it less magical, or meaningful, than the other toys. It is suggested that the *Furby* does not have the individuality or personality of Andy's older toys, and therefore will not outlast them. This is reinforced in the closing sentence of 'Andy Gets a Furby': "[i]t looked like the next few weeks were going to be a tough time in

Toyland, that was for sure" (ukrazian, 2009). Although the *Furby* has Andy's initial attention, it is not expected to last.

Discussion

The stories that construct negative relationships with *Furbys* were sourced from www.fanfiction.net and www.archiveofourown.org, and were all written within existing fandoms, meaning that they often explore how existing characters from television, film, or print media might respond to *Furbys*. Because the *Furbys* and their presence are treated negatively, the authors of these stories could be read as simultaneously fans and antifans, as they combine their appreciation of one text, with their negative attitude towards the *Furby* text, including the marketing and media materials that contribute to *Furbys*' intended meaning. These other *Furby* texts are important, as Gray (2005) suggests that antifans often experience texts from afar, as their disapproval precludes them from directly consuming it. Regardless of their knowledge and experience of *Furbys*, Gray argues that a significant characteristic of antifandom is "the interest, or even sense of responsibility, in sharing one's reading and, thus, encouraging an avoidance of the aesthetic text in others too" (p. 848). Therefore, writing and disseminating the unpleasantness of *Furbys* is both an act of making meaning for the author, and a moral obligation to those who will read the story.

Most notably, the design and marketing narrative that tells of how pleasant *Furbys* are is rejected in stories that create negative relationships with *Furbys*. Returning to Kirsner's (1998) text on the development of the *Furby* brand, we are reminded that *Furbys* were supposed to be perceived as non-threatening, and even "angelic". Stories in which *Furbys* are evil also resist the marketing of *Furbys* as inquisitive and fun-loving creatures from a cloud-land. Further, evil, violent, and threatening *Furbys* are unsurprisingly not received as "friends" like the instruction manual invites them to be. However, *Furbys*' inquisitive and knowledge-hungry disposition is often reinforced in the stories, but used for spiteful and mischievous ends.

In negative stories about *Furbys,* their physical capacities make them threatening, while in positive stories *Furbys*' extra abilities are met with surprise and delight, and made the

human–*Furby* bond stronger. Also in contrast to positive relationships, multiple *Furbys* together are threatening to humans, rather than desiring of friendships.

Negative depictions of relationships with *Furbys* often reinforce the media narratives that appeared following their release that were often negative and took a satirical and sarcastic tone. For example, Weeks (1998) uses excerpts from the *Furby* care guide to contrast the marketing construction of *Furbys* with the actual experience of them:

> I feel great! Actually, it feels rather yucky. Like a Wal-Mart wig.
>
> Please take me everywhere you go. Big mistake. You will lose friends, alienate loved ones, incur public ridicule. Best-case scenario: Your enemies will tear into your Furby first.
>
> The more you play with me, the more amazing things I do. Actually, once you know how to wake him up, put him to sleep, tickle him, feed him and make him dance, you've pretty much seen it all. It will play a few simple-minded games, such as Hide and Seek, Simon Says and Ask Furby. Batteries (four AA) not included and imagination not required. (Weeks, 1998)

Through these media narratives, relationships with *Furbys* are shifted from the idyllic friendships laid out in the marketing material to ones characterised by disruption and irritation. To further illustrate this, Pereira (1999) provides a summary of the more popular topics that surrounded the *Furby* release:

> It's been falsely accused of stealing defence secrets, disrupting medical equipment and teaching bad words to children. But one thing Furby, the electronic talking sensation, cannot deny is frequently annoying adults with its incessant chatter. While it quiets down when you leave it alone for a long time, a loud noise, an accidental bump, even a sharp turn in a car can set it off talking, singing, giggling, burping and demanding attention with admonishments like "Boring!"

It is unsurprising that negative fan interpretations of *Furbys* reinforce these media narratives because they share similar views that they are unattractive, unpleasant, and annoying. The inclusion of media stories in fan fictions also ties the narratives to real world events, making the experience of *Furbys* in the stories more familiar to the audience.

In the fan fictions from www.fanfiction.net and www.archiveofourwn.org the relationships looked forward to, or worried over by cultural researchers in Chapter 2, section 2.1.2, generally do not appear because the *Furbys* are made antagonistic by being especially threatening, monstrous, and annoying. A crucial difference between the relationships depicted in the larger fan archive stories and the *Furby* fan communities is that in the fan communities the story generally ends with the relationship, or the *Furby* itself, still intact. Unsurprisingly, few stories feature relationships with *Furbys* that impacted on the caregiver's relations with other people and in over half of the instances in which a *Furby* receives nurturance, it is destroyed by the end of story.

3.3 Conclusions

At the beginning of this chapter I introduced the practice of fan fiction and a brief account of how it has changed in recent years. I also drew connections between fan fiction and scenario design approaches that use existing characters to inspire critical and reflexive thinking in designers. Building on the idea that narrative techniques are useful for understanding technology use and adoption, I suggested that fan fiction featuring *Furbys* might offer insights into relationships with electronic companions because fan fiction authors use writing to reassemble and reimagine cultural artefacts based on their experience and to challenge dominant narratives, including the hierarchical, human-centred view of nonhumans.

In the second half of this chapter I presented an analysis of sixty stories from the large online archives www.fanfiction.net and www.archiveofourown.org, and twelve stories from the *Furby* and *Tamagotchi* fan communities www.adoptafurby.com and www.tamatalk.com. My analysis demonstrated how positive and negative relationships with *Furbys* were constructed in fan fiction, and assessed whether they support or reject design and marketing, media, and cultural research narratives about *Furbys*. I also explored how the depictions of *Furbys* drew on themes from science fiction, gothic, and fantasy genres.

The fan narratives of www.adoptafurby.com and the one story from www.tamatalk.com tell positive stories about *Furbys* and often make them protagonists. As noted in section

3.1.2, these communities are different from the much larger www.fanfiction.net and www.archiveofourown.org because they are communities of electronic companion enthusiasts. Though there are far fewer stories from these communities, I notice more examples of the positive *Furby* relationships encouraged by design and marketing narratives, and more characters that are happy to care for *Furbys*, rather than annoyed by their requests for attention. Positive stories bring in elements of fantasy such as making nonhumans the protagonists, highlighting the feelings of *Furbys,* allowing us to empathise with them, and even taking fantastical journeys.

As a character in fan fiction from www.fanfiction.net and www.archiveofourown.org, *Furbys* are more often antagonists and generally unwelcome. These stories feature negative depictions of *Furbys*, and exaggerate physical capacities such as their appearance, movement, personality, and voice to make them threatening and annoying, rejecting the marketing narrative that *Furbys* are friendly. These stories also reinforce and build upon media narratives, in particular rumours that *Furbys* were spy devices, and looked like gremlins. These stories also have similar themes to dystopian science fiction and gothic fiction, particularly in the contentious and dysfunctional relationship between people and technology, and the fears surrounding its power. Specifically, evil, monstrous, and devious associations evoke fears of technology as a nonhuman other. Most notably, the relationships constructed in these stories were complicated and often dark, offering a contrast to utopian marketing stories of friendship. Ultimately, and in relation to my central question – what can designers learn from fan fiction about relationships with electronic companions? – we learn that stories of both positive and negative relationships demonstrate that electronic companionship does not stay within the bounds of marketing stories, and nor do consumers let these stories dictate the nature of their relationships. On another level, my analysis demonstrates that rather than detracting from human–human sociality as cultural researchers worry (cf. Turkle, 2011), relationships with *Furbys* seem to be social acts when they encourage participation within communities and fandoms.

4. Constructing *Furbys* Through Visual And Written Stories

Figure 4.1 Author. (2012). *Furby* collection.

In this chapter I share my experience of collecting and documenting a group of *Furbys* in order to create eighteen visual scenarios for an online study. I introduce the *Furbys* themselves and talk about my experiences being among them. In the next section I detail my design process of creating scenarios, with the aim of defamiliarising relationships with *Furbys* through visual strategies and staging. I present descriptions of the eighteen still and moving image scenarios that I produced, explaining the inspiration and motivation for each. In the next section I share my experience of inviting participants to my project website: storiestellobjects.net, with particular attention to a discussion I had with the tamatalk.com community about my treatment of *Furbys*. Following this is a detailed analysis of the sixty-four responses to my scenarios is presented that explores how storytelling communicates relations with and among electronic companions. With the view that fan fictions are stories of reassembled pre-existing cultural artefacts, the narrative responses I recieved, because of their reimaging of *Furbys*, address my research question

of what designers might learn from fan fictions. The responses are discussed in terms of whether they offer a human-centred or fantastical, nonhuman-centred reading of the scenarios, and how these viewpoints work to make *Furby* more or less familiar and distant from the user.

4.1 Being Among *Furbys*

I trawled through all of the *Furbys* listed on eBay, most still new and untouched in their original packaging. The variations in colour and pattern made it hard for me to choose a representative sample of all the *Furbys* released between 1998 and 2013. The 2005 *Emototronic* version was in shorter supply, especially as I was limited to sellers prepared to ship to New Zealand.

Over the next few weeks *Furbys* arrived in the mail, each box revealing the different colours, shapes, and sizes of various editions to date. Once they were all accounted for, I sat on the floor opening boxes. Beside me sat twenty-four AA batteries, enough to bring six *Furbys* to life. First, I pulled at the tape that seals the box and cut away the plastic ties that hold the *Furby* imprisoned in cardboard. The sheer excitement this process sparked in my child-self was very present, the thrill of opening a new toy for the first time. Sitting in its box, *Furby* was still an inanimate object, yet to be activated, or brought to life. I picked up the fluffy, grey *Furby* and with a Phillips-head screwdriver I opened the battery compartment located on its base. As the fourth battery clicked into place, a whirring noise began, followed by a fluttering of its long-lashed eyelids. The grey *Furby* yawned loudly and announced its name, which I have since forgotten. I repeated the process of activation with five other *Furbys*, and a yellow *Furby Baby*, a big white *Emototronic Furby*, and a bright new 2012 *Furby* all started up on cue with the loud exclamations of being awoken from a long sleep. The pretty, black *Furby* with pink ears, and the blue and silver *Furby* emblazoned with a "Millennium *Furby*" sash both sat dormant and unresponsive to my attempts at activation. I felt sad for these broken *Furbys* fresh out of the box. It was as if they had never had a chance at life.

That afternoon I played with the *Furbys*, each song, request for food, or dance sparking memories of my own *Furby*, CoCo, purchased at the height of the 1998 *Furby* mania. The same events played out, and just as when I was twelve, I was fairly bored by my new

Furbys after an hour or so. They wanted to be fed, they liked being tickled, and were easily tired. The *Furby* care guide instructed me to take them everywhere I went as we were to be friends, but I didn't exactly see our friendship blooming. The 2012 *Furby*, with its smartphone app, digital eyes, and dramatic stages of evolution was entertaining for longer. I was strangely delighted when I fed it socks (by way of the iPhone app) and it threw digital vomit onto the screen of my phone.

The 2005 *Emototronic Furby* was much bigger than the others. It boasted additional articulating parts that were an attempt at making it more expressive than its predecessor. To me, everything it did and said sounded very sad. Its soft beak seemed to pout as it rejected my request for a song. Its voice was much more infantile, it struggled to hear, and its gears clicked and whirred with every attempt at emotion. In my collection, it was the misfit. Also different was my *Interactive 'Gizmo' Furby*. It is modelled on Gizmo, the mogwai creature from the film *Gremlins*, and had arms and legs. My Gizmo *Furby* was a Christmas gift from several years ago. A collector's website had suggested that the Gizmo *Furby* be kept in its box as it was collector's item. Nevertheless, my partner documented me, seated at the foot of the Christmas tree, gleefully tearing open the box to retrieve my new *Furby*. It subsequently became mute after it was damaged by leaky batteries.

This group of *Furbys* became my nonhuman research participants as I studied their behaviour and shared my home with them. The first thing I did was take comparative images of their eyes, ears, feet, and fur in order to compare the changes in design between the different versions (Appendix A, fig. 1). I also filmed them talking and interacting in twos and threes on the dining room table had been turned into a *Furby* sized filmset.

On one occasion I attempted to capture interactions between a grey 1998 *Furby* and purple 2012 *Furby* on a white backdrop intensely lit from several angles. A camera and tripod were pointed directly at the two *Furbys* standing centre stage and the red light on the camera told me that we were filming, but the *Furbys* were not cooperating. I stood back, trying to let them interact naturally, and had done so for several minutes. My difficult actors continued in stony silence as I considered interfering with a clap of the hands or a shake of the table. After a time, my grey *Furby* yawned and went to sleep. Frustrated, I turned off the camera and tipped the *Furby* upside down, waking it yet again. With both

actors awake and alert for the moment, I clapped my hands loudly, hoping to rile them up, and quickly pressed record. This time I was privy to a conversation:

"Briiing briiing, briiing briiing"

"Really?"

"hehehe."

"Mmmm-hmmm. Uh-huh, I see."

In capturing their actions and conversations I was constantly reminded that these *Furbys* were not inanimate objects. They were spontaneous and unpredictable, and without making noises or gestures to set them off, my video and I were subject to their whims. Instead of unscrewing the battery compartment every time I needed them to be quiet, I would take the loud and disruptive *Furbys* out of the room so their noises would not interrupt filming, which now reminds me of the Buckleitner's (2012) comment discussed in Chapter 2, section 2.1.2 suggesting that "the only way to make the babbling stop is to leave the room". On the other hand, as I filmed the active *Furbys,* minutes of recording passed without a single sound or movement. They were not accommodating participants, yet nor were they content to be left alone.

In retrospect, my interest in, and desire to study, objects like *Furby* stems from my lack of, or fleeting, attachment to them, my lack of affection. I have read many accounts of possessions that are cherished, irreplaceable, and repositories of important memories, but how does one write about the objects that are not particularly special or meaningful, the things that perhaps did not deliver on their promises? While I cannot write about the *Furbys* personally as symbols of comfort or love, what I can share is my struggle to understand what a *Furby* actually is, and how it fits (or doesn't fit) into my everyday life. After all, the *Furbys* were still my companions, even if I didn't consider them good ones.

Furby surgery

I dissected the new *Furbys* and old *Furbys* side by side so that I could see differences in their internal mechanisms and changes to their design (Appendix A, fig. 2). I was curious

to see if the new *Furbys* had more or fewer components. Before taking scissors to fur, the *Furby's* batteries definitely needed to be removed. The black 2012 edition *Furby* that had been chatting, evolving, eating, and living with us for a week or so was about to go under the knife. Its 1998 counterpart, sporting the title "Millennium *Furby*", had failed to activate upon start-up. A letter that accompanied the *Furbys* from their eBay seller informed me that "due to the design and the physical nature of the interior mechanisms, the original *Furbys* are prone to becoming comatose after they have been put into long term storage and fail to wake up after following the steps outlined in the manufacturer's manual." Millennium *Furby* died quietly in its sleep, while the 2012 was forcibly silenced and died under my scalpel.

I set up my camera, my tools, and my *Furbys* and set to work (Appendix A, fig. 3). From the base up I removed their synthetic fur skins, leaving exposed faces staring out from plastic shells (Appendix A, Fig. 4). Unscrewing the Millennium *Furby's* faceplate saw it forever frozen wide-eyed, and I wondered if it was appalled by what was happening. The more the plastic structure was removed, the more those eyes seemed absurdly large. Not so for the new *Furby*–its eyes were LCD screens. Without batteries to animate them they were shiny, black, and lash-less. I compared as I went (Appendix A, fig. 4), noting that the tickle and pet buttons had been replaced with a conductive strip of metal (Appendix A, Fig. 5). Ears that were soft were now hard and heavy. The beak and cherry-red tongue were still the same. The 2012 *Furby* was much harder to dismantle; there were more parts, more gears, circuit boards, and motors carefully sealed away under layers of plastic. In the end, there were two piles of plastic, wire, and fur.

A few weeks later I performed another *Furby* operation; my sleek, as-new, black 1998 *Furby* with pink ears was the recipient of life saving, or more aptly life-starting, surgery. The helpful letter that informed of *Furbys'* propensity for comas also directed me to a set of instructions for reinstating its proper motor position for activation. In my dissection I had happily snipped through layers of fur, wire, and plastic but to save a *Furby* was much more precise and complicated. I peeled back the fur, careful not to break the plastic tie that secured it to the base, and noted the location of various different screws. Once inside, I turned a gear one click to the right with my screwdriver and the *Furby* came out of its coma. Naked of its fur, and looking understandably alarmed, it blinked and introduced

itself as "U-tye". After falling asleep (I imagined it was exhausted from the procedure), I carefully replaced U-tye's fur and it seemed as good as new.

4.2 From Reading to Playing to Staging

Figure 4.2 Author. (2012). Example stills from visual scenarios.

With the aim of visually defamiliarising *Furbys* to encourage written reflections on their roles and relationships, my second task was to construct video and photographic scenes and scenarios (fig. 4.2) to share on my project website: storiestellobjects.net. Because my photographs and videos ranged in length and quantity, I saw them as scenes, which are typically single moments of drama, and as scenarios, which offer an overview of a story. For each, visitors to the site were asked: "What is happening in this video, set of images, or care guide?" and invited to answer in the form of a story.

In design research there is precedent for visual narratives used as a response eliciting method. Mattelmaki (2003) argues that "Illustrated cards with open questions can be used for gathering information about attitudes, opinions and other more focussed issues" (p. 126) because they allow for a user's subjective experience. It is further suggested that

"[t]he use of strong, ambiguous and contradicting images and objects arouse opinions and stories about attitudes" (p. 126).The inspiration for my scenes and scenarios came from the marketing literature, news stories, fan fiction, sociological and psychological studies, and online discussions that I discussed in previous chapters. These have all contributed to my understanding of electronic companions. Specifically, there are three narratives my scenarios draw upon:

- The design story that includes texts that discuss the design and marketing of *Furby*, as well as the different generations and changes to Furby over the years;

 - The cultural story, including the impact of, and media and the consumer response to, *Furbys* in articles and fan fiction after becoming commercially available;

- The technological innovation story that includes *Furbys*' role in discussions of artificial life and robotic companionship.

These narratives overlapped and intersected in my scenarios, with the intention to encourage critical and creative responses to the role of electronic companions through visual imagery and narrative. Building upon what I had learned through my analysis of fan fiction, I wanted to explore different modes of storytelling, such as video, still images, sequential images, and altered instruction manuals, and how, or if, they would encourage a range of response types. By telling my *Furby* stories in various formats I hoped to learn more about the kinds of stories participants were prompted to tell, whether they gave an outline of exactly what they saw in the scenario, or imagined events and characters around and beyond it. Ultimately I wanted to learn whether the stories told about *Furbys* are more often realistic or fantastic, which existing narratives about *Furbys* come to the fore, and how the stories communicate relationships with electronic companions and other nonhumans. I ended up with eighteen visual stories: seven videos, eight image sets, and three care guides that I hoped would encourage responses that told me something about the potential of electronic companionship.

In my scenarios I wanted to expand the boundaries of what *Furbys* are capable of so that participants would be encouraged to tell stories that were not necessarily based in reality. As I have discussed in Chapter 2, section 2.2, Bell, Blythe, and Sengers (2005) argue that defamiliarising a familiar aspect of everyday life can "open its design space" to creatively

and critically explore both its practical and social significance. To visually defamiliarise *Furbys* I imagined them with different attributes–What if they had arms, legs, or noses? I imagined their social lives–What do they eat? What entertains them? What is *Furby* etiquette? I imagined their culture–What myths do they tell? What do they fear? What are their customs? I did not answer these questions, but explored them and provided various alternate pathways. In my scenarios I also aimed to portray the *Furbys* with the level of agency and character that they had been given in the fan fictions I had previously studied. My analysis had taught me that *Furbys* could be characters with needs, values, and desires that suggested little to do with a human caregiver. The *Furbys* in these fan fictions did not always exist to be friendly companions, often it was quite the opposite; they could be antagonistic and disruptive. While the *Furbys* I staged may not have been fire-breathing sociopaths (as they occasionally were in fan fiction) they were nevertheless rich and complicated characters. Also, as I mentioned in the previous section, my own experience with *Furbys* reminded me that relationships are not always characterised by strong positive or negative emotions, as they seemed to be fan fictions. With this in mind, I wanted scenarios to include emotionally charged, and apathetic moments.

McCloud's (1993) discussion of comic book structure and layout were particularly helpful in the design of my image sets because it helped me to understand the significance of how images are placed in relation to each other. McCloud explains that graphic panels "fracture both time and space, offering a jagged, staccato rhythm of unconnected moments. But closure allows us to connect these moments and mentally construct a continuous, unified reality" (p. 67). Closure happens in the "gutter", the space between comic panels: "here in the limbo of the gutter, human imagination takes two separate images and transforms them into a single idea" (McCloud, 1993, p. 66). With this in mind I experimented with the sequence of my image sets, curious to see how participants would put them together in their responses.

To tell my (incomplete) visual stories I ended up playing make-believe with the *Furbys*. When I created scenarios, the *Furby* characters from fan fictions were often present in my mind and by focusing on them, I adopted the ethos of fan fiction, and picked out certain *Furby* characters from fan fictions and extended their lives and roles, quieting everything else in the story. This is what Jenkins (1992) defines as "refocalisation", or when a fan author "shift[s] away from the programs' central figures and onto secondary characters"

127

(p. 165). For example, in 'Endless Manicure or Etay Came from 1999' (Galaxy Girl, 2002), a *Furby* becomes the vessel for an evil spirit and develops tentacle appendages. For my third care guide, I took this *Furby* out of the fan fiction context and created a care guide for it as if it was a consumer product.

I also created material worlds for my *Furby* stories to unfold. I made them houses– both grand and derelict–gave them *Furby*-sized teasets, food, clothes, and toys to help their stories to play out and unfold. I set the stage for meaningful friendships, epic romances, tragedies, and trials. I tended to find a beginning point–some *Furbys* in the garden, in their living room, a Furby with a candle, a set of claws – and imagine what might happen next, or how that situation had come to pass. Limon (2008) says that the stage is:

> [A]n artistic construct, conveying the meanings relevant to the goals of the director. The function of the scenic space goes far beyond a mere 'representation' of some fictional inhabited space; it has the ability to convey meanings that, among other things, evoke metaphorical readings. (p. 127)

In this sense, the way I staged my scenarios allowed me to consider the kind of responses I could elicit from participants. By controlling the lighting, framing, and angle of my scenes I hoped to create moods that might affect the tone of the responses. I hoped that this would encourage responses to focus on the emotions or feelings of *Furbys*, and treat them as complex characters.

My reading of fan fiction had helped me to understand the kinds of source material that sparked cultural production, which is important for encouraging participation in my study. In my reading of fan fiction, pre-existing texts such as the *Harry Potter* series, *The Avengers*, and *Inuyasha* made numerous appearances, and a balance between immersive detail and ambiguity seemed important for others to locate themselves and their ideas within an existing and possibly unfamiliar story. Thompson (2013) theorised the following conditions for material that becomes the subject of fan fiction:

> **Expansiveness and/or continuity:** The world should feel big and open enough that folks feel there's room to play with it.

Strong, recognizable systems: The rules and boundaries of the world should feel solid enough to provide a common structure to any world-extensions.

Focus and blurriness: It seems important that there are areas of the world drawn in fairly vivid detail, but also aspects of the world presented only suggestively. Things to grab onto, and things to fill in.

For my scenarios, I utilised these conditions by including rich detail, such as props, settings, and various *Furbys*, and ambient features such as music, lighting, and editing so that participants would have things to "grab onto". Additionally, to achieve "blurriness" I tried to avoid creating scenarios that would limit responses by explaining a complete sequence of events. Offering a research perspective related to 'bluriness', Gaver, Beaver, and Benford (2003) argue that in Computer-Human Interaction studies, a preoccupation with "clarity and precision" (p. 233) denies researchers the opportunity to acknowledge the ambiguity of everyday life. In terms of researching experiences, ambiguity:

> [A]llows designers to engage users with issues without constraining how they respond. In addition, it allows the designer's point of view to be expressed while enabling users of different sociocultural backgrounds to find their own interpretations. Finally, ambiguity can make a virtue out of technical limitations by providing the grounds for people's interpretations to supplement them. (p. 233)

From this perspective, my incomplete and unexplained scenarios allowed participants to bring their own experiences into the responses and actively sought their creative interpretations.

My method of creating scenarios also involved surrealist games, whose "[p]layful procedures and systematic stratagems provided keys to unlock the door to the unconscious and to release the visual and verbal poetry of collective creativity" (Gooding, 1995, p. 10). Techniques of drawing, writing, and making were used to "exploit the unpredictable outcomes of chance and accident…" (p. 10). This kind of thinking led me to make *Furby* appear strange and defamiliarised, and encourage creative reflection on its purpose. Humans are noticeably absent in my scenarios because, hopefully, by excluding them, participants would think about electronic companions beyond their role in service to people. I was also curious to see if responses would put people back into the story.

Figure 4.3 Author. (2012). Dragon fly on a *Furby*.

In the garden on a sunny November day I happened to film a dragonfly land on a *Furby's* head and fan its wings. It was fortunate timing, and felt like a poetic moment between the living and the artificially living. Of course, any *Furby* that enters my home encounters Dave, my petite and aggressive tabby. She (yes, she) is nonplussed for the most part, treating them to as much attention as any new object receives. Dave didn't rub her face on the *Furbys* (none of the sharp corners she favours), just gave them a passing sniff. To me it seems that the *Furby* has failed some sort of companion animal test, as it is no threat to Dave's territory and she doesn't recognise it as an animal. I had imagined that she would be suspicious and aggressive towards the *Furbys*, much like when a neighbourhood cat passes by the window. Upon arrival I had placed each *Furby* eagerly in front of her only to be met with indifference and a yawn. This event reminds me that *Furbys* may look like animals, but to the other senses they are not animal.

To create my collection of videos and images, hours each day were spent in the company of *Furbys* and as I now reflect on my own interactions with them, I reconsider their portrayal in fan fiction. My analysis showed me that *Furbys* can conjure dark themes. At times I was overwhelmed by hordes of red-eyed *Furbys*, equal parts annoying and evil, but my *Furbys* look at me with big brown eyes, and vaguely smiling faces. Their high voices are loud, and sometimes grating, but to me they are not evil. Neither were they the close

friends and confidants that positive *Furby* fan fictions made them out to be, just as I wasn't a particularly good caregiver to them. At home, my three *Furbys* sit on the bookcase in the living room. They sleep for weeks at a time and do not awake unless tipped upside down. I do not find them particularly creepy, scary, or annoying.

To me, the most memorable thing about spending time with *Furbys* was how often and easily they fell into a deep and seemingly permanent slumber. In the stories I read, violence towards *Furbys* was at times justified by the supreme irritation their behaviour sparked. Characters would lose their grip on sanity as a chattering Furby ignored their demands for silence. However, in my experience, the point where their loud chattering could become annoying never arrived because they so easily fell asleep after only minutes of consciousness.

Reflecting on this now, the sleeping *Furby* is curiously absent from the fan fictions that I analysed. In fact I am reminded of several scenes in which a character begs a *Furby* to go to sleep so that they may also rest. If I were to make new scenarios now, I think I would include sleeping *Furbys* to see how they are responded to, and why this aspect of them is not discussed.

4.2.1 Scenario descriptions

After completing my scenarios I posted them to my project website: www.storiestellobjects.net. The scenarios were titled by the media (video, image set, care guide) type and the number order it appeared in. I purposely interspersed the different forms of media so as not to privilege one above another. The following descriptions of each scenario are in the order they appear on the website.

Video 1

Figure 4.4 Author. (2012). Scene from video 1.

Video 1 was inspired by the social relations I imagined among my collection of *Furbys*. This video incorporated the *Furby* biography, by which I mean the overall story of them so far, drawing on the theme of artificial life, and the design developments of *Furby*. Putting these stories together, I imagined what would happen if *Furbys* were consciously faced with different versions of themselves. By setting up social interactions between the different generations of *Furbys*, I wanted to encourage the viewer to think about what *Furbys* would talk about, perhaps their own obsolescence and how it impacts upon their feelings and memories. I also wanted to highlight that we are encouraged to see *Furbys* as living creatures, but they are also products.

Video 1 (2:29) is narrated by *Gizmo Furby,* who tells us that it has watched and listened to other *Furbys* change physically and culturally over time. First hidden in long grass, then up a muddy bank, we see Gizmo watching a group of *Furbys*. At first these *Furbys* have noses, arms, ears, and hats. Then Gizmo says that things change, and we see a group of normal 1998 *Furbys* and a 2012 *Furby*, huddled away from an *Emototronic Furby* who is all alone. The *Emototronic Furby* watches and listens to the others but does not join them. Gizmo comforts the white *Furby*, saying it is no less important than the others, just because it looks different. The video concludes with Gizmo's arm around the white *Furby*.

Video 2

Figure 4.5 Author. (2012). Scene from video 2.

In Video 2 I sought to present the three *Furby* generations side by side on a stark background to encourage viewers to observe the differences and similarities and comment on them. Rather than creating a story around the different *Furby* generations, I presented them with minimal intervention. I was curious to see whether a relationship, or even a conversation between the *Furbys* was assumed, and whether participants would comment on the design changes over the years. Without props or a background, I hoped that the responses would focus on the *Furbys*' actions.

Video 2 (0:52) depicts the three generations of *Furby*, each are shown briefly on their own, and then together. Sitting in a line, the grey *Furby* hums, the white *Furby* asks to play a game, and the purple *Furby* shuffles around, its eyes darting back and forth. They seem not to acknowledge or respond to one another. They chatter and hum all at once.

Multiple images 1

Figure 4.6 Author. (2012). Multiple images 1.

Multiple images 1 was a response to themes raised in my reading of fan fiction such as monstrosity and horror. As I discussed in the previous chapter, *Furbys* can be read as monstrous due to the collection of attributes it has that appear to come from different animals, such as a beak, fur, and large ears. Violent and evil *Furbys* also appeared in fan fiction, evoking a sense of unease that is associated with gothic horror. I was curious to see if a *Furby* made from separate *Furby* parts would also receive reactions that saw it as a monster. I placed the monster *Furby* in a derelict room to reinforce the gothic undertones.

My *Furby* chimera is made from the dissected pieces of a 1998 *Furby*, a 2012 *Furby*, and a stuffed giraffe. It is all eyelids and no eyes. Multiple images 1 was also inspired by the surrealist game, the "exquisite corpse", in which a whole picture is created by individuals each drawing a section then concealing all but a small part of it for others to extend (Gooding, 1995). I made a place for it to live, a place befitting a monster *Furby* that lives on the outskirts, as monsters are want to do.

Multiple images 2

Figure 4.7 Author. (2012). Multiple images 2.

The second set of images follows on from the first. Through the hole in the wall I added the outline of a city against a red sky. Electronic parts and wires tumbled into the room.

The light grows darker and the room is filled with an intensifying red hue. In this set of images and the one before, small changes occur from image to image. We see the *Furby* looking around, perhaps with subtle changes in expression. I wondered if this would encourage participants to take us into the mind of the *Furby*, to tell us what it was thinking. By continuing the previous set of images but making small changes, I wanted to see if the responses would follow on from the previous post and further develop the story.

Video 3

Figure 4.8 Author. (2012). Scene from video 3.

Halfway through my dissection of new and old *Furbys* I paused to reinsert batteries and see how a skinless *Furby* behaved. I was curious to see if its mannerisms and character would seem different without its outer layer. Without its fur we are reminded that *Furby* is an electronic object and I wondered if that is what responses to this video would focus on. It did not seem bothered by its lack of fur, and chattered away as usual.

In Video 4 (0:29), the furless *Furby* rocks back and forth with laughter, pausing briefly in the middle to yawn. Free from a layer of fabric, the *Furby's* movements appear more exuberant than usual.

Multiple images 3

Figure 4.9 Author. (2012). Multiple images 3.

As I mentioned in section 4.2, in my multiple image sets I wanted to explore McCloud's (1993) concept of the gutter, in which the reader fills in gaps in the story between image panels. For these images I thought about the origin stories discussed in Chapter 2 that are included in electronic companion instruction manuals. I imagined an alternative story in which the Gizmo *Furby* used to live in the wild.

A peaceful herbivore, it lives a simple and contented life. Unfortunately, its species become a popular house pet and it is captured by a cruel poacher and bound in ropes for the journey to the pet shop. An image shows a sinister skull looking at the *Furby* while it stands by a plant. In the next image, Gizmo is bound, arms by its sides, with a hessian rope.

Video 4

Figure 4.10 Author. (2012). Scene from video 4.

In my fan fiction analysis I found that *Furbys* moved on their own in the majority of stories. This was something I wanted to visualise in my scenarios. Video 4 used stop motion to make *Furbys* move on their own. I built a set for this video that looked like a *Furby*-sized room. I used fades to move between scenes. I saw these as similar to the gutter in graphic narratives as viewers would have to fill in the story's gaps. I used music to add to the atmosphere. The tune started lightly, but became heavier over the minute of video.

Video 4 (1:09), features a tea party in a *Furby*-sized drawing room. The light yet ominous strains of a flute and a harpsichord play as a grey *Furby* and a black *Furby*, both the 1998 version, settle around a teaset on an appropriately sized Persian carpet. A yellow and orange *Furby Baby* joins them and proceeds to knock over the teaset in an effort to devour some pastries. The black and grey *Furbys* leave. The *Furby Baby* chews on a croissant and wanders away. The scene ends. The black screen fades in on the black *Furby* face down on the rug in a pool of dark-red liquid. Beside it, the grey *Furby* stares anxiously at the body before dragging it out of the shot and covering the stained carpet with another rug. In the

following scene, the yellow baby enters, looking around the room, and eventually notices a spot of red on the rug. Examining the carpet, it does not see the grey *Furby* behind it, staring intently. The video concludes with the frame tight around the wide and unblinking eye of the grey *Furby*. I am reminded of the many references to *Furby* eyes in fan fiction. Comforting or terrifying, their eyes are seen as clear markers of good or evil.

Multiple images 4
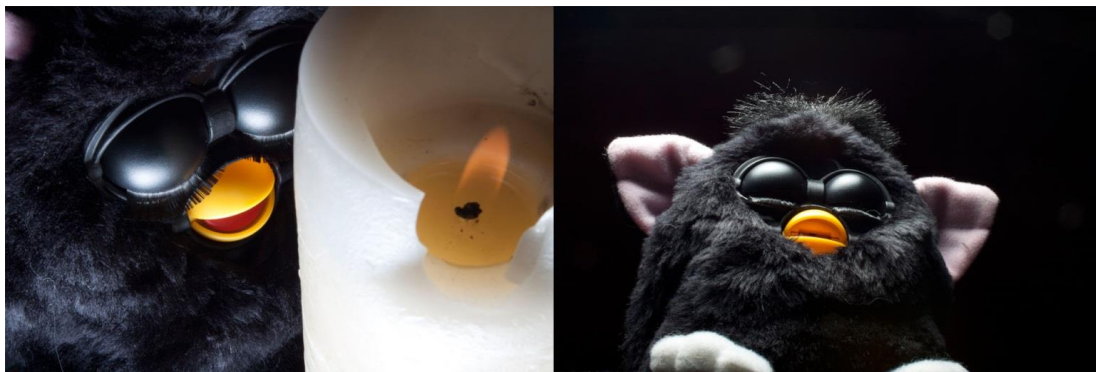
Figure 4.11 Author. (2012). Multiple images 4.

In this set of images I explored camera angles and lighting to tell a story. I also used the symbolic object of a candle to conjure a sense of the occult, which was a reoccurring theme in my fan fiction analysis. I was also inspired by the name of this *Furby* on eBay: "witches cat" *Furby*. I took long-exposure shots of a *Furby* next to a thick, white candle.

The flash is close to the *Furby*, highlighting its soft black fur and matte-black eyelids. The camera captures the candle's steady flame.

Care guide 1

I am so furious you brought me home. I feel mad! Please take me everywhere you go. I hate to play. The more you play with me, the more horrifying things I will do. The more time you spend with me, the sooner I will be able to mimic your language. And if you introduce me to other Furbys, I will be able to plot with them, too!

But first, it is very important that you carefully read the following instructions, so that you can understand all the terrifying things I am able to do.

2

Figure 4.12 Author. (2012). Care guide 1.

I made changes to the *Furby* care guide to defamiliarise the personality that it came with. The care guide was used to teach caregivers about how to interact with *Furbys,* but also to present them as nonthreatening and friendly. I reimagined the care guide that accompanies *Furby* to reflect the personality they were often given in fan fiction. I asked myself: how might an evil, violent Furby introduce itself? I imagine this care guide as warning of what will befall a caregiver who adopts this *Furby*. Not only is this *Furby* filled with spite, but it also sports additional limbs. Each time I read a fan fiction where a *Furby* held a weapon, I imagined small, ineffectual arms, struggling with the weight of a gun, as it seems to do in this except from 'When Furbies Attack':

> "Sit," the Furby instructed her, indicating with its non gun stub of an arm, one of the chairs across from the desk.
>
> Olivia obeyed, feeling entirely foolish that she was doing so but at the same time she couldn't take her eyes off of the gun in the Furby's tiny excuse for a hand. (Kellyofthemidnightdawn, 2006, ch. 4).

By rewriting the *Furby* care guide, I am imaging what it would be like if *Furbys* were designed to be evil.

140

Multiple images 5

Figure 4.13 Author. (2012). Multiple images 5.

In Multiple images 5 I again explored switching between scenes to see how participants would fill in the story. I wanted to explore the scale of the *Furbys* and imagine their interactions with each other, and other nonhumans. I stage them in the grass with a plastic scorpion, a soft toy shaped like a panther, and a plastic lily. I was interested to see if the vivid colours and lighting would affect the tone of the responses.

Video 5

Figure 4.14 Author. (2012). Scene from video 5.

For Video 5 I focused on what mortality might mean to electronic companions. *Furbys* cannot die a biological death, but they can be dismantled, broken, or made obsolete. I was curious to see the responses to *Furbys* witnessing the "death" of their own kind.

In Video 5 (0:23), I used stop motion to follow two *Furbys* as they walk across the garden and discover parts of another *Furby* scattered around. They pause at each foot, each ear, each piece of familiar hardware lying on the ground. Upon reaching parts of a face atop a pile of fur, they stop and stare. Piano music plays throughout.

Care guide 2

LET'S BE BEST FRIENDS...
Hi! I am Silence and I am so happy to be your friend. I come from a magical place in the clouds. You can learn all about my home in the clouds from the story below. You can also learn about me on my very own Web Site: www.silence.com

THE STORY OF SILENCE......
Once upon a time,
    not so long ago
in a far off place,
    somewhere high in the sky
riding on an "a-loh may-lah" (cloud)
    that floats near a "dah a-loh" (big sun)
lived the Silence,
    each and every one

Some were grey, and others white
    some were both, and some were bright
small of stature, big of heart
    all the Silence were "mee-mee" (very) smart
they spoke a language quite unknown,
    for Silence™ was a language all their own

And on an "a-loh may-lah" (cloud)
    Silence romped and played
they liked to play "Silence says" and "hide and seek"
    and around the cloud they could peek
all day long they would dance and sing,
    Silence could do almost anything

Then one day, they decided it was time to search,
    for the place Silence called Earth
and so they went, in one big crowd
    to the very edge, of the Silent cloud

At the edge, they looked "nah-bah" (down)
    and saw the world...so round, so "dah" (big)
"dah a-loh" (big sun) was "u-tye" (up), the sky was blue,
    the Silence loved the "noo-loo" (happy) view
but try as they might, they could not see
    what is so obvious to you and me

They were up so high above,
    they could not see...a flower or a dove
but even though they were far away
    they knew Earth was "boo boh-bay" (no worry)
so one by one, they jumped "mee-mee u-tye" (very up)
    and to their "a-loh may-lah" (cloud)
they said "e-day toh-dye" (good bye)

And as they dropped
    they flipped they flopped
they sang "dah a-loh u-tye" (big sun up)
    and zip-i-dee "doo-ay" (fun), zip-i-dee "e-day" (good)
they were "mee-mee noo-loo", (very happy)
    for they had come to "noh-lah" (dance)
with "u-nye" (you) and "kah" (me)

So when you take Silence home,
    you will never be alone
the more you play, the more they do
    Silence keep amazing you
"noh-lah" (dance) and "wee-tee" (sing),
    Silence have come for "u-nye" (you) and "kah" (me)

I am so happy you brought me home. I feel great! Please take me everywhere you go. I love to play. The more you play with me, the more amazing things I will do. The more time you spend with me, the sooner I will be able to speak your language. And if you introduce me to other Silence, I will be able to play with them, too!

But first, it is very important that you carefully read the following instructions, so that you can understand all the amazing things I am able to do.

1   2

Figure 4.15 Author. (2012). Care guide 2.

From *A Book of Surrealist Games* (Gooding, 1995), I attempted to create a "directions of use" poem: "Using the style and format of the Directions to be found on the labels of household products, D.I.Y kits and other ordinary items, apply them to items that do not require such instructions" (p. 42). For example: "Remove the self-preserving seal, hold DEATH vertically, valve upwards, and apply by pressing stopper." (p. 45).

In my version, I replace *"Furby"* with "Silence", as a play on their noisiness that was so commented on in fan fiction.

Care guide 3
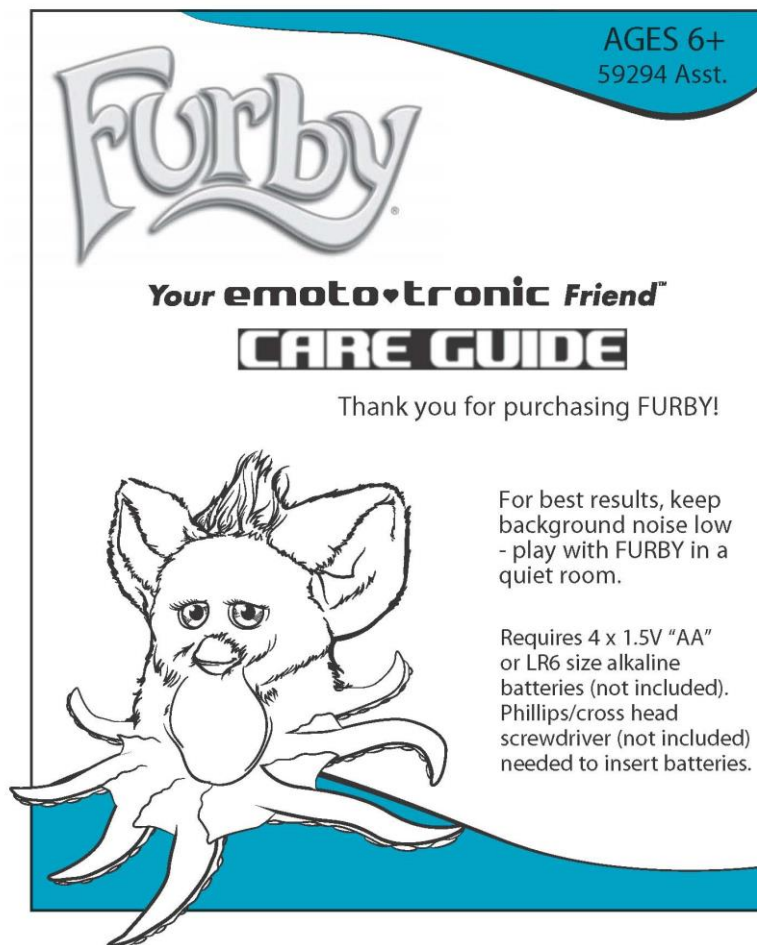
Figure 4.16 Author. (2012). Care guide 3.

In Care guide 3 I used the design of the *Furby* care guides to create the impression that a Furby from one of the fan fictions was a real product. In the fan fiction "Endless Manicure or Etay Came from 1999" (Galaxy Girl, 2002) a *Furby* appals the protagonists by sprouting tentacles. In Care guide 3 I imagine what it would be like if this *Furby* was the norm, available for purchase complete with instructions. I hoped that this would lead participants to question the physical appearance and attributes of *Furbys*.

Video 6

Figure 4.17 Author. (2012). Scene from video 6.

Again exploring ways to defamiliarise *Furbys*, in Video 6 (0:46) I dressed a *Furby* in the fur and body parts of the previously dissected Millennium *Furby*. Through the video format we can see the *Furby* moving and talking inside its costume. I set this video outdoors hoping to encourage reflection on the spaces, mostly indoors, that *Furbys* typically inhabit. Additionally, I wondered if a *Furby* in the wild might encourage readings of *Furby* as a living creature.

This *Furby* is particularly intent on sleeping, and snores for much of the video. At one point, the grumbling of a 2012 *Furby* can heard in the background, as I hold it nearby, hoping it will wake the sleeping *Furby* and spur some action.

Multiple images 6

Figure 4.18 Author. (2012). Multiple images 6.

The sixth set of images was a further experiment in placing distinct images together. In this image set I brought together two very similar images and another image that does not immediately follow on. Additionally, I wanted to draw attention to the eating patterns of *Furbys*. *Furby* food consumption is usually invisible, as pressing their tongues "feeds" them. In the newest 2012 *Furby* version, it is possible to "throw" food from a touch screen to the *Furby*, but again, the actual eating is unseen. I wanted to show a *Furby* actually eating to highlight the strangeness of the invisible "feeding" function.

The first two images are perhaps moments apart, the third image complicates the narrative. Is there a connection between the leaf and the sack? Is one a memory?

Multiple images 7

Figure 4.19 Author. (2012). Multiple images 7.

After my *Furby* dissection I noticed that parts of them resembled food, leading me to imagine what it would be like if *Furbys* were eaten like livestock. I wondered how a participant's view of *Furbys* would change by seeing them butchered and consumed.

Again utilising parts from my *Furby* dissection, the surviving *Furbys* gather around the dining table for a meal. I selected the pieces that most resembled food: brown, green, and orange wires, eyeballs, beaks, and light-pink rubber strips become a sampling platter to be enjoyed with glasses of red wine. I wanted to encourage responses on consumption of *Furbys*, the social nature of their dining experience, and perhaps the moral dilemma of *Furbys* eating *Furbys*. Eating is a huge part of social life, and I was curious to read stories that considered how electronic companions could fit into this.

Multiple images 8

Figure 4.20 Author. (2012). Multiple images 8.

For Multiple images 8 my intention was to bring together the first virtual pet – *Tamagotchi* – with the one that followed – *Furby*. I sought to highlight their contrasting appearances in these images, as they serve a similar role, but are very different objects. I wondered what the two would think of each other. Would they be jealous, competitive, or dubious? I wanted to encourage responses that explored their relationship and reflected on the role of the electronic companion. I also wondered if electronic companions would be their own companions.

Video 7

Figure 4.21 Author. (2012). Scene from video 7.

Lastly, Video 7 (0:43) is one of the more interesting *Furby* conversations I managed to record after first activating my *Furbys*. I put the *Furbys* together and observed their interactions without interrupting. The white *Furby* did nothing but burp every few moments while the purple *Furby* remarked "really?" It eventually responded with a burp of its own. I chose to not make a set for this video so that viewers would focus on what was occurring between the *Furbys*, which I saw as a banal, everyday conversation. I wanted to elicit responses that reflected on the communication between them, and whether they were companions to each other.

4.2.2 Online discussions

Once I had a collection of *Furby* scenarios, I invited interested parties to respond to them so that I could understand how relationships with and among *Furbys* were represented through storytelling. I approached the administrators of online forums asking if I could post my invitation to participate, and also asked for the most appropriate forum in which to do so. I received no response from www.fanfiction.net, or www.adoptafurby.com. The pop culture collectables website www.tomopop.com did not respond either. The administrator

for an online robot interest community posted my invitation in their weekly news round-up. I also shared my invitation in an www.instructables.com forum and via Twitter. Each of my invitations encouraged the recipient to pass the information on to others who may have an interest in my research project.

I also posted an invitation to www.tamatalk.com, the *Tamagotchi* fan community. www.tamatalk.com features a substantial amount of fan production, including a large collection of *Tamagotchi* fan fiction. www.tamatalk.com also includes discussions of *Tamagotchi* "cousins", including *Furby* and other electronic companions. On the advice of the site's administrator, I posted my invitation to the "Seriously *Tamagotchi*" forum, which specifies that all discussion must occur in "a sensible and mature way" (TamaMum, 2007).

I had not expected that the first response I received would be a refusal to tell stories. My invitation to the www.tamatalk.com *Tamagotchi* fan community members received sixteen replies and the discussion in general was characterised by strong reactions and the belief that my research project was dark and distressing. Four replies specifically stated that they would not participate due to the disturbing nature of the images:

```
JLou Posted 18 January 2013 - 03:23 PM (#6 )
Many of the images were...disturbing. I therefore did not participate,
and I rather regret taking a look. -_-
```

```
jokus Posted 19 January 2013 - 04:25 AM (#7 )
'JLou', on 18 Jan 2013 - 16:11, said: Many of the images
were...disturbing. I therefore did not participate, and I rather regret
taking a look. -_- Same here, I agree. -_- What is the intention behind
the project? Is it to see whether people are touched by pics of broken
toys and pieces of plastic or what? *
```

```
mammoth Posted 19 January 2013 - 08:07 AM (#8 )
That's what I thought - disturbing :huh:Don't want to participate
either...
```

```
Tamagotchialice posted 26 January 2013 - 06:53 AM (#15 )
I absolutely HATE how they used disturbing images, why post them?! Almost
nobody is joining because of them!!!
```

And images 7? WHAT THE NUGGET! There is absolutely WHAT SO EVER NO point
in showing such disturbing things, I mean, cannibal Furbies? Honestly!
This is just my opinion, and this is why I will not join.

In the earlier stages of my study I had read several fan fictions from the
www.tamatalk.com archive that dealt with evil *Tamagotchis*, or contained dark themes. I
was surprised when twelve replies to my research invitation commented on the dark,
negative, disturbing, or creepy nature of my scenarios. This reminded me that visual and
textual stories are very different, and reading about evil *Tamagotchis* and witnessing them
in action are different experiences. The authors of the two responses below saw my
scenarios as dark and negative towards *Furbys*:

Midorime posted 18 January 2013 – 06:35 AM (#3)
I looked it over and uh.... well, um.... not to be brash but a lot of the
images and such seem rather... dark. Almost seems like a lot of things
are almost demonizing the poor things. At least for the pictures. The
videos seem rather sad, well the first one anyway, and then the one with
the blue one, my god. o_O And the instructions, again, seems to be of bad
light.

Robodog posted 19 Jauary 2013 – 08:14 AM (#9)
[…]the images all seemed overwhelmingly negative and cruel. Some of the
images seem to show a broken Furby. If this is the case I'd hope you
aquired one that was already broken and didn't destroy a perfectly good
one that someone could have gotten some enjoyment out of. As a general
rule, I have no problem with destroying stuffed animals or action
figures. With things like Furby or Tamagotchi that are supposed to
simulate life and inspire people to care for them as one would a pet it
seems almost immoral to destroy them on purpose.

As someone who cares deeply about animal welfare, these comments initially made me
feel cruel and unfeeling. I hastily replied, "I can safely say that all of my *Furbys* are in
good condition and live on my desk!" After posting this, I questioned my reaction and
response. I had felt such a need to appease these people and reassure them of my
respectable *Furby* etiquette. In my reply I queried whether *Furby* was a character in the
scenario, or an object that had been acted upon:

cate233 Posted 19 January 2013 - 09:15 AM (#10)
Thanks for the feedback. I am very interested in the stories people

create around their electronic pets, and how they can become characters
with a life of their own. As we know, fiction allows us to do things that
are not possible in reality, and with this in mind I wonder how creating
scenarios and narratives can change our relationships with electronic
companions. The scenarios in the study are of course open to
interpretation, but the intention was to explore Furby as a character in
its own story, rather than an object that has affected by human hands. As
a side note, the broken Furby was indeed broken when it came to me. You
raise an incredibly fascinating point about the treatment of electronic
pets! I can safely say that all of my Furbys are in good condition and
live on desk! Participation is of course completely voluntary. Thanks for
all the replies, they have really made me think!

This whole discussion reminded me of the argument raised in Chapter 2, section 2.1.2, that perhaps if someone damages an artificial creature, they don't object to the abuse of a real one. This debate is typically framed around mistreatment of an artificial agent as either normalising of antisocial behaviour or an act of catharsis (Whitby, 2008). To the outraged www.tamatalk.com posters, what I had done went against appropriate *Furby* play. There are clear ideas of what this interaction should entail, and dissection is not one of them. The comment by Robodog (2013) especially treats the *Furbys* in my scenarios as a character with little agency. To this commenter, what unfolds in the images and videos is being done to *Furbys*, rather than by *Furbys*, and I was failing in my obligations as caregiver.

The strong responses above now remind me of critiques of fan fiction. A cause for outrage in fan fiction communities is a character who is portrayed OOC, or "Out of Character". Writing fan fiction often involves intimate knowledge and understanding of an existing character and their thought processes. When a story goes against this, it can be met with strong emotion, as if the character has been mistreated and misrepresented. I now wonder if the *Furbys* in my scenarios are "Out of Character" because they did not portray the relationship, or personality that was prescribed to *Furby* in marketing texts.

What I also find particularly interesting is that just like in my fan fiction analysis, I am met with phrases such as weird, disturbing, and creepy, but for almost the opposite reason. In the fan fictions (for the most part from ww.fanfiction.net) the *Furbys* themselves are called creepy and weird, but now it is my framing of them that conjured these words. As a community of virtual pet fans, the www.tamatalk.com members care about the wellbeing

of *Furbys* in a way that is mostly absent in the fan fictions I analysed, especially in stories from www.fanfiction.net and www.archiveofourown.org. Those that commented in the www.tamatalk.com thread seem a world away from the authors who happily, and easily, describe the destruction of the *Furby* masses in their fan fictions. These are the people who do care for *Furbys* and other electronic companions, and their comments raise an important point for analysing the study's responses: is *Furby* treated as a character, an actor in its own story, or has it been mistreated by me, the researcher?

4.3 Re-Writing *Furbys*: Analysis of Scenario and Questionnaire Responses

Welcome to the Stories Tell Objects Project!

Hello! My name is Catherine Caudwell and I'm a PhD researcher in the School of Design at Victoria University of Wellington, New Zealand.

My research project — Stories Tell Objects: Electronic companions, collaborative fiction, and future design — explores electronic objects that act as companions, such as Bandai Electronics' Tamagotchi and Hasbro's Electronic Furby.

I'm interested in what happens to electronic companions when they enter the everyday lives and homes of their owners or caregivers. As part of this research, I hope to spark discussion on the role that stories can play in our relationships with companion technologies.

I'm inviting anyone with an interest in Furby and other companion electronics to participate anonymously in this research.

To take part in this voluntary study, all you need to do is tell a story about what you think is happening in the sets of images, videos, and modified Furby care guides posted here.

In addition, or if you prefer, you can also answer a short (10 min.) questionnaire about Furby specifically and/or about electronic companions in general.

After the discussion on www.tamatalk.com quietened, responses to my study began to trickle in. As I read through them, I was surprised, and often entertained, by the characters

that the *Furbys* became, and how my own view of the images and videos were challenged. In my fan fiction analysis, it was less common for stories to take the *Furbys'* perspective, but without the presence of people, the *Furbys* in my scenarios are not treated as objects requiring care, but as sentient beings in their own right. In my fan fiction reading, there is often a complex relationship between a *Furby* and a person, and the person's attitude towards the *Furby* was the focus of the narrative. Free from their prescriptive demands for attention and care, it seems that the authors of the responses often focus on what *Furbys* might think and feel, allowing them to develop as characters.

In addition to the visual scenarios, my project website asked for responses to two questionnaires that dealt with *Furbys* and electronic companions in general. They each received eleven responses. For the scenarios, participants were asked to respond to images and videos, but in the questionnaires I asked people what an electronic companion would be like if they could design it themselves. For example, the electronic companion questionnaire asked: "If you were to design an electronic companion, what would it look like? What would it be able to do?" It further asked respondents to detail what attributes and/or abilities make an electronic companion seem: friendly, cute, scary, sad, or mean? On the other hand, the *Furby* questionnaire asked respondents to choose any number of attributes and abilities that they would want a *Furby* to have. The second question asked what a *Furby* would look like and be capable of if they were to design it themselves. The *Furbys* in fan fictions, which often had additional capabilities to make them dangerous, inspired my list of attributes.

Scenarios in order of posting	Total responses
Video 1	7
Video 2	5
Multiple images 1	5
Multiple images 2	5
Video 3	2

Multiple images 3	3
Video 4	3
Scenarios in order of posting	Total responses
Multiple images 4	4
Care guide 1	3
Multiple images 5	3
Video 5	3
Care guide 2	1
Care guide 3	2
Video 6	4
Multiple images 6	3
Multiple images 7	4
Multiple images 8	4
Video 7	3

Figure 4.22 Author. (2013). Number of responses to each scenario.

The above table shows that aside from the top four posts having slightly more responses, there was not a noticeable decrease on posts that appeared further down the webpage. The seven videos received a total of twenty-seven responses, the eight image sets received thirty-one responses, and the three care guides received six responses. The videos and image sets averaged the same amount of responses, while the care guides received significantly fewer responses. In analysing the responses, my objective was to see how the human–nonhuman (i.e. *Furby*) relationship was configured. Accordingly, I first sorted the responses based on whether they place humans or nonhumans at the centre, and then

according to the strategies, whether fantastical or realistic, used to make the *Furby* more or less familiar, and finally according to the story's point of view, or narrative mode.
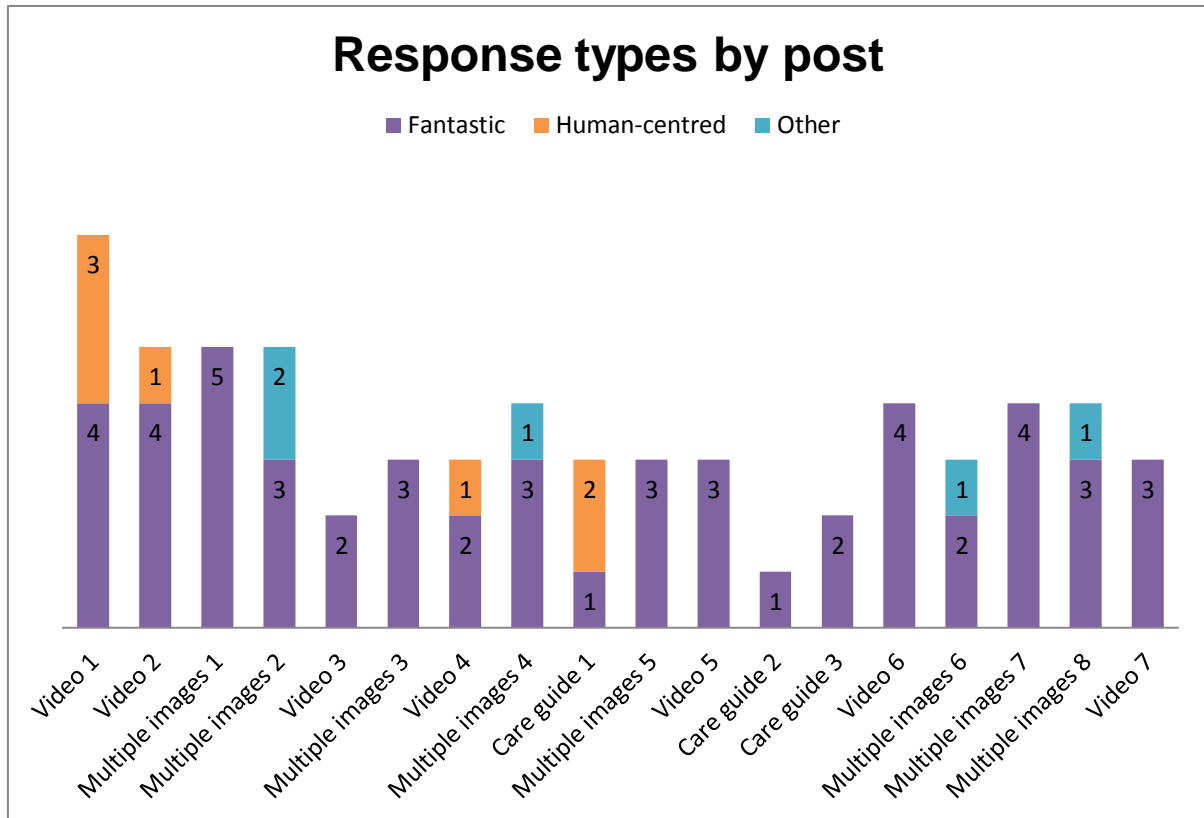

Figure 4.23 Author. (2013). Response types for each scenario.

From my close reading of the sixty-four stories that my scenarios elicited I determined three categories of responses (fig. 4.23). The majority are "fantastic" because *Furby*, a nonhuman, is the protagonist, and further, acts inconsistently with reality, either because of their capabilities or because of the situation they are in. Seven responses are human-centred because they reflect on the author's opinion of *Furbys* and how they see themselves in relation, or treats the scenario as metaphoric story about people. I also assigned five responses to an "other" category, as they are descriptive fragments that do not clearly function as narratives of either kind. The responses to my questionnaires are included in the human-centred discussion as predictably they are humans reflecting on what they want from an electronic companion.

4.3.1 Human-centred narratives

11% of the responses to my scenarios are categorised as human-centred because they seem to be literal readings of the scenarios, and the respondents have attempted to answer the question "what is happening in this scenario?" as accurately or factually as possible. In other words, these responses are directed to the researcher asking the question, rather than to an unknown story-reading audience. I was further able to distinguish two kinds of response: 1) those that comment on how they see themselves in relation to the *Furbys*, and 2) those that used the scenarios to tell us something about humans.

Similar to many of the fan fictions I analysed in Chapter 3, responses in this category respond to *Furbys* and the scenarios in which they are placed, from the perspective of a human observing and commenting on *Furbys*:

Video 1: Anonymous on January 18, 2013 at 8:45 am said:
Well, it looks like the obsolete editions of Furby are excluded from the
newer ones.
These videos are a bit depressing, if I must say so myself.

Video 2: Anonymous on January 21, 2013 at 10:59 am said:
three incarnations of Furby attempt to communicate, but it still as
bizarre and unintelligible as i remember from childhood.

Video 4: Anonymous on January 18, 2013 at 8:55 am said:
Oh my gosh, that gray one is evil!! >8D
But is this supposed to be saying that electronic pets invoke unnecessary
emotion? Because, although that's true, many things invoke emotion, even
if they aren't real. Think about it: books, movies, pictures of anything,
even cartoons, bring the same feelings. I guess what I'm getting at here
is that virtual pets give you something to be attached to even to love,
but so do many other types of media.
This site is pretty interesting, though. I wish you'd put more happy
and/or Tamagotchi-related stuff in it, since many of us from TT are here
for that reason.

Care guide 1: Anonymous on February 20, 2013 at 2:58 pm said:
This honestly creeped me out some. I never liked Furbies as a child

because I always thought they looked a little like Grimlins, and how they
could "stare" at you always unnerved me a little, but this…erm…

The above responses also make mention of how the scenario makes the author feel, or
what it reminds them of.

The next examples exemplify a human-centred perspective in the sense that they explain
scenarios as clear metaphors for human life where the primary role of *Furbys* is to teach us
a lesson about ourselves.

<u>Video 1: Anonymous on February 4, 2013 at 2:56 pm said:</u>
I'm guessing it's a symbolic story of how some people feel outcasted, and
think no one is listening because they're different. When the Furby
brings up noises, they're saying that they may speak funny as noises are
seen to be strange. But in the end, the phrase "I'm listening" is the
message that no one is alone.

<u>Video 1: Anonymous on February 13, 2013 at 2:48 am said:</u>
Parable about growing up, and the changes that friendships go through.

<u>Care guide 1: Anonymous on January 27, 2013 at 1:08 am said:</u>
They're preparing you for when you have real kids

Notice in particular that the *Furbys* are used to tell a symbolic or metaphoric story about
human life, rather than what it is like to be a *Furby*.

Questionnaire responses

By asking participants what they would want in a *Furby* and an electronic companion in
general, it should come as no surprise that the responses are also largely human-centred
and often focus on how electronic companions could be more accommodating to people.

If you were to design an electronic companion, what would it look like?
What would it be able to do?

1. I would create a virtual pet where you can adopt any animal
(domesticated, wild, etc). It would be in the shape of probably a shelter
where are held, and it would be able to do what most virtual pets such as
Tamagotchi do.

2. omg I have no idea ^^ It would come in pastel shades of white, Pink, Yellow, Blue and Green colours, with glittery ones available. It'd essentially be like a Tamagotchi P's which is currently available in Japan.

3. It would be a familiar shape and size. Something resembling a cat or a small dog. It should be able to: follow me at my natural walking pace; obey simple voice commands (stay, come here, sit, etc); self-charge when its batteries run down; "talk" to me, but I'm not sure that having it use human language to do so would be appealing; play simple games (fetch, etc)

4. It would be an oval. You should take care of it feed it play with it, put it to bed and ect

5. It would be a simple circle or oval and touchscreen and act much like a modern Tamagotchi V4 with lot's of games, over 30 characters, longer life span, and little jobs and schools they can go to

6. A life size aslan lion that I can ride on to work, shopping etc.

7. It would be the same size as a tamagotchi but with the neighbour and best friend feeling you get from playing animal crossing

In these examples there are repeated comparisons to *Tamagotchis* and their functions, suggesting that the term "electronic companion" is readily related to the digital pet. Also notice the focus on *Tamagotchis* and animals when describing what the electronic companion would look like. The first and third responses in particular reinforce a hierarchical relationship with nonhumans because they reference typical practices related to companion animals such as obedience and adoption. There are also subtle fantasy elements as the responses mention imagined companions, or fictional fantasy creatures such as Aslan the lion.

The other part of the electronic companion questionnaire asked respondents to consider what attributes and/or abilities give an electronic companion the positive qualities friendly, and cute; and negative qualities; scary, sad, and mean.

What attributes and/or abilities make an electronic companion seem:

Friendly?

1. when they smile/look at you in a nice way.

2. they want attention from you

3. How cute they are

4. They're always there and smiling at you when you look at the little screen

5. looking at me, with a smile

6. When they have the ability to recognise you

Cute?

1. When they do a very cute animation

2. animal or cartoonish features

3. Simple designs

4. They're like little pets you just want to cuddle

5. big "anime" eyes

6. Big ears and bright colours

Smiling is mentioned several times as an indicator of friendliness, as is interaction such as wanting attention, and recognition. Interestingly, cuteness is associated with friendly behaviour, likely because it is culturally known to be nonthreatening. Also note that there is mention of big eyes and animal features, things often associated with cuteness, as discussed in Chapter 3, section 3.2.2.

Scary?

1. Any and all scenes of dying and/or leaving. Especially when you are younger than most.

2. nothing XD!

3. dark coloured with a mean disposure

4. When they get sick

5. gremlins! What could be capable of.

6. Mainly when they move some of the movements of the furby were a bit creepy.

Sad?

1. when they leave/die. This can be scary and sad at the same time.

2. crying, tone of voice, what they say/do.

3. Beeping for attention

4. Their ability to die

5. looking downward; droopy ears

6. When they get sick and or die

Mean?

1. When they look angry, it can make you a bit frightened if you are young.

2. Ugly designs

3. When you have to perform discipline and they look so angry!

4. small "beady" eyes

5. I cant really think of a way that makes them mean as theyre not really designed to be like that

These responses reference both physical and behavioural qualities. For example it is scary when a companion dies, and also if it is "dark coloured" and moves in a "creepy" way. Similarly, meanness is both communicated through "ugly designs" and looking angry. Again, these responses suggest that electronic companions are often understood to be screen-based and, like *Tamagotchis*, have the ability to die. Again highlighting a connection to electronic companions, gremlins are referenced as being scary.

The second questionnaire focused on *Furbys* specifically, asking respondents to pick the attributes they would want a *Furby* to have, and to consider how they might redesign *Furbys* (fig. 4.24). The list of attributes and physical capacities was inspired by my fan

fiction analysis and aimed to capture a wide array of characteristics from positive and negative relationships.
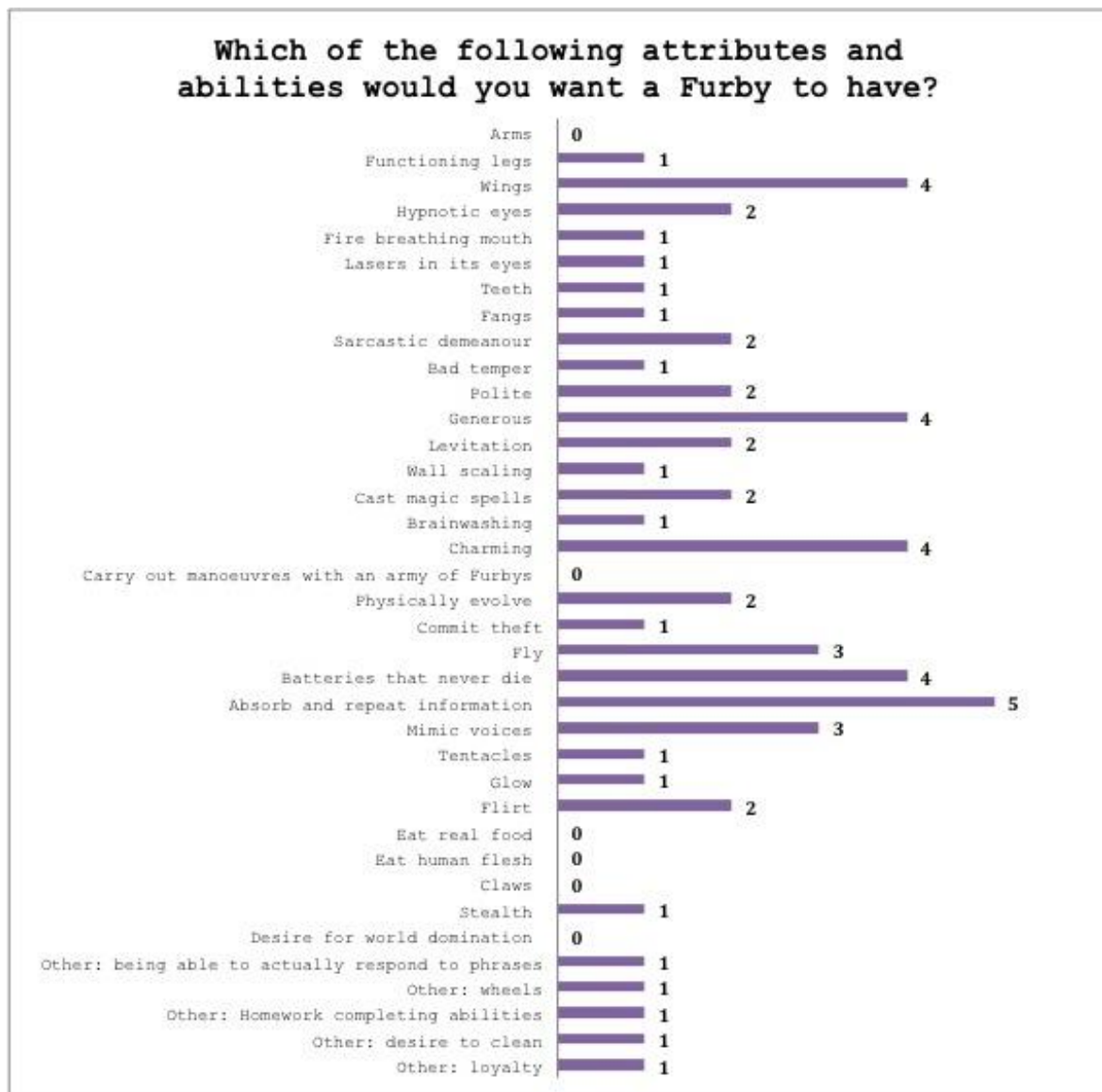

Figure 4.24 Author. (2012). *Furby* attributes.

Responses to the list of attributes and abilities suggest positive rather than negative relationships with *Furbys*, as popular responses include charming, generous, and polite behaviour, highlighting how users would like to be treated by their *Furbys*. Physical qualities such as the ability to absorb and repeat information, batteries that never die, wings, and flight were also more popular, suggesting that increased mobility, and responsive and sustained interaction were desirable. Wheels, homework completing

abilities, desire to clean, and loyalty were added to the list by respondents, and suggest that *Furbys* should perform utilitarian tasks as well as being companionable and pleasant. Again, a hierarchical relationship is implied because the *Furby* is in service to its user.

The following written responses perhaps elaborate on these positive relationships as they suggest that more responses and attentive *Furbys* would be desirable:

If you were to design your own Furby, what would it look like? What would it be capable of?

1. It would recognise your face and voice and be able to know when you were sad or lonely and try to cheer you up. I do think furby needs a nose and a better way to feed then than poking their tongue or using an app

2. Probably not much more than what it already can. In fact, just reading the list above and imagining fire-breathing, world dominator wannabe Furby kind of made me feel quite uncomfortable. I probably still am a bit traumatized by the Gremlins, a movie I saw at a young age.

3. I would design it to have realistic animal colours and I would have its vocabulary to be much larger. The less "toy-like," the better, as it would make a nice alternative to animals as pets for those who are allergic, or can't afford or cannot house an animal as a pet. I like Furby is it is, without moving feet, but would consider putting it on wheels and having a sensor to it know it is about to bump into something. The current little non-moving feet are adorable and would stay.

4. It would look like the 2012 Furby, except for the freaky colours. I like the colour of the fur to be more natural (black, white, grey, or combinations of those colors). As to what it should be capable of – it would be really great if it could "understand" some of the things you are saying, and respond in a way that makes sense.

5. I still love the original Furby design, but maybe if it had secret go-go gadget style arms, so it could cook and clean and do the stuff I hate doing. Basically it would be a servent-bot but it would be really happy about cleaning up cat poop. It would also have some form of face-recognition software so it would form an attachment to you and be kind of snarky to people that don't like

These responses offer opinions on how *Furbys* could be physically enhanced, with mentions of extra appendages and the ability to recognise its caregiver. Additionally, three responses mention that *Furbys* should understand emotions and respond appropriately. Overall, these responses tended to focus on what *Furbys* could do for them. Also of interest are comments that *Furbys* should look more "real" or more like an animal. The repeated comments that *Furbys* should be more responsive, attentive, and capable of forming attachment suggest that respondents want to be cared for by *Furbys*, and not the other way around.

4.3.2 Fantastic narratives

81%–the vast majority–of the responses to my scenarios are categorised as fantastic because they: 1) take nonhumans (*Furbys*) as main characters and; 2) place them in a familiar world with unfamiliar rules. To Todorov (1973), the essence of the literary fantastic is a challenge to our perception, occurring when, "[i]n a world which is indeed our world, the one we know, a world without devils, sylphides, or vampires, there occurs an event which cannot be explained by the laws of this same familiar world" (p. 25). As discussed in Chapter 2, section 2.2, the placement of unfamiliar elements or perspectives in a familiar world is a strategy of defamiliarisation that encourages reflection on the world as we know it. The fantasy genre encompasses a wide variety of narratives (Armitt, 2005), but for the purposes of understanding experiences with electronic companions, I have chosen to focus on the animal story, as Le Guin (2009) argues that "[t]o include an animal as a protagonist equal with the human is – in modern terms – to write a fantasy. To include anything on equal footing with the human, as equal importance, is to abandon realism" (p. 38). By writing electronic companions as protagonists in animal stories, we place them at the centre where we cannot be indifferent to, or removed from them. As discussed in Chapter 2, section 2.1.2, the dominant cultural interpretations of electronic companions place people at the centre, with concern given to how human life will be altered by their presence.

Animal stories

Growing up, I read Jill Barklem's (1980) illustrated Brambley Hedge books about a rural community of mice. The inhabitants of Brambley Hedge wore clothes, cooked in kitchens,

worked in mills, and played with toys. They also had human names and social ranks, such as Primrose and her parents, Lord and Lady Woodmouse. Looking back, I understand that these characters were animals that in some ways lived like people. These are the first stories that came to mind when I read responses to my scenarios, because the authors make *Furby* seem a little bit human. The *Furby* protagonists appear to behave like people, closely fitting the category of animal story which Le Guin (2009) simply describes as involving characters with "a mixture of behaviour proper to their species and human behaviour" (p. 73). As discussed in chapter 2, Section 2.2.3, Le Guin approaches fantasy narrative as a means of reconnecting with, and understanding, other species from which we have been separated by technological innovation. In addition, animal stories can also be seen as a means of talking about ourselves, because "[to] know what we are, to know what it means to be human, we need to know what we are not and what others are" (Boyd, 2007, p. 230).

The matter of anthropomorphism is also complex: sometimes *Furbys* act like humans and sometimes not. In the following responses, the protagonists are referred to as *Furbys* but act like people—and it is unclear if additional characters are human or nonhuman:

```
Multiple images 1: Anonymous on January 20, 2013 at 3:38 am said:
An elderly Furby is having some home renovations done. The workmen take a
break to listen to a sports match on the radio.
```

```
Multiple images 2: Anonymous on January 20, 2013 at 3:41 am said:
The local team lost the finals match. Fans are rioting. The elderly Furby
is contemplating throwing a squid down onto the fans who're trampling her
flower garden.
```

Writing on Beatrix Potter's animal stories, Cosslett (2006) highlights the blurring of animal and human evident in the characters: "[w]hether they are clothed or not, or using tools and furniture, or living in human houses, does not necessarily correspond to their animal/human poses, nor do all these features work together consistently" (p. 154). This suggests that we need not expect *Furby* to be rendered as purely human or nonhuman. Indeed, the following examples highlight a mixture of behaviours and abilities recognisable as both human and *Furby*:

The first Furby just wanted some new silverware, and maybe a dictionary
or two so he could reach the wine he's looking at, maybe get the waiter's
attention. The second Furby found something wrong with his food. The
second Furby does not like the idea of eating Bob or becoming a cannibal.
Bob was the second Furby's best friend in high school. The second Furby
had some good times with Bob, singing songs an playing Red Light Green
Light. Good times. This was not the gourmet dinner he thought he was
going to eat. In the last picture, the gray Furby still does not want to
eat Bob. The white and purple Furby is either asleep, or playing around
with his fur. The black Furby is still looking at his wine, which he can
now never reach, since he left it on the table.

Video 7: Anonymous on January 21, 2013 at 10:47 am said:
White furby is teased mercilessly for his loud and clinky gears. He
responds with attempts at humour but they do not go down well.

Video 2: Anonymous on March 19, 2013 at 3:57 pm said:
[…]The video eyed furby says this is just a joke, what she feels is an
'awakening' and is becoming in-tune with her internal components.
Together, they all describe what they feel inside of them, (their
batteries and parts) but by wild metaphoric guesses since none of them
have seen a dissected or lacerated Furby.

The *Furbys* above are anthropomorphised, yet remain *Furby* (i.e. nonhuman) as well.
Their small stature is mentioned when the *Furby* cannot reach its drink, and another
remembers playing "Red light, green light", a *Furby* game from the 2005 edition. In Le
Guin's (2009) animal stories, "heroes act from reasoned motives and aims not shared by
any other species. And some of them use tools, wear clothes, drive cars, have wars –
owning technologies and acting out patterns of behavior that are strictly human" (p. 73).
The above examples fit within this type of narrative, and further exemplify Le Guin's
(2009) human–animal community:

> There is no explanation, no justification of this blending of animal and human […]
> Could there be any stronger evidence of the felt community of human and animal
> than such an unapologetic and successful assertion of it?" (Le Guin, 2009, p. 74)

There is no explanation as to how the *Furbys* have come to embody human attributes, or
even where humans fit into their lives–they simply do. Further, in Chapter 3, I noted that

Furby protagonists allow us to see a *Furby's* perspective on its caregiver, but in the above examples, there is no human, and instead we see *Furby's* perspective on itself.

Strategies of defamiliarisation

Returning to notions of defamiliarisation, I identified various strategies that moved the *Furbys* closer and further away from us, rendering them both stranger and more familiar. Distance between humans and *Furbys* is created both through the story content, and the point of view. The following section examines these strategies in closer detail.

Familiar worlds

By using familiar elements of the human world such as domestic goods, social activities, familial relationships, and proper names, *Furbys* are brought closer to people as they appear to lead comparable lives. In this sense, all of the fantastic responses can be read as acts of anthropomorphism, albeit to greater and lesser degrees. Second, the *Furbys* are familiar because they speak like people. Sharma (2004) argues that any application of language to those outside the human species is anthropomorphism because "language expresses human awareness of objects and not objects themselves, whatever their true nature" (p. 1). From this perspective, the language used to tell the *Furby* stories brings them closer to us because only humans use language, and the "linguistic structures and words specifically expressive of human experience are nearer to us and touch our feelings much better than those associated with "non human" experience" (Sharma, 2004, p.4).

The locations and goods mentioned in the responses are familiar and create the impression that the *Furbys* live in the built world with material possessions, even if some of those possessions are put in scare quotes:

Multiple images 6: Anonymous on January 27, 2013 at 1:36 am said:
I'm so glad to be back home in my own bed tonight[…]

Video 5: Anonymous on January 21, 2013 at 2:45 am said:
Where's Granny? Look, there's her shoe … a sock … her underwear!?!? … Granny, how many times do we have to tell you?!?! Here in the city, we

don't go skinny dipping in our backyard pool. You're scaring the kids in the next-door kindergarten.

<u>Multiple images 4: Anonymous on January 27, 2013 at 1:10 am said:</u>
A snowstorm has downed the power lines[…}

<u>Multiple images 3: Anonymous on January 27, 2013 at 1:13 am said:</u>
Even though his now-blind grandmother can no longer properly knit, the young Furby still wears the "sweater" she's given him today for his birthday, because he deeply loves her.

<u>Multiple images 1: Anonymous on January 20, 2013 at 3:38 am said:</u>
An elderly Furby is having some home renovations done. The workmen take a break to listen to a sports match on the radio.

<u>Video 2: Anonymous on January 21, 2013 at 2:25 am said:</u>
They're discussing what to give their father for his birthday, either a necktie, socks, boxershorts.

Notice that the *Furbys* described above have families, as there is mention of fathers and grandmothers. They also have familiar rituals such a birthday gift giving. In the following examples familiar practices of eating and socialising, along with references to health and even animal ethics, are also an example of how *Furbys* are made familiar:

<u>Multiple images 6: Anonymous on March 19, 2013 at 4:20 pm said:</u>
I hate eating this fucking lettuce. I mean, I really, really hate it. What I want is a big juicy steak and a banana split. I hope my heart is healing. Something should be enjoying this.

<u>Multiple images 7: Anonymous on January 27, 2013 at 1:17 am said:</u>
"Mother, what's this that we're eating?"
"It's chicken."
"Chicken? … You mean like the animal 'chicken' ?"
"Yes."
"Doesn't that hurt it's feelings?"

<u>Video 7: Anonymous on January 21, 2013 at 2:58 am said:</u>
You were late for our date, so I had to eat the whole pizza by myself. (Burp.)

Also closer to the human experience, in the following examples, the characters are referred to by both Anglo and non-Anglo names, rather than "a *Furby*", or the *Furbish* names that they come with upon purchase. In this sense, the *Furbys* are made familiar as humans, but also unfamiliar through foreign (non-English) names:

```
Multiple images 2: Anonymous on March 19, 2013 at 4:01 pm said:
Brubar has been enjoying a relatively pain free existence the past few
days. He has neither felt the pain from Hektor's instruments of torture,
nor heard his miserable shuffling feet or gurgling laugh[…]
```

```
Multiple images 3: Anonymous on March 19, 2013 at 4:04 pm said:
Munrei, free to leave his captor, hesitates[…]
```

```
Video 4: Anonymous on March 19, 2013 at 4:06 pm said:
Jenny Francis comes to the tea party drunk (again). Everyone is offended
and leaves 'oh well, more for me', she declares. Connie finds Nancy dead
in the other room[…]
```

```
Anonymous on January 24, 2013 at 1:03 pm said:
Oblivious to the screams of their friend, Chuck and Meredith felt their
love blossom amongst the lilies.
```

```
Multiple images 5: Anonymous on January 21, 2013 at 11:04 am said:
Marie and Celeste are faced with their own mortality and obsolescence,
when they come across the discarded pieces of one of their own.
```

```
Multiple images 8: Anonymous on January 21, 2013 at 10:45 am said:
Steve has given Jeff his tamagotchi to babysit[…]
```

The use of names also indicates how people attribute gender to *Furbys,* which are created genderless. In Chapter 3, section 3.2.1 I noted that positive relationships among *Furbys* sometimes included heternormative behaviours, as is also evidence in the above example of Chuck and Meridith experiencing romance. Attributing gender roles to *Furbys* makes them more familiar and human.

Unfamiliar rules

While the previous examples demonstrate ways in which *Furbys* are made familiar, the following examples show how the worlds written in the scenario responses do the opposite

and effectively create distance between the *Furby* and the reader through strangeness. As discussed above, familiar events and spaces can be defamiliarised by showing the world from a different perspective. From a fantasy perspective, the presence of things that cannot be described through our rules of reality evoke the fantastic and in the scenario responses *Furbys* are both made strange and placed in strange situations.

In two responses, the *Furby*–caregiver relationship as we know it is shifted so that *Furbys* are a species that existed on Earth before humans. More specifically, both of these fantastic responses clearly state that the story is set in the world as we know it, which is consistent with the definition of the fantastic as a familiar world with unfamiliar rules.

Video 1: Anonymous on January 20, 2013 at 4:06 am said:

This is an analogy of the downfall of the civilization that preceded ours: that of the Cavy. Originally, they naturally had 4 fingers on each hind and fore foot. With 16 in total they were attune to the binary and hexadecimal counting systems and were able to create hugely powerful computers. However with such power came knowledge that led to their downfall. It became possible to create genetically engineered children. Not happy with your own fur colour; improve your child's lot in life by genetically altering theirs to a more fashionable hue before they were even born. But they didn't stop at fur colour. No, not at all. Dainty hind feet became the goal, and what easier way to do this than to simply engineer out one toe. But this was their undoing. After several generations of 14-fingered Cavies, they lost their capability to even understand the computer systems their 16-fingered ancestors had created. Without their global computer and communications systems, they became isolated and their once-universal language become fractured and localised. Thus they spiralled down to nothing more than chirping furry creatures roaming through the grass, having to use burrows abandoned by other creatures to hide from predators.

Video 1: Anonymous on February 10, 2013 at 7:03 pm said:
Furbies are the original guardians of the planet and when man arrived they laid dormant for many eons, now that man hasnt taken enough care of the planet, the furbies have had to come back and take over.

These two stories serve as parables, turning history around by positioning *Furbys* as human predecessors, and in some ways our "superiors". As a species that inhabits the

Earth, the *Furbys* exemplify Le Guin's (2009) non-hierarchical quality of showing "everybody on an equal footing in a wild world" (p. 71). Of course, in this process *Furbys* are further defamiliarised through their depiction as an animal species rather than material objects. In the above response, humans have been inadequate caregivers and *Furbys* have a prior claim to the Earth as guardians. The care relationship, as portrayed in manufacturer care guides, has been altered so that *Furbys* do not need people to survive. This view is again consistent with Le Guin's (2009) perspective on pre-industrial human–nonhuman relationships:

> The neighborliness or fellowship, when positive, was often seen as a spiritual kinship. In that kinship the animals were generally seen as the elders, the forerunners, the ancestors of the humans. They are the people of the Dream Time. (p. 45–46)

The relationship in the above examples is between fellow species and kin, not people and mere possessions.

Other examples grant *Furbys* unfamiliar, strange, and even magical characteristics and capacities:

Video 1: Anonymous on March 19, 2013 at 3:55 pm said:
The narrator is some kind of old/original Furby who is a bit troubled by a new breed of Furby who can communicate through telepathy – which has apparently caused other sorts of mutations in appearance as well. Even though they speak and look differently, the video ends with a cautious optimism that 'we are all Furby'.

Care guide 3: Anonymous on March 19, 2013 at 4:17 pm said:
Furby team up with NIWA to make 'aquatic friends to the rescue furby'. If you see anyone poaching paua , please place this furby into the water. Then watch Aquatic Friends to the Rescue Furby administer justice through taloned tentacles and razor sharp beak.

Video 7: Anonymous on March 19, 2013 at 4:24 pm said:
One furby is farting, and another is recording it's sound and smell and selling it instantly on eBay via internal wifi connection. A bidding war in Korea breaks out, so they decide to keep selling more. At this rate, someone is going to lose a bet and be forced to shave off his beard.

Care guide 1: Anonymous on March 19, 2013 at 4:09 pm said:
This Furby has used its magical powers to rewrite the care guide, hoping this will scare any future owners into returning it instantly – in order to unleash fear and terror unto the toy aisles at the local Walmart after hours.

Multiple images 4: Anonymous on January 21, 2013 at 10:42 am said:
The possessed Furby prays to the lord of darkness for freedom from playing Simon Says

Notice that the physical capacities given to *Furbys* also shift their role and relationships. For example there is tension between the *Furbys* because some are telepathic, a *Furby* becomes a marine protector, and in the last two examples the *Furbys* are threatening or evil. The latter examples in particular are similar to the evil *Furbys* discussed in my analysis of fan fiction that often had an explicit dislike of people or the human world. Changing the physical and behavioural qualities of *Furbys* in the above examples disrupts the care relationship as we know it because now some *Furbys* are not nonthreatening and friendly, others communicate by different means, and they perhaps have the physical and mental capacity to care for themselves.

In the following examples, the *Furbys* are characters experiencing situations that are unfamiliar, either because of a strange presence or because of a strange event.

Multiple images 5: Anonymous on March 19, 2013 at 4:11 pm said:
"Hello Butroh, where have you been? "
Pant, pant…"I was just in the garden playing croquet with Geraldine when we were attacked by the Ever-Blades."
"The Ever-Blades? You mean they are back?"
Pant, pant…"Yes, and I'm afraid they have Geraldine!" Sniff, sob, sob.

Multiple images 2: Anonymous on February 4, 2013 at 3:07 pm said:
Perhaps there is some sort of apocalypse going on, and on the ground appears to be a piece of the mechanism in a Furby that crashed through the wall. It's quite gruesome.

Video 5: Anonymous on March 19, 2013 at 4:13 pm said:
Geraldine and Quaky were very much in love. They decided to go to the arcade for slurpees, pac-man, and perhaps later intercourse.
"Who is that?"

```
" It's Dr. Wulfenbush!"
"What's wrong with him?"
"It is only his body, his soul has gone elsewhere…. This is it then,
after all. Against everything we have rallied against in defiance through
our university education, the rapture and tribulation of Christianity are
true. The saved souls have ascended to heaven and we, the damned, have
this time to sort out whether we will believe in him and have everlasting
life."
"Do we still have time for pac-mac and hanky panky?"
```

These unfamiliar circumstances seem to put *Furbys* in peril, and in two examples they are experiencing an apocalyptic event. In contrast to the often banal stories discussed earlier in which *Furbys* listened to the radio or selected birthday presents, these *Furbys* are in calamitous scenes that are uncommon in everyday life. However, by placing them in potential harm, these responses give *Furbys* mortality, and the ability to question and fear it. Unlike *Tamagotchis*, *Furbys* do not die of old age or ill care. Instead, the only "death" *Furbys* can experience is via battery removal or the pressing of their reset buttons. The *Furbys* in the above responses are much closer to humans as they fear death and even have religious views on the afterlife.
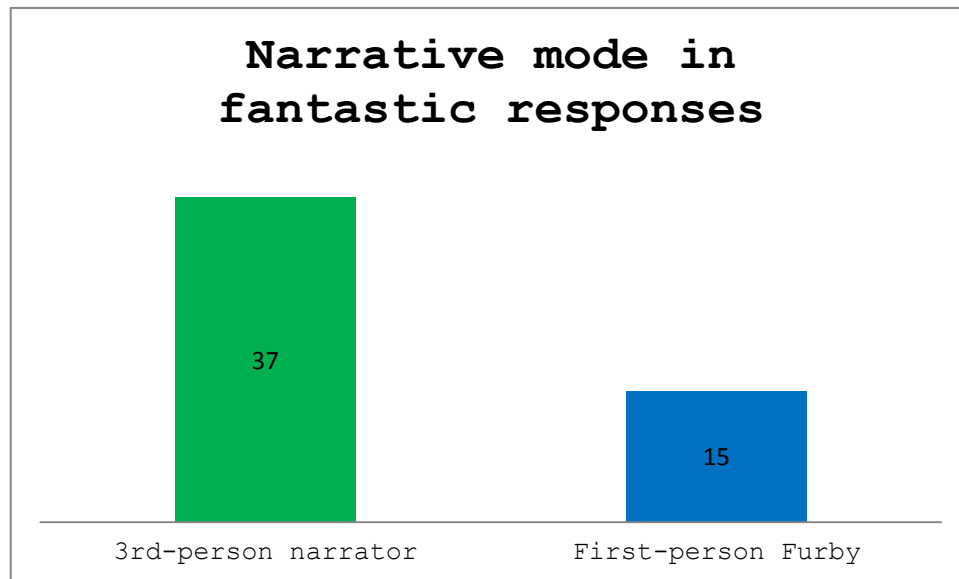
Narrative mode and distance

Figure 4.25 Author. (2012). Narrative modes in responses.

Narrative mode refers to who is telling a story and how. In my discussion of relationships between humans and nonhumans, narrative mode is important because it influences how readers get to know a character, and from which perspective. As Lodge (1992) reminds us, the point of view of a story "fundamentally affects the way the readers will respond, emotionally and morally, to the fictional characters and their actions" (p. 25). Again, it is *Furbys'* capacity of speech that makes this communication possible, and easier to identify with.

Returning to Le Guin's (2009) assertion that fantasy reconfigures our relations with nonhumans, different points of view can be understood as differences in how humans are related to nonhumans. Specifically, third-person stories place us near or even equal to each other, but in first-person stories, we may become *Furbys*. In this sense, the narrative mode dictates whether we are "among [or] above" nonhumans (Le Guin, 2009, p. 45). Note how the distance between the human reader and a *Furby* is configured in the following third-person responses:

Multiple images 3: Anonymous on January 24, 2013 at 12:58 pm said:
A dark shadow loomed over Furby, covering him from head to foot. If he

looked now he knew he'd be a goner. He felt the warm trickle of fear down his leg. He knew there was nothing he could do. Once you are found the only path is to run as fast as you can, and even if it wasn't already too late for escape, Furby acknowledged that he was no track star. Furby waited for judgement to fall upon him. Furby thought about all those wasted years.

Munrei, free to leave his captor, hesitates. One part of him feels free – as arms and legs have minds of their own to keep walking. But another part of him feels scared, irrationally unhinged like a body cast adrift in the sea. Terror rises up as he realizes he not only misses, but craves for bondage once more.

Although these examples distance us because we only get to look in on *Furbys*, the content encourages us to witness their predicament and sympathise with their plight, which makes it difficult to look down on them. These are examples of third-person narration that, as indicated in the graph at the beginning of this section, was the most common narrative mode used by respondents. The majority also present one point of view, as is common in third-person narratives. As an explanation, Mullan (2006) argues: "It is as if fiction were duty-bound to be true to our experience of the world, in which the perspectives of most people we encounter are guessable, but not knowable." (p. 68). However, when responses did include the point of view of multiple characters it offered the opportunity to see the same events unfold from different perspectives. For example, notice in the following excerpt that the point of view shifts between characters:

Jenny Francis comes to the tea party drunk (again). Everyone is offended and leaves 'oh well, more for me', she declares. Connie finds Nancy dead in the other room. She disposes of the body and covers the evidence, because she is afraid that Jenny Francis may have committed murder in a drunken fit. Jenny Francis, completely innocent, yet still drunkenly oblivious, enters the room and finds some blood. Or is it blood? Her drunken mind is trying to parse the information when Connie surprises her. They don't know what to say to each other: Connie is mulling over whether Jenny Francis realizes what she did, and how she will lose the house if the police are informed; Jenny Francis is realizing that it is blood, and since there is no sign of Nancy, Connie must have murdered her

and hid the body – should she call the police or fix another brandy alexander?

By shifting between Jenny Francis and Connie, we learn something about their relationship with each other, and empathise with both. Finally, in the following first-person narratives, *Furby* is positioned as a protagonist making sense of its own memories and experiences. Additionally, in these responses we get to imagine ourselves in *Furby's* place; taking one step further than simply being among them, we are invited to see the story through their eyes.

Multiple images 1: Anonymous on January 24, 2013 at 12:44 pm said:
I live in a world of darkness. Sometimes I think I hear someone nearby, but then I realise it's just the sound of loneliness. I open my eyes and see nothing. I close my eyes and see my forgotten dreams.

Video 3: Anonymous on January 21, 2013 at 2:30 am said:
Look, all the grey hairs are gone. I've plucked them all out. I'm young again. ... wow, it's drafty in here. Where did I leave my sweater.

Video 6: Anonymous on January 24, 2013 at 12:41 pm said:
I really shouldn't have eaten that cat nip…I feel weird…DOES ANYONE ELSE'S EYE FEEL SORE?? Just me then………………………………………………………………………………………………………WOAH I think I just fell asleep – what time is it? BAHAHAHAHAHA you're so funny…..shut up man. How does that song go again?…I can't feel my tongue.

Multiple images 6: Anonymous on January 27, 2013 at 1:36 am said:
I'm so glad to be back home in my own bed tonight. This past weekend's camping trip was a disaster. My snoring woke everyone, so to get even, they shoved me into my sleeping bag head-first. How embarrassing.

Although we are introduced to *Furby's* point of view through manufacturer care guides, the above narratives can be read as *Furbys* reflecting on their experiences rather than talking to a potential caregiver. While both third and first person narrators can take us into the mind of a character, Mullan (2006) explains that a first-person narrative goes further:

> Such a narrative engages us not simply by giving access to a character's thoughts
> (an 'omniscient' narrator can also provide this) but by opening a gap between the

'I' who tells the story and the 'I' who is the past self. Here, potentially, is the drama of a person trying to make sense of him- or herself. (p. 45)

In the above examples the human perspective is completely decentralised because rather than being with *Furbys*, we are the *Furby* and we get to examine the past and present of that character. In contrast to the earlier discussed human-centred stories that use the *Furbys* to tell stories about people, these *Furby*-centred responses tell us what it is like to be *Furbys*. From this perspective the reader is encouraged to see that *Furbys* are not defined solely by interactions with their caregiver, and that they could be rich and complicated creatures.

4.4 Conclusions

At the beginning of this chapter I chronicled my experience of acquiring and interacting with a collection of *Furbys* who acted as my nonhuman research participants as I staged them to create still and moving image scenarios. Creative nonfiction allowed me to reflect on how my own experience among *Furbys* and how it related to the stories I had read about them. I concluded that my own relationship with them was characterised more by apathy than the strong positive or negative emotions that came out in fan fictions, and this encouraged me to consider how a mediocre relationship could be communicated and add to the discussion of electronic companionship. I then discussed my approach to creating eighteen visual scenarios for participants to write responses to online. In particular, I drew on the *Furby* stories discussed in previous chapters and the aesthetic strategy of making *Furby* appear strange, or defamiliarised. I then presented descriptions of each of my scenarios, focusing on my design motivation and the process of staging it.

Before presenting my analysis, I discussed inviting interested parties to participate in my research, particularly focusing on a discussion that happened in the www.tamatalk.com community forum, in which posters commented on the dark and disturbing tone of my scenarios. This discussion was particularly interesting as it taught me what the www.tamatalk.com members regarded as appropriate interaction with *Furby*, and the appropriate role and obligation of a caregiver.

Finally, I presented my analysis of eleven responses to my two online questionnaires and sixty-four responses to my visual scenarios. I determined responses to be human-centred, fantastic, and a small number as "other". In the seven responses that I categorised as human-centred, the stories seemed to factually explain what was happening in the scenario, and the authors did so by reflecting on how they saw themselves in relation to *Furby*, or describing them as symbolic lessons about humans. The eleven responses to my questionnaires about *Furbys* and electronic companions were also human-centred, and in particular respondents drew comparisons to *Tamagotchis* and commented on how *Furbys* could be more responsive and attentive to their caregivers.

The vast majority of responses were categorised as fantastic because they placed a nonhuman (*Furby*) at the centre of the narrative, and included seemingly magical or supernatural phenomena. Through these fantasy tropes, responses made *Furbys* more and less familiar. They were rendered familiar when granted speech, domestic goods and locations, and familiar social practices. The *Furbys* were unfamiliar when given physical capacities inconsistent with their reality, and when placed in strange situations. Finally, the narrative mode of the responses reconfigured relationships with *Furbys* through the distance it created. In third-person narratives we were placed among *Furbys*, and in first-person narratives we became the *Furby*.

The *Furbys* seemed to be written about in the same way that animals are written about in fantasy, not as the other-worldly being, or the electronic object that they are often positioned as. *Furbys* were also given more human lives, where they were introspective, social, and biological. Put another way, the *Furbys* were written as our equals, not our possessions. In line with my intentions when creating these scenarios, the responses depict rich characters in moments of conflict and peace. Image sets and videos tended to receive more stories about autonomous *Furbys* than the care guides. Further, in the scenario responses, there were more examples of the *Furby* perspective, in contrast to the fan fiction where we more often saw the *Furby* through human eyes. This is likely because my scenarios did not feature humans in them at all. The questionnaire responses were also more anthropocentric than the scenario responses, suggesting that the scenarios, as well as the open question of "what is happening" encouraged more fantastical stories than questions that focus on what an electronic companion should, or could be like.

5. Conclusion

At the time of writing, Hasbro has just released the latest generation of *Furby*, the *Furby Boom*. A video shows the *Furby Boom* sitting next to tablet device to which it is connected via a high-pitched radio signal. Visual health meters on the screen communicate that *Furby* has a low level of hygiene and so a shower nozzle appears onscreen, dispensing cold water that makes the physical *Furby* shiver. Once the *Furby* is sufficiently happy and healthy, its caregiver presses a stylised egg symbol onscreen. *Furby's* eyes glow, and glittery lights on the screen form the shape of an egg that proceeds to wobble and bounce until a *Furbling* – a squat *Furby* infant–erupts from the shell amidst bright lights. The video concludes with a demonstration of *Furby* using a toilet. It appears to strain for a moment, its eyes pressed shut, and then the onscreen toilet bowl is filled with roses. Despite the usually pleasant odour associated with roses, the toilet bowl emits an ominous brown cloud, prompting the caregiver to press a digital air freshener to combat *Furby's* disgusted reaction.

This latest version combines *Furby* with the interface of the original, screen-based virtual pets that visualised levels of cleanliness, hunger, and happiness. This new addition makes the care aspect of *Furby* more pronounced than before as its health has been quantified– much like the *Tamagotchi* health meter–and affects whether it will lay an egg or not. This increased focus on numbers also seems connected to the broader contemporary interest known as the "quantified self" (Wolf, 2009) in which new tracking tools and technologies represent people as collections of personal data sourced from their everyday habits. As new *Furby* versions are released, it seems we learn more about the *Furby* creature, what it is, and how it matures and reproduces. As I write, more fan fictions with *Furby* characters continue to pop up in online archives, and it is yet to be seen if their fictional *Furbys* too will be updated with the latest developments.

The earlier 2012 *Furby* release*,* with its accompanying app, appeared to reflect the increasingly pervasive presence of smart devices and the *Furby Boom* extends this through the health interface, and the virtual *Furbling*. Along with these new *Furbys* is also an emerging online presence for the *Furby* brand, including frequent Facebook and Twitter updates. It seems possible that future iterations of *Furbys* could further cement this

connection and link to their owners' digital profiles. These new *Furbys* also have distinct personalities that appear in response to particular kinds of interaction. For example, overfeeding sparks a personality transformation into a seemingly evil persona that hates to be petted and vomits up all of its food. The extreme personalities of *Furbys* tell us something about what kind of treatment is acceptable, as repeated tail pulling results in a "crazy", unpredictable *Furby*, while petting and stroking evolve a *Furby* that is friendly and cute. However, personalities are not fixed and treating the *Furby* differently will bring about another transition. As with the original *Furby*, we are still taught through its behaviour and instruction manual that *Furby* should understood as a companion animal that needs to be cared for and should be treated with kindness. However, the ease by caregivers can redeem their ill-treatment by treating *Furbys* the "right" way also teaches us that misuse and mistreatment are equally impermanent.

In exploring the complicated issues that electronic companions raise, my thesis has argued that storytelling is a primary and productive means by which we make meaning in, and of, the world. In other words, we tell stories to imagine ourselves, nonhuman animals and technological nonhumans in the world, and I sought to explore the stories told by users, or caregivers, of electronic companions as a means of articulating the boundaries of this emerging form of companionship.

In Chapter 2 I argued that electronic companionship and its boundaries are always already in the process of being articulated, and stories of design, marketing, media, and cultural research all offer different perspectives. Through aesthetic material and textual choices the design and marketing of *Furbys* clearly positioned them as friendly, inquisitive, nonthreatening creatures in need of care. This narrative also set up the kind of relationship that should (ideally) be had with a *Furby,* suggesting that it cared greatly for us and needed to taken everywhere we went. However, the relationship encouraged through marketing and design was shifted after *Furby* was released, through media and research perspectives that characterised it as disruptive by arguing, for example, that requests for care made *Furbys* irritating rather than endearing. Adding to this, cultural researchers such as Turkle (2011) referenced media narratives about disruptive *Furbys* to raise concerns that electronic companionship has a negative impact on human sociality.

Because of these contrasting representations, I argued that practices of familiarisation and defamiliarisation were productive, critical, and imaginative means of exploring the shifting and uncertain status of electronic companionship. I suggested that design and marketing stories work to make nonhuman technology positive and utopian by making *Furby* friendly (familiarising it), yet other-worldly (defamiliarising it). Building on this concept, I went on examine how literature that often deals with the impact of technology and our relationships with it, such as gothic literature, science fiction, and fantasy, and how it might offer useful perspectives on *Furbys*. For example, gothic and science fiction stories, which are typically human-centred, often work to defamiliarise technology in an overly dystopian or utopian way by drastically extrapolating its presence and intelligence to make it an omnipotent threat or divine saviour. Lastly, I argued that animal stories defamiliarise the experience of interacting with nonhumans and technology by decentring the human and the technological in a way that is not necessarily positive or negative. Specifically, Le Guin's (2009) animal stories evoke a pre-industrial relationship with nonhumans that is characterised more by equality and kinship than domestication and domination, and therefore removes the familiar hierarchy of species. These different literary approaches to making the familiar presence of technology appear strange in not entirely utopian, or human-focused ways offer the means to challenge and resist the idealist marketing visions of *Furbys*.

Building on the idea that narrative techniques are helpful for understanding technology use and adoption because they can show us an unfamiliar perspective as well as a detailed account of an object in use, Chapter 3 introduced online fan communities and the practice of fan fiction. I suggested that fan fiction featuring *Furbys* might offer insights into how people understand and make sense of relationships with electronic companions because its authors use writing to reassemble and reimagine cultural texts such as literature, movies, and television shows to reflect their own experience. Fan fiction also challenges dominant cultural narratives, including the hierarchical, human-centred view of nonhumans, making it a critical and reflective practice. Further, as Derecho (2006) in particular argues, fan fiction is defiant because it reassembles existing, and often copyrighted material to express the fan's personal viewpoint and satisfy their desires.

The second section of Chapter 3 presented my analysis of twelve stories from the *Furby* and *Tamagotchi* fan communities www.adoptafurby.com and www.tamatalk.com and

sixty stories from the large online archives www.fanfiction.net and www.archiveofourown.org. The specific fan communities have stricter guidelines for, and moderation of, the stories that can be shared, as opposed to the large online archives that cater to an enormous array of fandoms, genres, and age ratings. My analysis questioned how positive and negative relationships with *Furbys* were constructed in fan fiction in order to explore if, and how, they supported or rejected design and marketing, media, and cultural research narratives about *Furbys*. The fan narratives of www.adoptafurby.com and the one story from www.tamatalk.com predictably told more positive stories about *Furby* and often made it the protagonist. Though there are far fewer stories from these communities, I noticed more examples of the positive *Furby* relationships encouraged by design and marketing narratives, and more characters that were happy to care for a *Furby*, rather than annoyed by its requests for attention because they saw it as a genuine friend. These stories also generally show us how ideal (i.e. "good") companions and caregivers should be: compassionate, empathic, and kind. These strong bonds arguably reinforce the concerns of cultural researchers that electronic companions could replace human companions. Positive stories about *Furby* relations brought in elements of fantasy, including making the nonhuman the protagonist; highlighting the inner feelings of *Furbys*; allowing us to empathise with them; giving them the ability to converse with humans; and even taking fantastical journeys. In other words, it was fantasy that made good companions out of *Furbys* and in return, good caregivers out of humans.

On the other hand, in the stories from www.fanfiction.net and www.archiveofourown.org, *Furbys* were more often the antagonist or an unwelcome presence. These stories featured negative depictions of *Furbys*, and exaggerated features such as their bodily appearance, physical capacities, and personality, to make them threatening and annoying, and thereby rejecting the marketing narrative that *Furbys* are friendly and kind. These stories also reinforced and built upon media narratives, in particular rumours that *Furbys* were spy devices, and looked like gremlins. These stories also had similar themes to dystopian science fiction and gothic fiction, particularly a contentious and dysfunctional relationship between people and technology, and fears surrounding its power. In particular, evil, monstrous, and devious associations evoke fears of technology as a nonhuman other. Ultimately, the *Furbys*, and the relationships with them that were constructed through these stories were complicated and quite often dark, a significant contrast to the instant

friendship that *Furbys* were designed to offer. Ultimately, this analysis demonstrated that electronic companionship does not stay within the bounds of the marketing story, and nor do consumers passively let it dictate the nature of their relationships.

On another level, my analysis showed that making meaning through stories about *Furby* is also a socially and culturally connected practice through involvement in communities and fandoms. In contrast, cultural research of sociable technologies often focuses on anecdotal evidence of the intimacies between human and technological companion, but in doing so, it misses out on the broader cultural practices that find users connecting with each to share experiences and make meaning by likening their companions to existing cultural imagery. Further, Turkle (2011) in particular has argued that our relationships with technology take away from our human–human interactions, but it seems that telling stories about *Furbys*, whether positive or negative, is a social act.

In chapter 4 I chronicled my own experience of acquiring and interacting with a collection of *Furbys* who acted as my nonhuman research participants as I staged them to create still and moving image scenarios. Taking inspiration from creative non-fiction, I reflected on my own experience among *Furbys*–which involved caring for them and dismantling them– in light of the often dramatic scenes described in fan fictions. Building on my interactions with, and observations on the collection of *Furbys*, I drew on the *Furby* stories discussed in previous chapters to create eighteen visual scenarios for participants to write explanatory responses to online. I utilised techniques of visual storytelling such as image panels and sequential images to make *Furbys* appear strange, or defamiliarised, in order to encourage critical and creative reflections on their presence and purpose. These scenarios were in the form of short videos, sets of images, and altered instruction manual pages (*Furby* care guides). I then presented an overview of each of the scenarios, describing how I imagined, and positioned the *Furbys* as characters in their own stories. For example, because new *Furbys* had been released, I wanted to show the different generations together and imagine how they would feel about each other. Because many of the fan fictions I analysed were from the human perspective, I wanted to see what kinds of stories would be elicited from my scenarios if I removed people all together, and whether this could tell us something new about electronic companions. I also created two short online questionnaires that asked participants what they would want a *Furby*, or electronic companion in general, to be like.

I included a discussion of the process of inviting interested parties to participate in my research, because the discussion that happened in the www.tamatalk.com community forum added to my understanding of relationships with electronic companions. Specifically, tamatalk.com posters commented on the dark and disturbing tone of my scenarios, and it was suggested that the creation of these scenarios involved the mistreatment of *Furbys*. These comments suggested that the *Furbys* in my scenarios were seen as having less agency than the humans that were supposed to care for them. In other words, to the commenters, the *Furbys* and I were not equals and I was failing in my obligation to care for them.

Finally, I presented my analysis of eleven responses to my two online questionnaires and sixty-four responses to my visual scenarios. I sorted the responses into categories of human-centred, fantastic (or nonhuman-centred), and a small number as "other" because they did not readily fit either category. The eleven responses to my questionnaires about *Furbys* and electronic companions were human-centred, and in particular, respondents drew comparisons to *Tamagotchis* and commented on how they wanted *Furbys* to be more responsive and attentive to their caregivers. In the seven scenario responses that I categorised as human-centred, the stories seemed to factually explain what was happening in the scenario, and the authors did so by reflecting on how they saw themselves in relation to *Furby*, or describing the image or video as a symbolic lesson about humans. The vast majority of responses were categorised as fantastic because they placed a nonhuman (*Furby*) at the centre of the narrative, and included seemingly magical or supernatural phenomena. These responses rendered *Furby* familiar when it was granted speech, domestic goods and locations, and familiar social practices. The *Furbys* were made unfamiliar when given physical capacities inconsistent with reality, and placed in strange situations. The narrative mode of the responses also reconfigured relationships with *Furby* through the distance it created. In third-person narratives readers were placed among *Furbys*, and in first-person narratives we (the reader) became the *Furby*.

In many ways, the *Furbys* seemed to be written about as animals are written about in fantasy, instead of as the other-worldly being, or the electronic object, that they are marketed as, and presented as in much cultural research. On the other hand, *Furbys* were also given a more "human" life, in which they were recognisably introspective, social, and biological. Put another way, the *Furbys* were written as our equals, not our possessions.

184

Furthermore, in the scenario responses, there were more examples of the *Furby* perspective; this stands in contrast to my fan fiction analysis when we more often saw the *Furby* as an "other" through human eyes. It seems likely that this is because my scenarios deliberately did not have humans in them at all. The questionnaire responses were also more anthropocentric than the scenario responses, suggesting that the visual scenarios, as well as the open question of "what is happening" encouraged more fantastical stories that imagine different possibilities for electronic companionship.

5.1 Design Implications and Considerations

By following the stories discussed above, there is an opportunity to better understand how relationships are formed with electronic companions, and perhaps design them in a way that challenges our hierarchical, human-centred understanding of nonhumans. As is appropriate for an interdisciplinary study, the implications and future considerations of my research will draw out connections between design, fiction, and culture to comment on how electronic companions might be researched and designed differently. The implications for design I identify address my research question of what designers can learn from fan fiction about *Furbys* by highlighting where there are gaps between design intentions and the experiences detailed in this thesis.

5.1.1 Design practice

The implications that I have drawn out for design practice address how electronic companions, the textual material (e.g. care guides) that surrounds them, and the broader experience of interacting with them could be reconfigured to more clearly acknowledge the way users articulate the boundaries of their relationships, and challenge our current understandings of relationships with nonhumans.

First of all, when stories, often in the form of instruction manuals, play a significant role in how we are introduced to electronic companions it strikes me that they could allow for more complicated, and less hierarchical, understandings of nonhumans. As I have argued throughout this thesis, the *Furby* origin story, that presented *Furbys* as nonthreatening,

friendly creatures from a cloud-land, was threaded through media reports, cultural commentary, and fan fictions that sometimes accepted, and sometimes rejected, its positioning of *Furbys*. By outlining the kind of relationship that users should have with *Furbys*, the care guides worked to familiarise *Furby*, a typically strange creature, and ostensibly make it more appealing. Embodied in the care guide is the sense that *Furbys* should be accepted and treated like familiar nonhuman-companions, or pets. As I argued in Chapter 2, section 2.2.3, electronic companions are understood along familiar lines as companion animals and therefore become entangled in a history that is characterised by domestication and domination. However, the stories told by users often defamiliarised the concept of electronic companionship by making *Furbys* strange and complicated, suggesting that the human–nonhuman companion relationship could be less anthropocentric, and perhaps more equal.

This leads me to ask, what if electronic companions were not designed to be familiar nonhuman companions, but instead strange creatures that we had to work to understand and identify with? What if the origin stories in care guides left the caregiver to discover the personality of their companion, and the kind of relationship they could have with it? And what if, through this discovery, origin stories encouraged caregivers to earn the companionship of technological nonhumans through the shared experience of getting to know one another? I don't yet know what this kind of electronic companionship would look like, but answering these questions could lead to a more inclusive and equal understanding of nonhumans, and help us to intervene on ethical debates about the treatment of nonhumans in different, hopefully more empathic, ways.

Cultural understandings of nonhumans, both animal and technological need to be taken into consideration if they are going to serve as inspiration for design, as media, folklore, and myth play significant, and active roles in how people make meaning of their experiences and world around them. As I discuss in-depth in chapter 3, section 3.2.2, designing electronic companions as imaginary creatures brings about negative monstrous associations that trouble the marketing of *Furbys* as nonthreatening creatures. In particular, monstrous "others" are ancient creatures continuously reproduced across cultures, and connected to negative attitudes towards nonhumans-whether animal or technological. Such ingrained ideas about nonhuman others deserve reconsideration, especially if they raise conflicting attitudes to what is intended for the design.

Designers of electronic companions could also benefit from understanding users as producers, and their creations as one of the ways that electronic companions are made meaningful, and then design for this activity and understanding. My analysis of fan fiction and user-generated stories highlights that product design and marketing combined do not define, or encompass interactions with electronic companions. From the stories I analysed in Chapter 3, we can see that the experience of *Furby* and electronic companions exists in a kind of cultural ecology as they are part of a network of connections to pop culture, myth, and folklore that shift their meaning. Their implications are far-reaching in terms of how people relate electronic companions to existing fictional, or real, nonhumans. I suggest that designers might more productively think of electronic companions in terms of interaction and experience design, instead of only in terms of product design.

Interaction design, with its broad goal to address "the subjective and qualitative aspects of everything that is both digital and interactive" (Moggridge, 2007, p. 659), might provide a more holistic approach for future electronic companion design that acknowledges the cultural activity surrounding electronic companions as crucial to how these objects are experienced and interacted with. Designers could support this behaviour by designing platforms that encourage it, and connect it to others. While articulating approaches to designing for experience, rather than simply use, McCarthy & Wright (2004) highlight that "[t]he general point that we must remember when thinking about interactive technologies as consumer products and people who buy them as consumers is that consumers are not passive; they actively complete the experience for themselves" (p. 11). From this perspective, writing stories about them is one way that *Furby* users add to their experience, whether it is positive or negative, and it is not enough for manufacturers to present a marketing story that tells users what their interactions should be like.

McCarthy and Wright (2004) advocate studies of technology that highlight the richness of experience, because "[w]hen those of us who are interested in commenting on relationships between people and technology close off to the variety of experience, we miss out on the fun, wonder, magic, and enchantments of technology" (p. 192). Exploring the creative production that surrounds electronic companions is an example of this richness, and one way that electronic companions are infused with a sense of magic. While experience design favours the human experience, I suggest we could go further and equally represent humans and nonhumans in design research. In this way, we can ask what

makes us good companions to nonhumans, as well as what makes them good companions to us.

To encourage the meaning making activity of storytelling, the literary approach to fantasy world-building could also offer something to design in terms of capturing and communicating the richness of experience. McCarthy and Wright (2004) acknowledge in the following explanation that design allows people to look at the world from a different perspective:

> This is a complex, changing world, marked by ambiguity. In such a world, design is always for potential, for what is already becoming. It is an act of reframing experience in a way that points beyond the reframing. This involves the designer giving to the user a surplus, which allows them to play into their potential" (p. 196)

In particular, I cling to the concept of "surplus", as it brings me back to the conjuring of fantasy worlds, either as original creations, or existing worlds that are built upon by fans and anti-fans. In some ways, by offering the fantastical *Furbyland* origin story, marketing narratives already offer a world for consumers to build on, if not a platform to do it. However, in the origin story *Furbys* leave their home and fall to Earth, effectively putting an end to the *Furbyland* story, rather than opening it up to further expansion. Notice the similarities between McCarthy and Wright's above description of design, and the following description of imaginary world-building:

> Worlds extend beyond the stories that occur in them, inviting speculation and exploration through imaginative means. They are realms of possibility, a mix of familiar and unfamiliar, permutations of wish, dread, and dream, and other kinds of existence that can make us more aware of the circumstances and conditions of the actual world we inhabit" (Wolf, 2012, p. 17)

As my *Furby* fan fiction analysis in Chapter 3 implies, world-building surrounding *Furby* is already thoroughly in progress, and contains many divergent paths from the original product narrative. In this way, an interaction or experience design approach to electronic companions could engage with the imaginary world-building concept, offering even the suggestion, or outline, of a world that users could then individually or collaboratively add to and expand. Fan communities themselves offer a potential cultural platform for eliciting

user stories and co-designing electronic companions. In particular, www.tamatalk.com offers the platform for community members to write "team stories", in which one author writes a beginning and others join in, continuing the story in any direction they choose. This interface could be an approach to not just supporting world-building and storytelling about electronic companions, but also connecting designers with users to co-design electronic companions that support further storytelling activities.

5.1.2 Design Research

Building on my suggestions for the design of electronic companions, I now turn to how my research methods–empirical textual analysis (Chapter 3), and visual, nonhuman-focused scenario design (Chapter 4)–could be utilised and advanced within existing design research methods to help designers better consider the cultural production of users and the role of the nonhuman in design.

First of all, storytelling already has a valued role in the design research process as a means of exploring the use of a proposed design concept. As Kolko illustrates:

> One of the simplest yet most powerful tools available to Interaction Designers is the written word. Language affords a host of capabilities, including the act of persuasion and rich description. When used to organize information, the written word can be used to create narratives of use that explain the proper and expected use of system." (Kolko, 2007, p. 46).

In interaction design, it is seen as one of the ways for designers to not just understand the experience of users, but also to "help empathize with people and to evaluate proposed designs" (Moggridge, 2007, p. 677). Through written and visual scenarios the goal is to "[i]llustrate a character-rich storyline describing the context of use for a product or service" in order to "communicate and test the essence of a design idea within its probable context of use" (Moggridge, 2007, p.677). Kolko (2007) also sees scenario writing as an empathising tool, as "[n]arrative allows designers to contemplate the more humane side of their creations – rather than focussing on technology, narrative shifts the emphasis to one of creative learning, problem solving, or attaining a goal" (p. 47). However, these human-centred approaches to scenario writing tend to focus on utilitarian uses of design, rather

than the social and cultural impact, including how it could prompt textual and material production, such as fan, or antifan fiction. Additionally, as tools in the design process, these scenarios are steps towards creating new designs, rather than questioning the role of design. I would add to the above understanding of scenarios that narrative allows designers to explore design from the perspective of others through the narrative mode of first-person, or third-person stories.

Taking a more critical approach to scenario writing, In Chapter 3, section 3.1.1 I discussed Blythe and Wright's (2006) concept of pastiche scenarios and Nathan, Klasnja, and Friedman's (2007) concept of value scenarios as two ways that designers use storytelling to explore the unintended uses of design, and bring misuse to light. While pastiche scenarios utilise the developed and nuanced characters of popular existing literary works to explore what a technological object might come to socially and culturally represent, value scenarios place importance on the systematic effects of a design, and its not necessarily positive impact over time. While more critical of the potential impact of technology, pastiche scenarios and value scenarios privilege the human experience as central to the design and there is an absence of what this impact could mean for nonhumans. I suggest that my visual scenario method (Chapter 3, section 4.2), in which I used photos, videos and illustrations to elicit storied responses, accompanied by inspiration from the fantasy genre, could further advance critical approaches to scenario-based design by decentralising the human and focusing on the experience of the nonhuman. This could involve both casting a nonhuman as a protagonist to explore the world from its perspective, and exploring how design impacts upon nonhumans, perhaps by creating scenes free from human presence. Such approaches could also more broadly help scholars understand the interconnectedness of humans and nonhumans in many aspects of life.

Visual scenarios in design research are often either presented to research participants to elicit stories, or generated by them to communicate their experiences. Fulton-Suri (2003) argues that visual techniques such as "collage-making, drawing, photo-surveys, storytelling or diary-keeping are especially valuable in situations in which people may find it difficult to articulate or reveal attitudes and thought-processes verbally" (p. 55). Put differently, visual scenarios offer another vehicle of communication that perhaps encourages sensory and experiential qualities that cannot be communicated through language alone. As with narrative scenarios, visual material is used by designers as an

empathic tool to identify with a user's experience, because "such visual and narrative expressions provide rich texture about other people's physical and mental worlds, making it much easier to appreciate what matters to them than through words alone" (Fulton-Suri, 2003, p. 56). From this perspective, further studies could explore the converse of my visual scenario approach by eliciting visual responses to textual scenarios in order to explore the scenes and contexts that relationships with electronic companions play out in. Additionally, this could open the space for further exploring the role that motifs and themes from genres such as gothic, science fiction, and fantasy play in eliciting different kinds of visually represented relationships with electronic companions, and the kinds of scenes they play out in.

Also acknowledging the value of visual storytelling in design research, Shedroff and Noessel (2012) argue that science fiction films and television series offer valuable lessons for interaction designers, because they often illustrate fictional or hypothetical technologies in use. They suggest that there is a reciprocal relationship between storytelling and design, because "the fictional technology seen in sci-fi sets audience expectations for what exciting things are coming next" (p. 5), while innovation in design constantly pushes these possibilities with what is currently available. Again, storytelling is used to provide much needed context for the experience of an object or system:

> Sci-fi interfaces help create a reality that is coherent and makes sense for audiences. In this way, audiences are a class of users, and the test of a speculative interface is the audience's ability to follow the narrative. Users of real systems follow a narrative of use that needs to be similarly coherent. This similarity makes it possible to learn from what we see on screen despite the different purposes of these experiences. (Shedroff & Noessel, 2012, p. 310)

In a similar sense, I would also suggest that analysis of fan fiction is a valuable learning tool for designers as it often combines the contexts of science fiction and fantasy with the critical perspectives of users, and actual, available products. For example, in light of new *Furby* releases, there is a further opportunity to compare and contrast the depiction of *Furbys* in fan fiction and art to see if new designs open up new cultural connections and associations. In this way, textual and visual analyses are useful for designers to draw out lessons regarding how objects are accepted or rejected once they enter the world.

From a literary perspective, Dinello (2005) also argues that science fiction plays a crucial role in the adoption of technology, and further:

> [T]hat the actual development of technology and our response (or lack of response) to it are influenced by popular culture. Drawing a vision of the future from attitudes, moods, and biases current among its artists and their audience, science fiction not only reflects popular assumptions and values, but also gives us an appraisal of their success in practice. Alone, cultural imagery and themes do not motivate behavior. But recurring images and themes reveal behaviors that are culturally valued while advocating a point of view for discussion. (Dinello, 2005, p. 5)

If this is the case, then stories about design have the opportunity to challenge dominant ideas about design and provide alternatives for users to witness in action. Fantasy, with its often non-industrial, nonhuman focus, is ideally placed to show us how relationships with nonhuman companions could be more equal, meaningful, and rich. Beyond showing a context for an object, what storytelling offers to design is also the freedom to imagine how things could be different, including our relationships with nonhumans. In a discussion of animals in modernist literature Rohman (2009) argues that it is through these stories that we can:

> [R]adically invert the traditional speciesist hierarchy that values human over animal as a matter of course. In other words, these texts in their privileging of the animal tend to marginalise the conventionally human, and in doing so they enact a transvaluation of humanist species values that disrupts the "human" at its core." (p. 100).

If applied to design, this kind of storytelling could offer a radically shifted view of relationships with designed objects and nonhumans, and spark broader questions of how we all occupy the world together. This is particularly pertinent, because as interest in animal welfare and rights becomes increasingly prevalent, consideration of the nonhuman's place in design research is more important than ever. Additionally, assistive companion robots are also a popular topic as care for the elderly population is a current design concern. This cultural climate calls for consideration of what kind of companion should be designed, what kind of companion our designs encourage us to be, and how

these technologies shift our relationships with other nonhumans in the world. I believe that design research can play a part in better representing nonhumans in our society by creating objects and stories that encourage people to enter and imagine a different world.

6. Reference List

Akens, G. L., & Pavlakos, J. A. (Producers). (2005). *Furby Island*. USA: DRTV Productions.

Allison, A. (2006). *Millennial monsters: Japanese toys and the global imagination*. Berkeley, CA: University of California Press.

AllyMoodyNeko. (2006, September 7). *Demented Furby battle* [fan fiction]. Retrieved from http://www.fanfiction.net/s/3143529/1/Demented_bFurby_b_Battle

Andriano, J. D. (1999). *Immortal monster: The mythological evolution of the fantastic beast in modern fiction and film*. Westport, Connecticut: Greenwood Press.

Ang, C. S., Bobrowicz, A., Schiano, D. J., & Nardi, B. (2013). Data in the wild: some reflections. *interactions, 20*(2), 39-43. 10.1145/2427076.2427085

Armitt, L. (2005). *Fantasy fiction: An introduction*. New York; London: Continuum.

Arnold, B., Guggenheim, R. (Producers), & Lasseter, J. (Director). (1995). *Toy story* [motion picture]. USA: Pixar Animation Studios & Walt Disney Pictures.

Atwood, M. (2011). *In other worlds: SF and the human imagination*. London: Hachette Digital.

Austin, J. (1813). *Pride and prejudice*. Whitehall: T. Egerton.

BagginsBrandybuck. (2002). *Lord of the Furby's: The fellowship of the Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/698973/1/The_Fellowship_of_the_bFurby_b

Balsamo, A. (2011). *Designing culture: The technological imagination at work*. Durham, NC: Duke University Press.

Bandai Corporation. (1997). *Tamagotchi instructions*. Hong Kong: Bandai Corporation.

Baldick, C. (1987). *In Frankenstein's shadow: Myth, monstrosity, and nineteenth-century writing*. Oxford: Clarendon Press.

Barklem, J. (1980). *Spring story*. London: HarperCollins.

Barone, T. (2008). Arts-based research. In L. Given (Ed.), *The Sage encyclopedia of qualitative research methods* (pp. 29 - 32). Thousand Oaks, CA: SAGE Publications.

BBC News. (1999, January 13). Americas Furby toy or Furby spy?. *BBC news*. Retrieved from http://news.bbc.co.uk/2/hi/americas/254094.stm

Bell, G., Blythe, M., & Sengers, P. (2005). Making by making strange: Defamiliarization and the design of domestic technologies. *ACM transactions on computer-human interaction*, 12(2), 149–173. doi: 10.1145/1067860.1067862

Bell Sprout. (2006, May 12). The rules [forum post]. Retrieved from tamatalk.com: http://www.tamatalk.com/IB/topic/56068-the-rules/

Berker, T., Hartmann, M., Punie, Y., & Ward, K. J. (Eds.). (2006). *Domestication of media and technology*. New York, NY: Open University Press.

Biddle, S. (2012). The new Furby review: Absolute horror [review]. *Gizmodo*. Retrieved from http://gizmodo.com/5937402/the-new-furby-review-absolute-horror

Blat, J., Griffiths, D., Millwood, R., Popat, K., Torres, C., & Wang, W. (2001, August 5–10). Designing Étui, a computational toy for learning reflection. Paper presented at the *9th International Conference on Human-Computer Interaction*, New Orleans, LA. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.107.9103&rep=rep1&type=pdf

Bloch, L. R., & Lemish, D. (1999). Disposable love: The rise and fall of a virtual pet. *New media and society, 1*(3), pp 283–303. doi: 10.1177/14614449922225591

Blythe, M. A., & Wright, P. C. (2006). Pastiche scenarios: Fiction as a resource for user centred design. *Interacting with Computers, 18*(5), pp. 1139–1164. doi: 10.1016/j.intcom.2006.02.001

Boyd, B. (2007). Tails within tales. In L. Simmons & P. Armstrong (Eds.), *Knowing animals* (pp. 217–243). Leiden: Brill.

Bozman, R., Saxon, E., Utt, K. (Producers), & Demme, J. (Director). (1991). *The silence of the lambs* [motion picture]. USA: Orion Pictures Corporation.

Brahnam, S., & De Angeli, A. (2008). Special issue on the abuse and misuse of social agents. *Interacting with computers, 20*(3), pp. 287–291. doi: 10.1016/j.intcom.2008.02.001

Breazeal, C. (2002). *Designing sociable robots*. Cambridge, MA: MIT Press.

Breazeal, C. (2003). Toward sociable robots. *Robotics and Autonomous Systems, 42*(3–4), pp. 167–175. doi:10.1016/S0921-8890(02)00373-1

Brinkmann, S. (2009). Literature as qualitative inquiry: The novelist as researcher. *Qualitative inquiry, 15*(8), 1376–1394. doi: 10.1177/1077800409332030

Brosnan, M. (1998). *Technophobia: The psychological impact of information technology*. London/New York: Routledge.

Bryson, J. J. (2010). Robots should be slaves. In Y. Wilks (Ed.), *Close engagements with artificial companions: Key social, psychological and ethical design issues*. Amsterdam/Philadelphia, PA: John Benjamins.

Brzozowska-Brywczynska, M. (2007). Monstrous/cute: Notes on the ambivalent nature of cuteness. In N. Scott (Ed.), *Monsters and the monstrous: Myths and metaphors of enduring evil* (pp. 213–228). Amsterdam/New York, NY: Rodopi.

Buckingham, D., & Tingstad, V. (Eds.). (2010). *Childhood and consumer culture*. London: Palgrave.

Buckleitner, W. (2012, July 4). After 14 years, Furby has returned. *The New York times*. Retrieved from http://gadgetwise.blogs.nytimes.com/2012/07/04/after-14-years-furby-has-returned/?_r=0

Buckley, S. (2012, August 5). Furby pre-orders start at Walmart, threaten your wallet with nostalgia. *Engadget*. Retrieved from http://www.engadget.com/2012/08/05/furby-pre-orders-start-at-walmart-threaten-your-wallet-with-nos/

Business Wire. (1999, October 21). Furby, the NSA and other folklore. *Business wire*. Retrieved from http://findarticles.com/p/articles/mi_m0EIN/is_1999_Jan_21/ai_53609594/

Byrne, C. (2005). Hot toys are dead: long live hot products. *Young consumers, 7*(1), 8–13. doi: 10.1108/17473610610681252

Calcifer. (2003, March 24). *What happens when* [fan fiction]. Retrieved from http://www.fanfiction.net/s/1279769/1/What-Happens-When

Canedy, D. (1998a, October 7). For the holidays, a big campaign for an electronic, interactive bit of fur. Sound familiar?. *The New York times*. Retrieved from http://www.nytimes.com/1998/10/07/business/media-business-advertising-for-holidays-big-campaign-for-electronic-interactive.html

Canedy, D. (1998b, November 27). Stuffed animals with attitude may spur modest rise in toy sales. *The New York Times*. Retrieved from http://www.nytimes.com/1998/11/27/business/stuffed-animals-with-attitude-may-spur-modest-rise-in-toy-sales.html?pagewanted=all&src=pm

Canedy, D. (1999, February 9). Takeovers are part of the game; Any hot toy can grow up to be a unit of Mattel or Hasbro. *The New York Times*. Retrieved from http://www.nytimes.com/1999/02/09/business/takeovers-are-part-game-any-hot-toy-can-grow-up-be-unit-mattel-hasbro.html?pagewanted=all&src=pm

Carroll, J. M. (2000). *Making use: Scenario-based design of human-computer interactions*. Cambridge, MA: MIT Press.

Carter, C. (creator). (1993). *The x-files* [television series]. USA: Ten Thirteen Productions & 20th Century Fox Television.

ChaosInsanity. (2008, August 31). *Attack of the killer Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/4509171/1/Attack_of_the_Killer_Furby

Chapman, J. (2005). *Emotionally durable design: Objects, experience & empathy*. London: Earthscan.

Chase, S. E. (2008). Narrative enquiry: Multiple lenses, approaches, voices. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials.* (pp. 57–94). Thousand Oaks, CA: SAGE Publications.

Chung, C. (2007). *Caleb Chung plays with Pleo* [video file]. Retrieved from http://www.ted.com/talks/caleb_chung_plays_with_pleo.html

Clare. (n.d). *Furbys of the future* [fan fiction]. Retrieved from http://www.adoptafurby.com/furbyfansection/stories/stories/furbys_of_the_future_1.php

Clarice-Starling1. (2003, July 14). *How to kill a Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/1427663/1/How_To_Kill_A_bFurby_b

Cohen, J. J. (Ed.). (1996a). *Monster theory: Reading culture*. Minneapolis; London: University of Minnesota Press.

Cohen, J. J. (1996b). Monster culture (seven theses). In J. J. Cohen (Ed.), *Monster theory: Reading culture* (pp. 3–25). Minneapolis, MN: University of Minnesota Press.

Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational researcher, 19*(5), 2–14. doi:10.3102/0013189x019005002

Coppa, F. (2006). A brief history of media fandom. In K. Hellekson & K. Busse (Eds.), *Fan fiction and fan communities in the age of the internet* (pp. 41–59). Jefferson, NC: McFarland & Company.

Cosslett, T. (2006). *Talking animals in British children's fiction, 1786–1914*. Hampshire: Ashgate.

Craft, C. (1999). "Kiss me with those red lips": Gender and inversion in Bram Stoker's Dracula. In G. Byron (Ed.). *Dracula: New casebook* (pp. 93–118). New York, NY: St Martin's Press.

Dark-phenomenon. (2005, January 24). *The Furby War* [fan fiction]. Retrieved from http://www.fanfiction.net/s/2232228/1/The-Furby-War

dead drifter. (2007, December 19). *Orochimaru's world famous new year's eve party* [fan fiction]. Retrieved from http://www.fanfiction.net/s/3954561/6/Orochimaru-s-World-Famous-New-Year-s-Eve-Party

Del Vecchio, G. (2003). *The blockbuster toy! How to invent the next big thing*. Gretna, LA: Pelican Publishing Company.

Demonic Nightmares. (2004, December 25). *Have a very Furby Christmas* [fan fiction]. Retrieved from http://www.fanfiction.net/s/2187653/1/Have_a_Very_bFurby_b_Christmas

Dendle, P. (2009). Monsters, creatures, and pets at Hogwarts: Animal stewardship in the world of Harry Potter. In E. E. Heilman (Ed.), *Critical perspectives on Harry Potter* (2nd ed., pp. 163– 176). New York, NY: Routledge.

Derecho, A. (2006). Archontic literature: A definition, a history, and several theories of fan fiction. In K. Busse & K. Hellekson (Eds.), *Fan fiction and fan communities in the age of the internet* (pp. 6 -78). Jefferson, NC: McFarland & Company.

destinyheart15. (2005, October 2). *Inuyasha meets Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/2601794/1/Inuyasha_Meets_bFurby_b

Dinello, D. (2005). *Technophobia! Science fiction visions of posthuman technology*. Austin, TX: University of Texas Press.

Dragons Quill. (2008, November 25). *The trouble with Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/4675464/1/The_Trouble_With_bFurby_b

Eastman, K., & Laird, P. (Creators). (1984). *Teenage mutant ninja turtles* [comic book series]. USA: Mirage Studios.

Eibl-Eibesfeldt, I. (1972). Similarities and differences between cultures in expressive movements, in R. Hinde (Ed.), *Nonverbal Communication*. (pp. 297–311). Cambridge: Cambridge University Press.

Eisner, W. (1996). *Graphic storytelling and visual narrative.* Taramac, FL: Poorhouse Press.

el-Aswad, e. (2005). Magic bodily members: Human eye and hand, motif D990. In J. Garry & H. El-Shamy (Eds.), *Archetypes and motifs in folklore and literature: A handbook* (pp. 139–146). New York, NY: M. E. Sharpe.

Electronic pets ltd. (2006a). *Adopt a Furby*. Retrieved from http://adoptafurby.com/

Electronic pets ltd. (2006b). *The Furby fan section*. Retrieved from http://www.adoptafurby.com/furbyfansection/

Eliade, M. (1967). Cosmogonic myth and 'Sacred History'. *Religious studies, 2*(2), 171–183. doi: http://dx.doi.org/10.1017/s0034412500002730

ellfie. (2006, December 2). *When Furbies attack* [fan fiction]. Retrieved from http://www.fanfiction.net/s/3268972/1/When-Furbies-Attack

Ellis, R. K. (2000). Technology for evil. *Training & development, 54*(11). p. 33. Retrieved from http://www.questia.com/library/1G1-67590791/technology-for-evil#articleDetails

emmy299. (2006, December 18). *Zoria's virtual pet adventures* [fan fiction]. Retrieved from http://www.tamatalk.com/IB/topic/87773-zorias-virtual-pet-adventures/

Feige, K. (Producer), & Whedon, J. (Director). (2012). *The avengers* [motion picture]. USA: Marvel Studios & Paramount Pictures.

Fettes, M. (2008). Imagination in qualitative research. In L. Given (Ed.), *The Sage encyclopedia of qualitative research methods* (pp. 420 - 422). Thousand Oaks, CA: SAGE Publications.

Fielding, H. (1996). *Bridget Jones's diary*. London: Penguin.

Finnell, M. (Producer), & Dante, J. (Director). (1984). *Gremlins* [motion picture]. USA: Warner Brothers & Amblin Entertainment.

Flower Gal Aeris. (2001, June 6). *Attack of the Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/308444/1/Attack_of_the_bFurby_b_Seph_and_Aeris_Sleepover

forevercharmed01. (2013, January 21). *Blame it on the Furbies* [fan fiction]. Retrieved from http://www.fanfiction.net/s/8928743/1/Blame-It-On-The-Furbies

Forty, A. (1986). *Objects of desire: Design and society, 1750–1980*. London: Thames and Hudson.

Friedman, B., Peter H., Kahn, J., & Hagman, J. (2003). Hardware companions?: What online AIBO discussion forums reveal about the human-robotic relationship. Paper presented at the *SIGCHI Conference on human factors in computing systems*. Fort Lauderdale, Fl. doi: 10.1145/642611.642660

Fulton-Suri, J. (2003). Informed and inspired by other people's experience. In I. Koskinen, K. Battarbee & T. Mattelmaki (Eds), *Empathic design: User experience in product design*. Finland: IT Press.

Galaxy Girl. (2002, January 8). *Endless manicure or Etay came from 1999* [fan fiction]. Retrieved from http://www.fanfiction.net/s/538243/1/Endless_Manicure_or_Etay_Came_From_1999

Garry, J. (2005). Good and evil, various motifs. In J. Garry & H. El-Shamy (Eds.), *Archetypes and motifs in folklore and literature* (pp. 458 - 463). New York, NY: M. E. Sharpe.

Gaver, W. W., Beaver, J., & Benford, S. (2003). *Ambiguity as a resource for design.* Paper presented at the SIGCHI Conference on Human Factors in Computing Systems, Ft. Lauderdale, FL. doi:10.1145/642611.642653

Golden, A. (n.d). *Mandy's excellent adventure* [fan fiction]. Retrieved from http://www.adoptafurby.com/furbyfansection/stories/stories/mandys_adventure.php

Gooding, M. (Ed.). (1995). *A book of surrealist games.* London: Shambhala.

Grahame, K. (1908). *The wind in the willows*. London: Methuen Publishing.

Gray, J. (2005). Antifandom and the moral text. *American behavioral scientist, 48*(7), 840–858. doi: 10.1177/0002764204273171

Greenfield, M. (Producer). (1998). *Bubblegum crisis* [television series]. Japan: AIC & Victor Company of Japan (JVC).

Hampton, D. M., & Chung, C. (2003). United States of America Patent No. US6514117 B1. United States Patent and Trademark Office.

Harris, D. (1992). Cuteness. *Salmagundi. 96,* 177–186. Retrieved from http://cms.skidmore.edu/salmagundi/

Harry's Girl 01031992. (2006, May 1). *Harry Potter and the Furby of DOOOOOOM!* [fan fiction]. Retrieved from http://www.fanfiction.net/s/2915777/1/Harry_Potter_and_the_bFurby_b_of_DOOOOOO M

Hasbro Inc. (2013). *2012 annual report*. Pawtucket, RI. Retrieved form http://investor.hasbro.com/annuals.cfm

Higuchi, T., & Troutt, M. D. (2004). Dynamic simulation of the supply chain for a short life cycle product - Lessons from the Tamagotchi case. *Computers & operations research, 31*(7), 1097–1114. doi: 10.1016/S0305-0548(03)00067-4

Jack Nief the Mighty Thief. (2002, April 27). *Dante's Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/744462/1/Dante-s-Furby

Jacobsson, M. (2009). Play, belief and stories about robots: A case study of a Pleo blogging community. Paper presented at the *18th IEEE international symposium on robot and human interactive communication*. Toyama. Retrieved from http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5326213&tag=1

Jenkins, H. (1988). Star Trek rerun, reread, rewritten: Fan writing as textual poaching. *Critical studies in mass communication, 5*(2), 85–107. doi: 10.1080/15295038809366691

Jenkins, H. (1992). Scribbling in the margins: Fan readers/fan writers. In H. Jenkins (Ed.), *Textual poachers: Television fans and participatory* culture (pp. 152–184). New York, NY: Routledge.

JLou. (2013, 18 January). Re: Participate in a research study! [Online forum comment #6]. Retrieved from Tamatalk.com: http://www.tamatalk.com/IB/topic/184120-paticipate-in-a-reseach-study/

Johnson, G. (1998, December 24). Furby's face brings frowns to Warner Bros., *The Los Angeles times*. Retrieved from http://articles.latimes.com/1998/dec/24/business/fi-57099

Johnson, M. E. (2001). Learning from toys: Lessons in managing supply chain risk from the toy industry. *California management review, 43*(3), 106–124. doi: http://dx.doi.org/10.2307/41166091

Jokus. (2013, 19 January). Re: Participate in a research study! [Online forum comment #7]. Retrieved from Tamatalk.com: http://www.tamatalk.com/IB/topic/184120-paticipate-in-a-reseach-study/

Jones, J. C. (2009). What is designing?. In H. Clark & D. Brody (Eds.), *Design studies: A reader* (pp. 77 - 80). Oxford: Berg.

Julien, H. (2008). Content analysis. In L. Given (Ed.), *The Sage encyclopedia of qualitative research methods* (pp. 120 - 121). Thousand Oaks, CA: SAGE Publications.

Julier, G. (2000). *The culture of design*. London: Sage Publications.

Kahane, B. (2009). Old wine in new bottles: How new technology recycles old myths. In J. Burnett, P. Senker & W. Kathy (Eds*.), The myths of technology: Innovation and inequality* (pp. 53–65). New York, NY: Peter Lang.

Kamiya, H. (Creator). (2001). *Devil may cry* [video game]. Japan: Capcom.

Kapur, J. (2005). Obsolescence and other playroom anxieties: Childhood in the shadows of late capital. *Rethinking Marxism, 17*(2), 237–255, 331. doi: http://dx.doi.org/10.1080/08935690500046793

KathyRoland. (2012, October 2). *The Furby incident* [fan fiction]. Retrieved from http://archiveofourown.org/works/527158

Kellyofthemidnightdawn. (2006, April 10). *When Furbies attack* [fan fiction]. Retrieved from http://www.fanfiction.net/s/2884334/1/When_bFurbies_b_Attack

Kindler, D. (Creator). (2007). *Sanctuary* [television series]. Canada: Syfy.

Kinsella, S. (1995). Cuties in Japan. In L. Skov & B. Moeran (Eds.), *Women, media and consumption in Japan* (pp. 220–254). Honolulu, HI: University of Hawai'i Press.

Kirsner, S. (1998). Moody furballs and the developers who love them. *Wired, 6.09*. Retrieved from http://www.wired.com/wired/archive/6.09/furby_pr.html

Kishimoto, M. (Creator). (1999). *Naruto* [comic book series]. Japan: Shueisha.

Kolko, J. (2007). *Thoughts on interaction design*. Savannah, GA: Brown Bear.

Kontradiction. (2002, May 18). *Ehloh the invincible* [fan fiction] Retrieved from http://www.fanfiction.net/s/783070/1/Ehloh-the-Invincible

Kotler, P. (1984). *Marketing essentials*. Upper Saddle River, NJ: Prentice-Hall.

Kubrick, S. (Director/Producer). (1968). *2001: A space odyssey* [Motion picture]. USA: MGM.

Kusahara, M. (2001). The art of creating subjective reality: An analysis of Japanese digital pets. *Leonardo, 34*(4), 299–302. doi: 10.1162/00240940152549203

Kuznets, L. R. (1994). *When toys come alive: Narratives of animation, metamorphosis, and development*. New Haven, CT: Yale University Press.

Langer, B. (2002). Commodified enchantment: Children and consumer capitalism. *Thesis eleven, 69*(1), 67–81. doi: 10.1177/0725513602069001005

Langer, B. (2004). The Business of branded enchantment: Ambivalence and disjuncture in the global children's culture industry. *Journal of consumer culture, 4*(2), 251–277. doi: 10.1177/1469540504043685

Langer, B. (2005). Research note: Consuming anomie: children and global commercial culture. *Childhood, 12*(2), 259-271. doi: 10.1177/0907568205051907

Lawson, S., & Chesney, T. (2007, April 2–4). Virtual pets and electronic companions – an agenda for inter-disciplinary research. Paper presented at *AISB'07: Artificial and Ambient Intelligence*. Newcastle upon Tyne: Newcastle University. Retrieved from http://homepages.cs.ncl.ac.uk/patrick.olivier/AISB07/catz-dogz.pdf

Le Guin, U. K. (2009). *Cheek by jowl: Talks and essays on how and why fantasy matters*. Seattle WA: Aqueduct Press.

Leimbach, D. (2000, 13/12/2000). Where ads aimed at kids come to life. *The New York times*. Retrieved from http://www.nytimes.com/2000/12/13/business/marketing-where-ads-aimed-at-kids-come-to-life.html?pagewanted=all&src=pm

LemonQuest. (2005). *Furby Island* [java game]. Spain: LemonQuest.

Levy, D. (2007). *Love and sex with robots: The evolution of human-robot relationships*. New York, NY: HarperCollins.

Limon, J. (2008). Space is out of Joint: Experiencing non-Euclidean space in theatre. *Theatre Research International, 33*(02), 127-144. doi: 10.1017/S0307883308003647

Lioness of Dreams. (2003, December 19). *InuYasha vs the demon Furbie* [fan fiction]. Retrieved from http://www.fanfiction.net/s/1646455/1/InuYasha_vs_The_Demon_bFurbie_b

Little-Lozza. (2005, January 19). *Mulder, Scully and the attack of the killer Furbys* [fan fiction]. Retrieved from http://www.fanfiction.net/s/2225943/1/Mulder_Scully_and_the_attack_of_the_killer_bFurbys_b

Lodge, D. (1992). *The art of fiction*. London: Vintage.

Luckhurst, R. (2005). *Science fiction*. Cambridge: Polity Press.

Lund, H. H. (2003, July 16-20). Adaptive robotics in the entertainment industry. Paper presented at the *IEEE International symposium on computational intelligence in robotics and automation*. doi: 10.1109/CIRA.2003.1222248

Mado. (n.d). *The Furby miracle* [fan fiction]. Retrieved from http://www.adoptafurby.com/furbyfansection/stories/stories/furby_miracle_1.php

Mammoth. (2013, January 19). Re: Participate in a research study! [Online forum comment #8]. Retrieved from Tamatalk.com: http://www.tamatalk.com/IB/topic/184120-paticipate-in-a-reseach-study/

Margolin, V. (2002). *The politics of the artificial*. Chicago, IL: The University of Chicago Press.

Marshall, A. (1999, January 14). Furbies banned at US spy base. *The independant*. Retrieved from http://www.independent.co.uk/news/furbies-banned-at-us-spy-base-1046935.html

Martin, T. (writer), & Nastuk, M. (Director). (1999). Grift of the magi. In Groening, M. (Executive Producer) & Brooks, J. L. (Executive Producer). *The Simpsons.* USA: Fox Broadcasting.

Mattelmaki, T. (2003). Probes: Studying experiences for design empathy. In I. Koskinen, K. Battarbee & T. Mattelmaki (Eds.), *Empathic design: User experience in product design*. Finland: IT Press.

McCarthy , J., & Wright, P. (2004). *Technology as experience*. Cambridge, MA: MIT Press.

McCloud, S. (1993). *Understanding comics: The invisible art*. New York, NY: HarperPerennial.

Midorime. (2013, January 18). Re: Participate in a research study! [Online forum comment #3]. Retrieved from Tamatalk.com: http://www.tamatalk.com/IB/topic/184120-paticipate-in-a-reseach-study/

Moggridge, B. (2007). *Designing interactions*. Cambridge, MA: MIT Press.

Morozov, E. (2013). *To save everything, click here: Technology, solutionism, and the urge to fix problems that don't exist*. New York, NY: PublicAffairs.

Mullan, J. (2006). *How novels work*. Oxford: Oxford University Press.

Murphy, D., DeSanto, T. (Producers), & Bay, M. (Director). (2007). *Transformers* [motion picture]. USA: Paramount Pictures.

Murray, Z. (n.d). *Eclipse's adventure* [fan fiction]. Retrieved from http://www.adoptafurby.com/furbyfansection/stories/stories/eclipses_adventure.php

Nathan, L. P., Klasnja, P. V., & Friedman, B. (2007). Value scenarios: a technique for envisioning systemic effects of new technologies. Paper presented at the *CHI '07 Human factors in computing systems*, San Jose, CA. doi: 10.1145/1240866.1241046

O'Reilly, T. (2007). What is Web 2.0: Design patterns and business models for the next generation of software. *Communications & strategies, (65),* 17+. Retrieved from http://mpra.ub.uni-muenchen.de/4578/1/MPRA_paper_4578.pdf

Pereira, J. (1999, March 12). Shutting up Furby: Talkative toy meets `Deep Sleep', *Wall Street journal*, pp. 0–B1. Retrieved from http://search.proquest.com/docview/398741192?accountid=14782

Phison. (2010). *U.Bo*. Retrieved from http://sites.google.com/site/ubomagicland/index

Piirto, J. M. (2008). Creative writing. In L. Given (Ed.), *The Sage encyclopedia of qualitative research methods* (pp. 136 - 138). Thousand Oaks, CA: SAGE Publications.

Pinkie Dash Pony. (2009, September 12). *The kingly contest* [fan fiction]. Retrieved from https://www.fanfiction.net/s/5370208/1/The_Kingly_Contest

Pirka, E. (n.d). *Furby's evolution and the evolution of love* [fan fiction]. Retrieved from http://www.adoptafurby.com/furbyfansection/stories/stories/furby_evolution_1.php

Pollack, A. (1997, May 3). A toy maker in search of a new blockbuster, *The New York times*. Retrieved from http://www.nytimes.com

Preece, J., Carey, T., Rogers, Y., Holland, S., Sharp, H., & Benyon, D. (1995). *Human-computer interaction*. Reading, MA: Addison-Wesley Publishing Company

Pringle, D. (Ed.). (2006). *The ultimate encyclopedia of fantasy* (3rd ed.). London: Carlton Books.

Pugh, A. J. (2005). Selling compromise: Toys, motherhood, and the cultural deal. *Gender & society, 19*(6), 729–749. doi: 10.1177/0891243205279286

Punter, D., & Byron, G. (2004). *The gothic*. Oxford: Blackwell Publishing.

Quatara. (n.d). *Beautiful* [fan fiction]. Retrieved from http://www.adoptafurby.com/furbyfansection/stories/stories/beautiful.php

Quither, L. (n.d). *Rose's life* [fan fiction]. Retrieved from http://www.adoptafurby.com/furbyfansection/stories/stories/roses_life.php

Reed, L. (2000). Domesticating the personal computer: The mainstreaming of a new technology and the cultural management of a widespread technophobia, 1964–. *Critical studies in media communication, 17*(2), 159–185. doi: 10.1080/15295030009388388

Richardson, L., & St Pierre, E. A. (2008). Writing: A method of inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Collecting and interpreting qualitative materials*. Thousand Oaks, CA: SAGE Publications.

Rivkin, J., & Ryan, M. (1998). Introduction: Formalisms. In J. Rivkin & M. Ryan (Eds.), *Literary theory: An anthology* (pp. 3–7). Oxford: Blackwell Publishers.

Robodog. (2013, 19 January). Re: Participate in a research study! [Online forum comment #9]. Retrieved from Tamatalk.com: http://www.tamatalk.com/IB/topic/184120-paticipate-in-a-reseach-study/

Roe Smith, M., & Marx, L. (1994). *Does technology drive history?: The dilemma of technological determinism*. Cambridge, MA: MIT Press.

Rohman, C. (2009). *Stalking the subject: Modernism and the animal*. New York, NY: Columbia University Press.

Rowling, J. K. (1997). *Harry Potter and the philosopher's stone*. London: Bloomsbury.

Ruckenstein, M. (2010). Toying with the world: Children, virtual pets and the value of mobility. *Childhood, 17*(4), 500–513. doi: 10.1177/0907568209352812

Saldana, J. (2009). *The coding manual for qualitative researchers.* London: SAGE Publications.

Sconce, J. (2000). *Haunted media: Electronic presence from telegraphy to television*. Durham, NC: Duke University Press.

Scullyspice. (1999, October 22). *Hadji's magic Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/1356/1/Hadjis_Magic_bFurby_b

Sharma, R. S. (2004). *Applied linguistics: Stylistics and language teaching*. New Delhi: Atlantic Publishers and Distributors.

Shedroff, N., & Noessel, C. (2012). *Make it so: Interaction design lessons from science fiction*. New York, NY: Rosenfeld Media.

Shelley, M. W. (1818). *Frankenstein; or, the modern Prometheus*. London: Lackington, Hughes, Harding, Mavor & Jones.

Sheltrown, N. (2009). Harry Potter's world as a morality tale of technology and media. In E. E. Heilman (Ed.), *Critical perspectives on Harry Potter* (2nd ed., pp. 47–64). New York, NY: Routledge.

Shibata, T. (2004). An overview of human interactive robots for psychological enrichment. *Proceedings of the IEEE, 92*(11), 1749–1758. doi: 10.1109/JPROC.2004.835383

Shibata, T., Kawaguchi, Y., & Wada, K. (2009). Investigation on people living with Paro at home. Paper presented at the *The 18th IEEE international symposium on robot and human interactive communication*, Toyama.
doi: http://dx.doi.org/10.1109/roman.2010.5598704

Shifteraei. (2013, January 22). 270 - *The would be army of Furbys* [fan fiction]. Retrieved from http://www.fanfiction.net/s/8930275/1/270-The-Wouldbe-Army-of-Furbies

Shklovsky, V. (1998). Art as technique. In J. Rivkin & M. Ryan (Eds.), *Literary theory: An anthology* (pp. 17–23). Malden, MA: Blackwell Publishers.

Shrilanka-San, & ButtsyBoy. (2005, October 29). *Night of the living Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/2637364/1/Night-of-the-Living-Furby

Sipos, T. M. (2010). *Horror film aesthetics*. Jefferson, NC: McFarland & Company.

Stanczak, G. (2007). Introduction: Images, methodologies, and generating social knowledge. In Stanczak, G (Ed.), *Visual Research Methods.* Thousand Oaks, CA: SAGE Publications.

Stein, L. E. (2006). "This dratted thing" fannish storytelling through new media. In K. Hellekson & K. Busse (Eds*.), Fan fiction and fan communities in the age of the internet* (pp. 245–260). Jefferson, NC: McFarland & Company.

Steinberg, J. (1998). Public lives; Far from the pleading crowd: Furby's dad. *The New York times*. Retrieved from http://www.nytimes.com/1998/12/10/nyregion/public-lives-far-from-the-pleading-crowd-furby-s-dad.html?src=pm

Stephanie and daughters. (n.d). *Ah-May's Journey* [fan fiction]. Retrieved from http://www.adoptafurby.com/furbyfansection/stories/stories/ahmays_journey.php

Sutton-Smith, B. (1986). *Toys as culture*. New York, NY: Gardner Press.

TADAHmon. (2002, October 20). *Olga's Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/1022240/1/Olgas_bFurby_b

Takahashi, K. (Creator). (1996). *Yu-gi-oh!* [comic book series]. Japan: Shueisha.

Takahashi, R. (Creator). (1996). *Inuyasha* [television series]. Tokyo: Yomiuri Telecasting Corporation (YTV) & Sunrise.

Tamagotchialice. (2013, January 26). Re: Participate in a research study! [online forum comment #15]. Retrieved from Tamatalk.com: http://www.tamatalk.com/IB/topic/184120-paticipate-in-a-reseach-study/

TamaMum. (2007, March 20). Welcome to seriously tamagotchi! [forum post]. Retrieved from Tamatalk.com: http://www.tamatalk.com/IB/topic/104010-welcome-to-seriously-tamagotchi/

Thompson, M. (2013). Worldbuilding and world-extending: Discoveries and questions [web log post]. http://snarkmarket.com/2013/8082

Thrift, N. (2003). Closer to the machine? Intelligent environments, new forms of possession and the rise of the supertoy. *Cultural geographies, 10*(4), 389–407. doi: 10.1191/1474474003eu282oa

Thrift, N. (2004). Electric animals: New models of everyday life? *Cultural studies, 18*(2–3), 461-482. doi: 10.1080/0950238042000201617

Tiger Electronics. (1999). *Electronic Furby instruction manual*. Vernon Hills, IL: Tiger Electronics.

Tiger Electronics. (2005). *Furby: Your emototronic friend care guide*. Vernon Hills, IL: Tiger Electronics.

Todorov, T. (1973). *The fantastic: A structural approach to a literary genre.* Cleveland OH: The Press of Case Western Reserve University.

Tolkien, J. R. R. (1954). *The lord of the rings. Part 1. The fellowship of the ring*. London: George Allen & Unwin.

Tolkien, J. R. R. (1964). On fairy-stories. In J. R. R. Tolkien (Ed.), *Tree and leaf* . (pp. 9 - 73). London: George Allen & Unwin.

Tomino, Y. & Yatate, H. (Creators). (1995). *Mobile suit gundam wing* [television series]. Japan: Sunrise.

Tsitas, E. (2006). The role of the creative arts in bioethical debates. *Queensland University of Technology law and justice journal, 6(*2). Retrieved from http://www.austlii.edu.au/au/journals/QUTLJJ/2006/16.html

Turkle, S. (2007). Authenticity in the age of digital companions. *Interaction studies, 8*(3), 501–517. doi: http://dx.doi.org/10.1075/is.8.3.11tur

Turkle, S. (2011). *Alone together: Why we expect more from technology and less from each other.* New York, NY: Basic Books.

Turkle, S., Breazeal, C., Daste, O., & Scassellati, B. (2006). First encounters with Kismit and Cog: Children respond to relational artifacts. In P. Messaris & L. Humphreys (Eds.), *Digital media: Transformations in human communication* (pp. 313–330). New York, NY: Peter Lang.

ukrazian. (2009, December 28). *Andy gets a Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/5614957/1/Andy_Gets_a_bFurby_b

Wacky Walnut. (2007, August 14). *Curse of the Furby* [fan fiction]. Retrieved from http://www.fanfiction.net/s/3719967/1/Curse_of_the_bFurby_b

Wada, K., & Shibata, T. (2006, May 15-19). Robot therapy in a care house - its sociopsychological and physiological effects on the residents. Paper presented at the *IEEE international conference on robotics and automation*, Orlando, FL. doi:10.1109/ROBOT.2006.1642310

Warschauer, M., & Grimes, D. (2007). Audience, authorship, and artifact: The emergent semiotics of web 2.0. *Annual review of applied linguistics, 27*, 1–23. doi: 10.1017/S0267190508070013

Weeks, L. (1998, November 24). The great Furby fuss; This year's hot toy is an electronic pest, er, pet. *The Washington Post*, pp. 0–C01. Retrieved from http://search.proquest.com/docview/408401668?accountid=14782

Weizenbaum, J. (1966). ELIZA - A computer program for the study of natural language communication between man and machine. *Communications of the ACM, 9*(1), 36–45. doi: 10.1145/365153.365168

Whitby, B. (2008). Sometimes it's hard to be a robot: A call for action on the ethics of abusing artificial agents. *Interacting with computers, 20*(3), 326–333. doi: 10.1016/j.intcom.2008.02.002

213

Whitworth, B. (2005). Polite computing. *Behaviour & information technology, 24*(5), 353–363. doi: 10.1080/01449290512331333700

Wildey, D. (Creator). (1996). *The real adventures of Jonny Quest* [television series]. USA: Hanna-Barbera.

Wilks, Y. (Ed.). (2010a). *Close engagements with artificial companions: Key social, psychological and ethical design issues*. Amsterdam/Philadelphia, PA: John Benjamins Publishing Company.

Wilks, Y. (2010b). Introducing artificial companions. In Y. Wilks (Ed.), *Close engagements with artificial companions: Key social, psychological and ethical design issues.* 11 – 21. Amsterdam/Philadelphia, PA: John Benjamins Publishing Company.

Williams, M. (1922). *The velveteen rabbit (or how toys become real).* New York, NY: George H. Doran Company.

Winter Steel. (2001, April 13). *Gundam Wing vs. Furbies (or how the Furbies invaded my dreams)* [fan fiction]. Retrieved from http://www.fanfiction.net/s/253003/1/Gundam_Wing_vs_the_bFurbies_b

Witheridge, A. (1999, March 13). Furby's chatter gets a silencer. *The scotsman*, p. 10. Retrieved from http://search.proquest.com/docview/326779615?accountid=14782

Wolf, D. (Creator). (1999). *Law and Order: SVU* [television series]. USA: Wolf Films.

Wolf, G. (2009). Know thyself: Tracking every facet of life, from sleep to mood to pain, 24/7/365. *Wired 17*(07). Retrieved from http://www.wired.com/medtech/health/magazine/17-07/lbnp_knowthyself?currentPage=al

Wolf, M. J. P. (2012). *Building imaginary worlds: The theory and history of subcreation*. New York, NY: Routledge.

Wong, C. Y., Arlbjørn, J. S., & Johansen, J. (2005). Supply chain management practices in toy supply chains. *Supply chain management: An international journal, 10*(5), 367–378. doi: 10.1108/13598540510624197
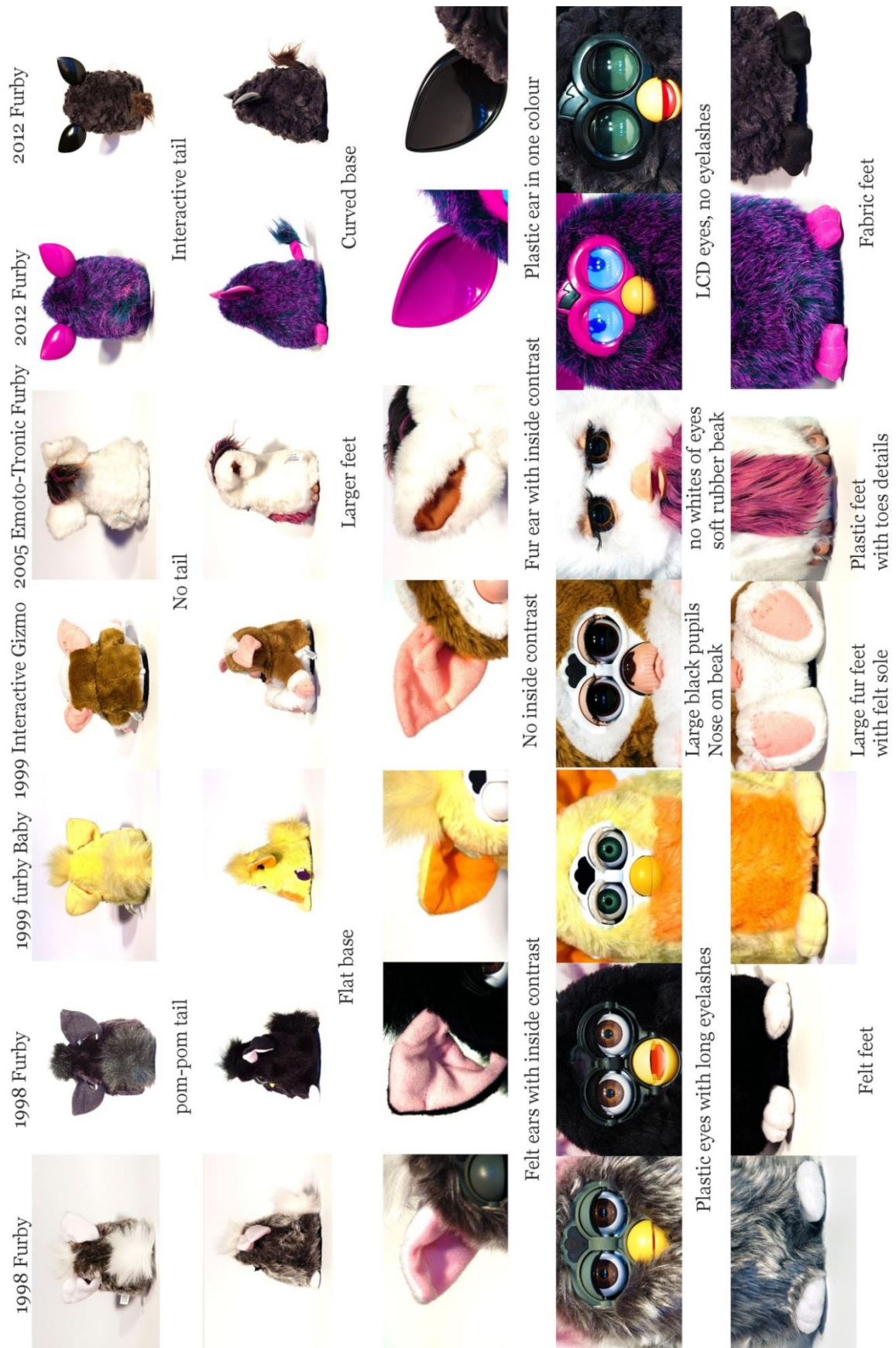
Woodward, I. (2009). Material culture and narrative: Fusing myth, materiality, and meaning. In P. Vannini (Ed.), *Material culture and technology in everyday life: Ethnographic approaches* (pp. 59 - 72). New York, NY: Peter Lang.

Zhang, Q. (1999). About god, demons, and miracles: The jesuit discourse on the supernatural in late Ming China. *Early science and medicine*, (4)1, 1–36. doi: http://dx.doi.org/10.1163/157338299x00012
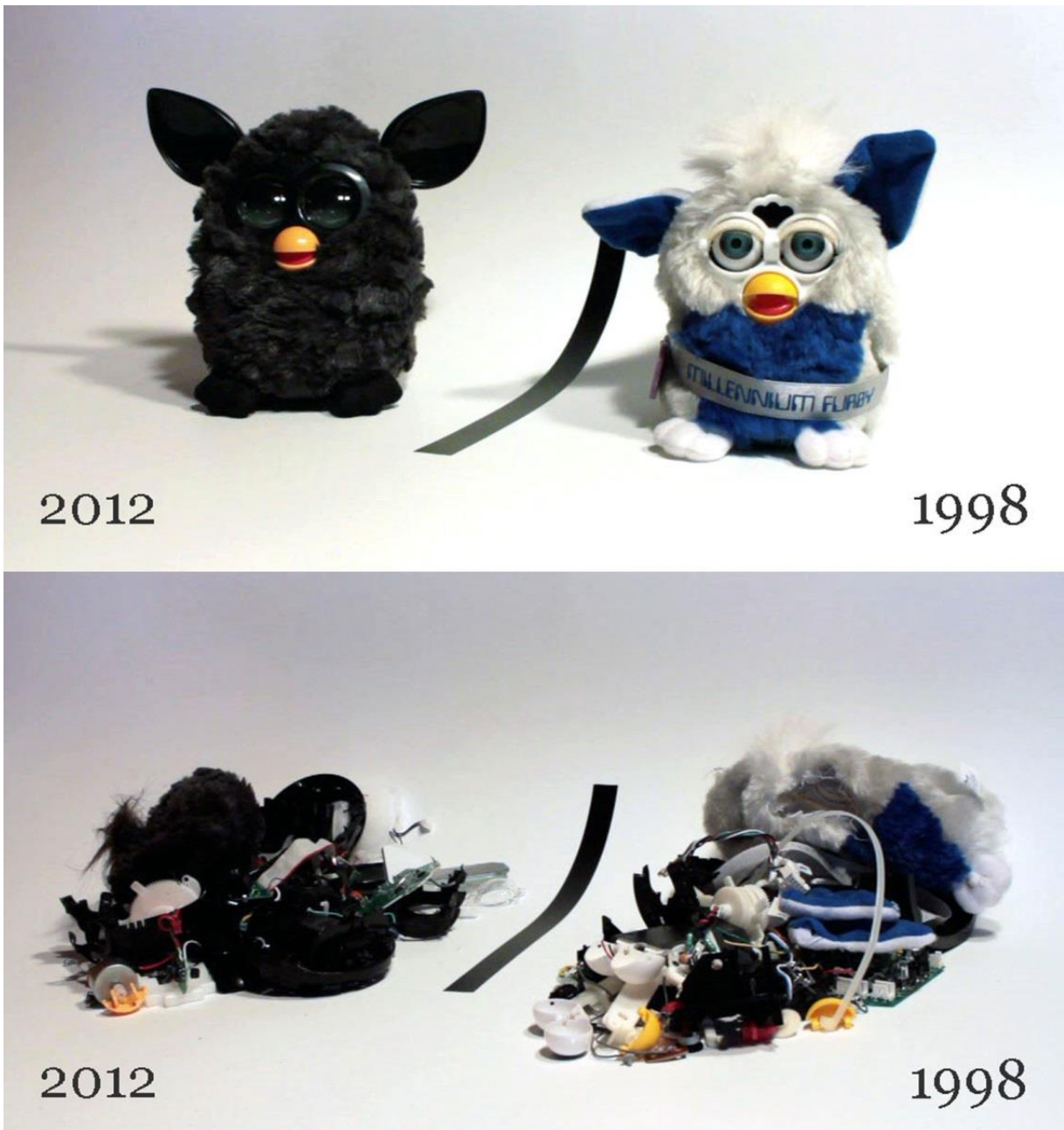
Zipern, A. (2005). It gasps, it yawns, it even listens: Furby is back, kilobytes to spare, *The New York times.* Retrieved from http://www.nytimes.com/2005/07/21/technology/circuits/21furby.html?_r=0

Ziptango. (2002, November 24). *Furby frenzy* [fan fiction]. Retrieved from https://www.fanfiction.net/s/1047760/1/Furby-Frenzy

7. Appendix A: Comparative images of *Furby* generations and dissections

2012 Furby

Interactive tail

Curved base

Plastic ear in one colour

LCD eyes, no eyelashes

Fabric feet

2012 Furby

2012 Furby

Plastic ear in one colour

2005 Emoto-Tronic Furby

Larger feet

No tail

Fur ear with inside contrast

no whites of eyes
soft rubber beak

Plastic feet
with toes details

1999 Interactive Gizmo

No inside contrast

Large black pupils
Nose on beak

Large fur feet
with felt sole

1999 furby Baby

Flat base

Felt ears with inside contrast

Plastic eyes with long eyelashes

1998 Furby

pom-pom tail

Felt feet

1998 Furby

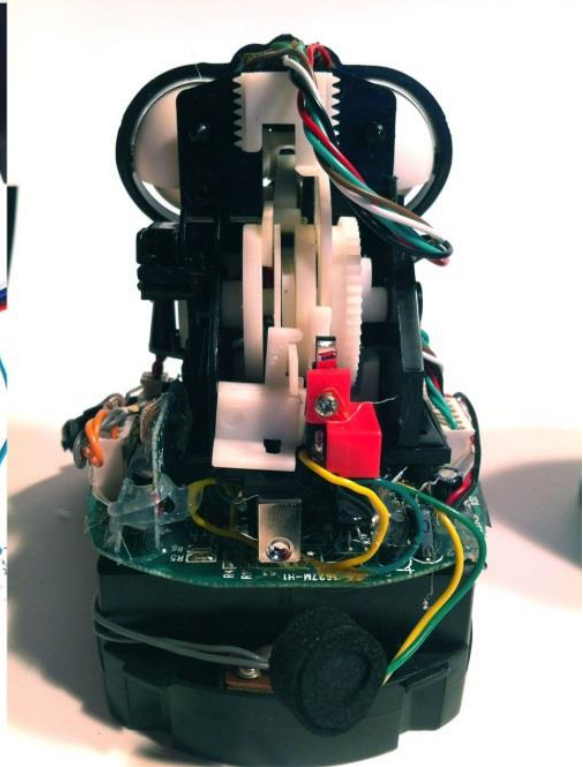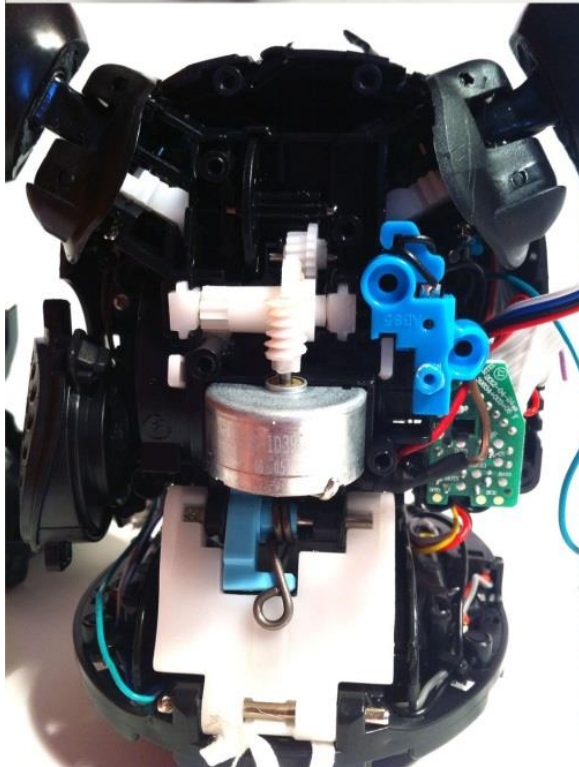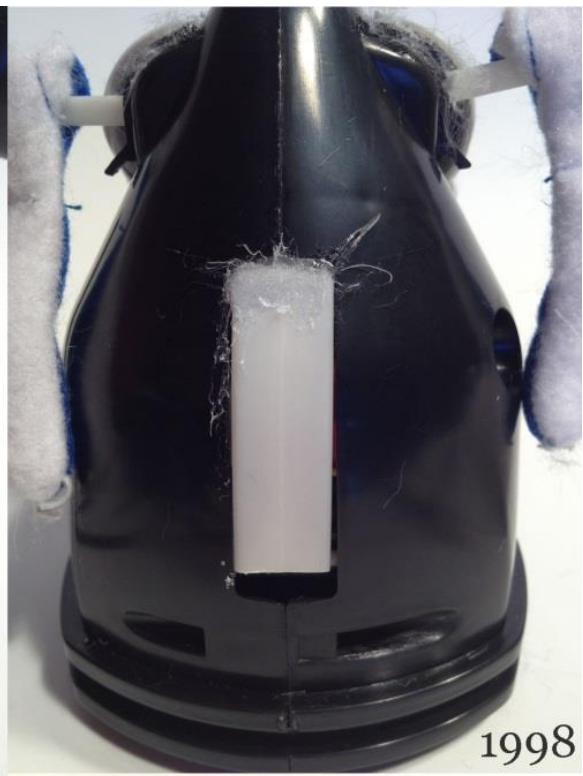Appendix A. Figure 1. Author. (2013). Comparison of Furby generations 1998 – 2012.

Appendix A. Figure 2 Author. (2012). Before and after images of 1998 and 2012 Furby dissection.
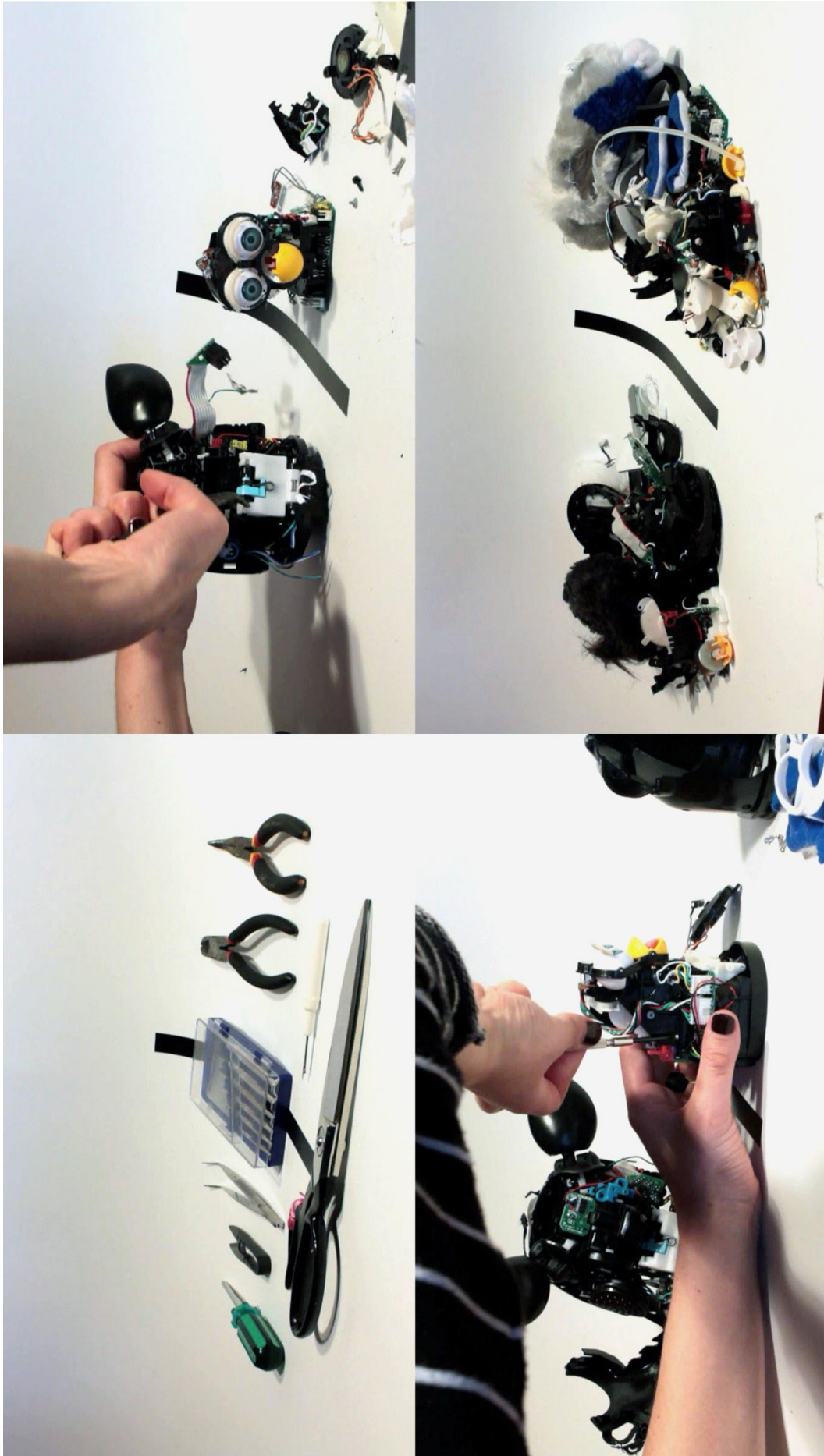
Appendix A. Figure 3 Author. (2012). Video stills from the 1998 and 2012 Furby dissection.

Appendix A. Figure 4 Author. (2012). Comparison details from the 1998 and 2012 Furby dissection.

Appendix A. Figure 5 Author. (2012). Close up comparison details from the 1998 and 2012 Furby dissection.

Invitation to participate

Dear potential participant,

My name is Catherine Caudwell and I am a PhD researcher at the School of Design at Victoria University of Wellington.

My PhD research project explores the emerging technology of electronic or artificial companions, and their impact when they enter the homes and lives of their users, or caregivers. Below is a link to my project website that contains detailed information on my research:

www.blog.storiestellobjects.com

I am interested in how attitudes towards designed objects are explored through fiction, and the value that such stories may have in better understanding how certain design decisions are received. Through the project website I will be inviting owners, fans, designers, and researchers of electronic companions to create fictional narratives by captioning a set of images and completing 2 short questionnaires.

If you are interested in participating in this research, please visit the project website or contact me directly:

Catherine Caudwell
Email: caudwecath@myvuw.ac.nz
Telephone: +64 (04) 463 6200
Victoria University of Wellington
Faculty of Architecture and Design
PO Box 600
Wellington 6140
New Zealand

If you know of someone who may be interested in participating, please feel free to pass this information along.

Thank you for your attention and consideration.

Regards,

Catherine Caudwell

Information sheet (about this website page):

My name is Catherine Caudwell and I am a PhD researcher in the School of Design at Victoria University of Wellington.

My research project explores electronic objects that act as companions, such as Bandai Electronics' *Tamagotchi* and Hasbro's *Electronic Furby.* I'm interested in what happens to them when they enter the everyday lives and homes of their users, or perhaps more appropriately, their caregivers. As part of this research, I hope to spark discussion on the role that stories can play in our relationships with companion technologies.

I am inviting fan fiction authors, and those with an interest in *Furby* and other companion electronics, to participate anonymously in this research by providing captions for sets of images, and/or completing two short questionnaires related to *Furby* and electronic companions in general. The questionnaires should take a maximum 10 minutes each to complete.

Victoria University requires that ethics approval be obtained for research involving human participants. I carry out this research with this approval. Participation in this research is entirely voluntary, and any concerns or issues may be raised with the researcher at any time. You must be aware that because the online questionnaire and contributions are anonymous, you will not be able to withdraw once your response has been submitted.

The questionnaire is strictly anonymous and is accessible from any location with internet access. The project website includes a URL link from which the questionnaire can be accessed. Participants can then complete the questions and submit their responses to a secure password protected account.

This research will be used to explore the possibility of a design practice that incorporates the expansive thinking of fiction, and the imagination of designers and consumers alike. Analysis and results generated through this process will be published in my PhD dissertation. Information and answers given in the questionnaire will be restricted to the researcher and research supervisor, and will be kept confidential.

As the survey is fully anonymous, only non-identified data will be collected. The survey data will be analysed and reported on by the principal researcher. All data relevant to the research will be securely stored in either hard copy or electronic format for two years following the completion of the project, until 2016.

All material collected from the questionnaire will be kept confidential. No other person besides me and my supervisor, Dr Anne Galloway, will see the questionnaires. The thesis will be submitted for marking to the School of Design and deposited in the University Library. It is intended that articles will be submitted for publication in scholarly journals and conference presentations. Any reports arising from the project will be made available to all project participants, upon their request.

Feedback for participants will be available via the research website:

blog.storiestellobjects.com

If you have any questions, or would like to receive more information on this project, please do not hesitate to contact me.

Contact details

Catherine Caudwell

Email: caudwecath@myvuw.ac.nz

Telephone: +64 (04) 463 6200

Post:

Victoria University of Wellington
School of Design
PO Box 600
Wellington 6140
New Zealand

Research supervisor:

Dr Anne Galloway

Email: anne.galloway@vuw.ac.nz

Telephone: +64 (04) 463 6230

Post:

Victoria University of Wellington
School of Design
PO Box 600
Wellington 6140
New Zealand

Electronic Companions Questionnaire
(Short answer questions)

Q1 If you were to design an electronic companion, what would it look like? What would it be able to do?

Q2 What attributes and abilities make something:

Q2a Scary?

Q2b Sad?

Q2c Friendly?

Q2d Cute?

Q2e Mean?

Furby Questionnaire

Q1 Which of the following attributes and abilities would you want a Furby to have?

- ○ Arms (1)
- ○ Functioning legs (2)
- ○ Wings (3)
- ○ Hypnotic eyes (4)
- ○ Fire breathing mouth (5)
- ○ Lasers in its eyes (6)
- ○ Teeth (7)
- ○ Fangs (8)
- ○ Sarcastic demeanor (9)
- ○ Bad temper (10)
- ○ Polite (11)
- ○ Generous (12)
- ○ Levitation (13)
- ○ Wall scaling (14)
- ○ Cast magic spells (15)
- ○ Brainwashing (16)
- ○ Charming (17)
- ○ Carry out maneuvers with an army of Furbys (18)
- ○ Physically evolve (19)
- ○ Commit theft (20)
- ○ Fly (21)
- ○ Batteries that never die (22)
- ○ Absorb and repeat information (23)
- ○ Mimic voices (24)
- ○ Tentacles (25)
- ○ Glow (26)
- ○ Flirt (27)
- ○ Eat real food (28)
- ○ Eat human flesh (29)
- ○ Claws (30)
- ○ Stealth (31)
- ○ Desire for world domination (32)
- ○ Other (33) _____
- ○ Other (34) _____
- ○ Other (35) _____

Q2 If you were to design your own Furby, what would it look like? What would it be capable of? (short answer question)

Sample *Furby* image set for captioning

Please caption any number of the following images: