

Article

Pets that Have ‘Something Inside’: The Material Politics of in/Animacy and Queer Kin within the Childhood Menagerie

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Received: 16 November 2019; Accepted: 3 February 2020; Published: 31 March 2020



Abstract: In this paper, we seek to unsettle and extend understandings of what constitutes the contemporary family in Western minority world society and consider the material politics that follow from such a reconceptualization. We do this by offering a situated exploration into the caring relations and shared biographies that routinely evolve between children, other than human animals and toys within the family home. An emergent field of scholarship (Hohti and Tammi 2019; Taylor 2011; Malone 2015) reveals child–animal relations to be charged with various pedagogical and ideological assumptions, which we argue are partly exported to the relations that form between children and their toys. We undertake a close examination of the relationalities between humans and a range of toys as a means to explore the ways in which care and liveliness materialize in childhood play and what this means for our conceptualizations of ‘the family’. We put to work the idea of queer worlding (Haraway 2008; Osgood and Andersen 2019) and animacy (Chen 2012) alongside Puig de la Bellacasa’s (2017, 2011) feminist ethics of care. We then specifically focus on the materiality of robotic toys to illustrate some crucial connectivities and erasures to examine how the queer human–animal and animate–inanimate boundaries are reworked and negotiated in childhood play. These processes create a shift in understanding what matters in children’s lives and how materiality and affective forces co-constitute the posthuman family. This paper engages critically with the ambivalences and tensions that emerge within the domestic menagerie and extend to a planetary scale in ways that are inherently political.

Keywords: queer kin; worlding; care; animacy; toys; robots; child–animal relations

1. Introduction

Our feminist new materialist concern with care and materiality in contemporary childhoods has invited a close examination of children’s relations with other-than-human animals as well as toys within and beyond the family home. For the purposes of this paper, we visited the homes of two girls, Matilda and Nimona¹, whom we know as friends and whose engagements with both live animals and robotic pets had piqued our interest. Following informed consent, we spent several hours with both girls, immersing ourselves in their ‘menageries’ comprising domesticated animals, toy animals and, on occasion, wild animals. We videotaped and photographed these encounters and compiled field notes whilst also engaging with the robotic toys ourselves. In both homes, the collection of toys was

¹ We are using pseudonyms for both the children and the pets.

vast and included the ubiquitous teddy bear and other soft toys, as well as robotic toys with inbuilt smart technology, particularly those belonging to the Little Live Pets™ family and robotic Teksta™ pets.

Following these situated encounters, the research proceeded through analytical readings of written notes as well as through sharing observations while re-engaging with the visual materials. The empirical engagements continued with cinema trips (to watch *Toy Story 4*) and shorter, ad hoc and on-going discussions with the girls and their families which enabled us to pursue the central concerns of this research further.

Our analysis pays attention to the dominant discourses of care and responsibility imported from the realm of child–animal relations to the world of robotic animal toys in ways that reproduce human exceptionalism. We suggest that although different in scale and consequence, children’s shared lives with both animals and toys raise interesting questions about co-living in contemporary times that relate to the underlying discursive opposites of human–animal and animate–inanimate. Through this analysis, we suggest a broadening of contemporary conceptualizations of ‘the family’ to recognise that it reaches beyond humanist assumptions.

Within family studies, ignorance towards multispecies households and human–animal relationships is a longstanding blind spot, or a ‘species barrier’ (Charles 2014). However, over the past two decades, the ways in which other animals are constitutive of human social lives have gradually been acknowledged. In 2008, Charles and Davies (Charles and Davies 2008) studied notions on family and kinship, and found that close, family and friend-like relationships exist between human beings and animals sharing domestic space. Complementing earlier studies of kinship that considered pets as substitute children, these scholars explored ‘some of the other ways in which animals are constructed as kin’ to consider whether such constructions confound the (socially constructed) nature/culture boundary. Morgan (2011) explored intimacy and the physical organization of the home and suggested that domestic animals should be included in sociological analyses of family practices. Gabb (2011) draws on Haraway to remodel animals within the fabric of connected lives to argue for ‘queer families of companion species’ (Haraway 2003, p. 11). Levy (2009) study on the evolution of human–robot relationships is useful to our research, especially the connection identified between pets and robots as ‘attachment figures’ that we talk to, love and care for, and grieve when they die.

In what follows, we build on this emergent scholarship when doing ‘history of the present’ (Foucault 1977). For us, this ‘present’ is approached as inherently multispecies, emerging at the intersections of multiple beings, including technoscientific ones (Ogden et al. 2013; Puig de la Bellacasa 2011). We extend notions of the posthuman family by focusing on the ways in which robotic pet toys (common in most Western minority world² homes with children) participate in family life but also global childhoods—ideologically, affectively, materially and corporeally. By putting to work the concepts of animacy (Chen 2012) and care (Puig de la Bellacasa 2011, 2017), we analyse how the boundaries of the human, the child, and the family are established, and potentially blurred in the playful engagements involving animals and robotic animal toys. This paper is guided by the question: how does animacy emerge in the affective materiality of robotic toy play, and how does robotic toy play queer normative understandings of nature, bounded human bodies, family homes and nation states?

2. Troubling Childhoodnature

Children’s relations to animals in the minority world are shaped by a legacy of understanding ‘nature’ that stems from Christianity, Enlightenment and settler colonialism and its dehumanizing strategies (Taylor 2011; Malone 2015; see Bunyak 2019). Within these discourses, an essentialized and valorized ‘special relationship’ between children and nature has been established. Taylor (2011)

² Following scholars such as Shahidul Alam, Sadaf Shallwani and Michael Gallagher, we use the terms (Western) minority world and majority world to refer to the distinction between the parts of the world traditionally called developed/developing, or the Global North/South.

examines the links between the essentializing discourses concerning both nature and childhood, pointing to ways in which the first authenticates and morally justifies the second. To queer this connection involves not only deconstructing the essentialized nature of childhood but also ‘the essentialized nature of nature’ (Taylor 2011, p. 421). Specifically, child–animal relations are understood through a discourse of innocence that binds these two categories to keep them firmly on the ‘nature’ side of the nature/culture binary (Hohti and Tammi 2019).

More generally, growing up in the West today involves heavy socialization towards human exceptionalism (Pedersen 2010), whereby humanity becomes defined through superiority and separation rather than relatedness between humans and other-than-human animals (Hohti and Tammi 2019; Grusin 2015). Bunyak (2019) discusses the histories of animals in homes, specifically the ways in which middle-class families in the United States considered keeping pets as a moral act, cultivating virtues of kindness and sympathy within children. He traces this discourse back to Locke, who proposed that humane treatment of animals will teach human beings to ‘treat each other with compassion’. There continues to be a strong assumption that children learn to be responsible and develop empathy as a skill by taking care of animals (Thompson and Gullone 2003). We want to argue that children’s encounters and relationalities with animals (real and robotic) are more complex and offer opportunities to reimagine families beyond species and reproductive lines, which Haraway (2008) has conceptualised as ‘queer kin’ and ‘companion species’. We work with these twin concepts as a means to reconsider the constitution of (post-human) families.

3. Animality and Animacy as Matters of Care and Queering

Matilda longed for a live hamster but after on-going negotiations, she had (reluctantly) settled upon having a robotic toy hamster. The desires, tensions and reasonings around this decision emerged from a range of factors: peer group pressure, TV and YouTube narratives, the fact that a hamster is nocturnal, and most significantly the fact that Dave, her cat, is established queer kin with a history of catching hamster-sized creatures in the garden. The other child in our study, Nimona, moved from another country several years ago. Much to her dismay, her cat companion, Pablo, had been unable to join the family in their new home. Nimona’s room was inhabited by a large collection of toys, ranging from well-worn and visibly loved soft toys to robotic pets equipped with smart technology. Over the course of the research, she lived in excited anticipation of the arrival of new pets, two fish that the family had bought from a nearby pet shop. Nimona had an aquarium ready for Jim and Molly’s arrival.

Matilda and Nimona have shared histories with their animals and their toys, ones that stretch across individual and family histories while being situated in specific cultural and societal contexts. Foucault’s method of genealogy (Foucault and Ewald 2003) offers one way to analyse how these shared histories are shaped and how they continue shaping the present, through discourses concerning humanity, animality and animacy. Genealogy attempts to ‘desubjugate historical knowledges, to set them free, or in other words to enable them to oppose and struggle against the coercion of a unitary, formal, and scientific theoretical discourse’ (Bunyak 2019). Millei, Korkiamäki and Kaukko (Millei et al. 2019) consider the significance of objects in the production of shared histories. They state that objects are biographical by their very existence, as they create connections, ‘inevitably provoke imaginations, tell stories that people conjure and can recall’ (p. 4), and animate human cohabitants with affects and emotions, creating connections and encounters with other people and objects which each have unique biographies in different times, places, cultures and positions. Berriman and Mascheroni (2019) discuss affordances, referring to the capacity of toys to request, demand, encourage, refuse, or allow. In the case of smart toys and robotic toys, the life-likeness or agency of toys—generic features of all childhood play—are at their very core and intentionally engineered. Robotic pet toys, such as the Little Live Pets bird and Teksta dog discussed in this paper, are ‘alive’ by virtue of technological functions designed to directly interact with humans.

4. When Technoscientific Things Become Matters of Care

Recently, feminist philosophers of the more-than-human have theorised life as emerging from meshworks of naturecultures, entanglements (Barad 2007) or as processes of worlding (Haraway 2008). Conceptualised this way discourses, materials and affects are inseparable. Haraway (2008) feminist figuration of the cyborg and the idea of queer kin are particularly helpful to our examination of child–animal–robot relations. Haraway explained how these concepts enable ‘conceiving of us all as communication systems, whether we are animate or in-animate, whether we are animals or plants, human beings or the planet herself, Gaia, or machines of various kinds’ (in Markussen et al. 2000, p. 7) and how they point at odd kinds of family relations, ‘a queer family that is neither nature nor culture’ (in Markussen et al. 2000, p. 15). This theoretical framework suggests that humans can be defined in ways that disrupt the human–animal binary, through relations and co-evolving shared histories with other animals and objects (Osgood and Mohandas).

To stay with the ambivalences of the child–animal–robotic toy relations, we draw from queer theory and feminist ethics of care. Puig de la Bellacasa (2011) introduces the idea of turning technoscientific things into matters of care. She elaborates that care can expose the related labour, affect and politics, which become ‘productive doings’, whereas understanding animals, things and technologies as mere ‘mediators’ (of well-being, learning, knowledge) they become ‘free citizens’, seemingly neutral, mute, and inert (see Latour 1993). Her notion of care is a feminist attempt to ‘re-affect the objectified world’. Care as a mode of knowing generates possibilities for other ways of relating and living: it connects things that at first glance are not held together, illuminates the tensions and ambivalences around them, and transforms the ethico-political and affective perception of things by the way they are represented. Care can thus be employed both as a topical interest in how care is implicated across children’s relationships with living and non-living companions, and a critical analytic to examine material, affective and ethico-political dimensions and effects of these relations in situated contexts, including the family home.

For Chen (2012), animacy accounts for the ‘fragile division between animate and inanimate’, and as an analytic it probes beyond conventional categories of human and animal. For them, animacy is a process of hierarchization that ‘arranges human life, disabled life, animal life, plant life, and forms of nonliving material in orders of value and priority’ (Chen 2012, p. 13; Shannon). Animacy can thus bring together queer studies, colour scholarship, critical animal studies, and disability studies to discuss some pressing issues facing current societies, such as animal rights debates or biosecurity concerns. In *Animacies*, Chen analyses toys in this mode, by following the classed, racialised and national panics around toxic lead used in Chinese toy manufacturing.

Taylor and Blaise (2014) employ ‘queer worlding’ (Haraway 2008) to disrupt the normativity of anthropocentrism i.e., normalized fixation upon exclusively human concerns and agency, trademarks of humanist knowledge traditions (see Giffney and Hird 2008). They state: ‘Just as heteronormativity is naturalised and defended by entrenched romantic traditions and truisms (such as the adage that “opposites naturally attract”), the normativity of natural childhoods is entrenched by the romantic coupling of nature and young children’ (pp. 378–79). They also suggest that because the ‘special relationship’ between children and nature is thoroughly invested with sentimental and limiting adult nostalgia, it requires queering. It is to this project of queering that we attempt through our research with Matilda, Nimona and their various critters.

5. Toy Stories

Variations of liveliness inevitably emerge in connection with play; children rarely need designated playthings for lively encounters and interactions with objects to emerge. When we visited Matilda, she narrated life with her soft toys, some as old as her, visibly worn by endless strokes, cuddles and shared adventures. Berriman (2018) examines how time materializes in children’s toys and objects and how children elaborate their shared pasts and temporal experiences with them. During our visit, Matilda engaged in curatorial practices described by Berriman: ‘storying’ time and memory with

her lifelong rabbit companion, Boo, and other soft toys, and ‘sorting’ and curating material pasts, for example tracing back in time the moment when she got a particular toy, and ranking its importance at different phases of life. Even if most of the toys did not have the built-in functions of movement or voice, there was visible attachment and animacy around the moments in which Matilda engaged with them, lifting them up, setting them in groups and hugging them while telling us about their ‘shared biographies’ (Millei et al. 2019).

The links between liveliness and attachment have been the recent focus of childhood research on toys (Berriman and Mascheroni 2019), and along with the emergence of various techno toys and smart toys, the interest in these phenomena has intensified. A dominant strand of research looks at soft toys such as teddy bears from a psychoanalytic perspective, as objects that provide stability in life during transitions and other challenging moments. Turkle (2011) makes a distinction between ‘transitional artefacts’ that allow children to project meanings and desires, and ‘relational artefacts’ like social robots or smart toys, which, according to her, require less input from the child. Berriman and Mascheroni (2019) suggest that new smart toys share some features with traditional toys, for example, in the way they invite imaginative play, practices of care, and affection—but these have been augmented by new sets of characteristics, such as liveliness, ‘affective stickiness’ and portability, that resemble mobile media. This augmentation of the affordances of toys has led to a shift in the dynamics between child and toy in which play practices that were previously ‘requested’ or ‘encouraged’ are now ‘demanded’ (p. 28). However, based on empirical analyses of play with the Tamagotchi and the Furby, they contend that the toy technology never fully determines children’s playful practices.

In addition to traditional toys, the menageries of both Matilda’s and Nimona’s homes harboured various robotic/techno toys, including a Little Live Pets bird and Teksta the robotic dog. These toys can be considered smart toys in that their functions include a degree of adaptive computational interactivity, albeit rather basic. In accordance with Berriman and Mascheroni (2019), we contend that all toys, not only smart toys, need to be attended to in their wider media ecologies and the processual and relational practices of ‘connected play’, in which child, toy and play culture are co-constituted. Like Japanese cute monsters in Allison (2006) study, contemporary toys typically belong to a mixed-media industry of electronic games, cartoons, cards, movies, comic books, and other merchandise. Both Little Live Pet birds and Teksta dogs come accompanied by a range of digital materials: instructions to be retrieved from the Internet, TV commercials, YouTube videos (made by both adults and children), and, in the case of Teksta, an application that is needed to fully run all the activities of the robotic dog. Toys travel to and with children’s lives on the waves of global marketing that utilize the contaminant ‘sticky affects’ (Berriman and Mascheroni 2019) moving across children’s sociality and peer cultures. In the relational practices of play, fantasy, capitalism, and globalism are conjoined (Allison 2006), and from early on, intertwined with digital technology.

One particular commercial narrative worked as an affective backstory for much of Matilda’s and Nimona’s engagements with their toys. The Pixar movie Toy Story premiered its fourth sequel at the time of the research, and so the girls (and their mothers) were invited to watch the movie with us. Having watched the previous Toy Story films since they were little (often again and again) the grand narrative of living toys continued to stimulate their imaginations. Toys as lively, animated characters manifested in the play cultures that featured in their homes, with family members and with friends. Taking care of toys, feeling genuine attachment to them, and believing in their capacities to be more than just ‘things’ are core elements of the Toy Story narrative. When we asked Matilda and Nimona if they believed their toys were alive, Matilda was still partially drawn to these discourses. She recounted the Toy Story-inspired play culture she developed with her older brother (before he became immersed in computer games as his primary form of play). When we arranged to watch Toy Story 4 together, Nimona told her mother that the researcher failed to grasp that Toy Story was meant for younger kids. While negotiating, or ‘sorting and storying’ (Berriman 2018) their memories and relations to their toys,

both girls reworked their attachments as well as the inanimate/animate boundaries in connection with time and popular culture.

In what follows, we take a close look at child–toy–animal engagements within the broader relationalities of connected play described above. By focusing on robotic toy animals we are invited to revisit well-worn narratives about child–animal relations and so consider *what else* gets produced through inter- and intra-actions within the menageries of two eight-year-old girls (see Osgood 2020). We expand the notions of ‘affordances in practice’ and ‘connected play’ to examine attachment, responsibility and care as played out across the child–animal–toy continuum. Understood as more-than-human, these affects illuminate how the queer boundaries of in/animate and human–animal are negotiated and reworked in play situations. We consider Berriman and Mascheroni (2019) suggestion that digital materiality creates ‘porosity’ leading to a dynamic and constantly shifting ontological landscape. Attending to not only flows of narratives and playing cultures, but also to transcorporeal flows of earth energies and materials, pushes us further to explore these ontological landscapes and to attend to the biopolitical world-making dimensions of play. Undertaking this analytic exercise enables us to disrupt discourses of innocence and nostalgia related to childhood play, and to challenge the Western securely bounded anthropocentric notion of what constitutes the family. Child–animal–robotic toy relations are emblematic of ‘queer kin’ (Haraway 2008), involving complex care relationalities that implicate non-human and more-than-human matter alongside human subjects.

6. Matilda and Little Live Pets—Scripts of Care and Liveliness

To turn the bird on, slide the switch to the left and watch your bird come to life. (Little Live Pets demo video)

The Little Live Pets bird³ looks at us with cute round eyes. Its body is approximately the size of a canary, just ‘little’ enough for children to play with, and to carry in their hands (see Tammi and Hohti). The pastel pink and blue of the robotic pets mark their belonging to gendered material childhood cultures of girls where femininity is reinscribed through clothing, room decor, toy worlds, accessories, and more (Fine and Rush 2018). The body of the bird is covered with velvet-like material, neither fluffy nor furry, but nevertheless tactile enough for human fingers to touch and stroke.

Your bird loves to be petted. Gently stroke your bird’s back and it will tweet and light up for you.

Continue stroking and your bird will be happier and chirp and tweet longer, and eventually sing a song.

As advertised, when the robot is turned on, animated chirping and tweeting ensues; when stroked, it chirps and tweets even more, and occasionally sings a song. The characteristic feature of the LLP toys, included even in the cheapest version of this brand, is that when pushing a button, a voice recorder starts to operate; a further button push and the recorded message is repeated in a cartoonish avian tone: ‘*Your bird loves repeating what you say*’.

There is a long history of humans bringing things ‘to life’ by inserting compartments to create sound, light or movement. Similarly, the ambition to create ‘realistic’ dolls and pet toys dates back to the early history of human material culture. Voice, according to Plowman (2004), is a powerful indicator of social presence and intelligence, and speech is considered to give the illusion of rapport between a plaything and its user. Among mechanical toys and automata, in the quest for creating artificial life, talking toys have been granted a special position. Edison’s invention of the phonograph in 1877 (Plowman 2004) marks a significant moment in the liveliness of toys. At the time of this study, speech technology in toys appears ubiquitous. Contemporary speaking toys are possible because of light-weight technology that is increasingly affordable (a single LLP bird costs less than £10 on the internet).

³ From now on LLP bird.

Your bird loves attention. When you leave your bird alone it will occasionally chirp, tweet and sing to get your attention. (LLP commercial in YouTube)

The life-like performances of the LLP bird do not only invite or encourage continued engagement; rather, as suggested by [Berriman and Mascheroni \(2019\)](#), the affordances come close to ‘demanding’ interaction. The instructions and other commercial materials concerning LLP urge, persuade and insist that users engage with the bird as more than mere play or fun, but as a mode of practicing care:

If there is something that all children have in common it is their love for pets. Especially when they’re babies. If your children have been begging you for one and you haven’t yet decided, these adorable birds can be the perfect solution. This way, they’ll learn how to become good caretakers and develop their emotional, social and language skills too. (<http://blog-en.famosa.es/little-live-pets-best-interactive-toy-of-the-year/>)

Internet blogs and YouTube videos on robotic toys make connections between robotic pets and live animals in children’s lives. The blog written by a parent above recommends that LLP birds provide an initiation towards having a ‘real’ pet. The idea that animals can aide emotional and moral development by teaching children to care and take on responsibility are central to pedagogical child–animal relations ([Hohti and Tammi 2019](#)), and the child–animal–robotic toy continuum in the quote suggests that care and responsibility can be exercised across animate–inanimate animal worlds. However, the emphasis on the benefits of contact with animals (e.g., improving learning, emotional skills, enhancing well-being in classrooms) leaves the human–animal binary, human exceptionalism, and the related essentialized notions of what is ‘natural’ in children’s and animals’ lives, undisturbed. The pedagogical goal of care itself is seen as innocent, nothing but beneficial and pure ([Hohti and Tammi 2019](#)).

In her analysis of children’s engagements with Tamagotchi, the most popular smart toy of its era more than ten years ago, [Ruckenstein \(2010\)](#) illustrated that digital toys became acceptable when framed by a care imperative. Similarly, with the LLP birds, care is framed by assumed innocence. Yet the care narrative is being used to sell commodities and render them acceptable to consumer parents. In the case of robotic toys, care also serves as a marker of liveliness, as it is an inherently relational phenomenon: both born of relations and producing relationality of a specific kind ([Puig de la Bellacasa 2017](#)). The toy has its own needs, and within practices of care it becomes ‘almost real’. [Turkle \(2011\)](#) stresses how robotic toys can be regarded as better than real pets as they never tire of performing their animality. In encounters with real animals, this Disneyesque animality expectation of species-specific behavior does not automatically occur: Matilda’s cat Dave, for example, mostly does not perform ‘cat’ tricks that Teksta does, instead he sleeps during the day and becomes active at night and/or during time outside/out of human sight.

You are meant to communicate, so I do what I am meant to do to make them happy.

I don’t love them but they are fun.

Following [Berriman and Mascheroni \(2019\)](#) idea of ‘affordances-in-practice’, the LLP bird must be decentred as a ‘solitary object’ and instead considered implicated in ‘processual and relational practices in which child, toy and play culture are co-constituted’ (p. 9). Whereas the types of love and care scripted for the LLP toy are seemingly endless and seamless, practice brings about porosity and ontological insecurity: the care and attachment scripted in the LLP bird has limitations. When attempting to describe her affection to robotic toys, Matilda ponders about the fact that they have ‘something inside’, whereas the soft toys without technology do not: there is no on/off switch. For her, toys without technology appear to offer more magical possibilities. In Matilda’s case, love and care do not come from the demands or other affordances built into the toy—the pre-programmed liveliness, emotional responses and care—or from the assumed development of caring attitudes. Rather, these affects are a matter of intuition and personal, situated child–toy histories, biographies and narratives.

Employing *Toy Story*, the movie, as ‘low theory’ (Halberstam and Halberstam 2011) sheds light on the ‘toy’ side of the child–toy relationships. One of the central elements of *Toy Story* is the toys’ unconditional love and commitment for ‘their own kids’. The toys sense fulfilment as their kid grows up and they help to create happy memories. In *Toy Story 4* one plot concerns the desire of baby doll Gabby-Gabby to create a relationship with a human child. Her damaged wind-up voice box denies a performance of liveliness through voice. Upon meeting Woody (manufactured in the same factory as herself) she plots to have his voice box extracted and inserted into her body. In this narrative, however, the technology meant to guarantee liveliness is insufficient. The central characters Woody and Buzz Lightyear both have voice functions, but their cowboy cheerings and heroic astronaut commands mostly conflict with the real-life drama. In one culmination point of *Toy Story 4*, Buzz persistently pushes his voice button to create a command suitable for the situation but fails and so decides to act. When Gabby-Gabby’s voice box is fixed, the unpredictability of life strikes, as the girl (Harmony), after a fleeting moment of enchantment, becomes bored and abandons her on the floor.

While cleverly persuading young audiences to believe in the genuine affects and moral qualities of objects, thus propelling the commercial flow of merchandise, toys and such, the movie also raises profound questions of animacy, attachment and temporality. A queer temporality emerges in connection with toys, objects that are presented as more capable of building lasting relationships, more loyal and more moral than humans. The toys cherish fond memories of their own kids, and they preserve their youthful appearances whereas humans grow, change, forget, move away and age. The new cycles of the movie add complex temporal layers; it is not only children but also young grown-ups that are targeted by Pixar. Childhood memories and shared biographies with toys have been shaped by narrative elements of *Toy Story* (akin to Matilda and her brother) as a generational, materially lived and affective experience.

7. Nimona and Teksta—From Scripts of Mastery to Queer Animacy

The robotic dog sits in front of us, eyes blinking, clearly waiting for action. Nimona’s *Teksta*TM dog was a Christmas gift, and she introduces us to her robotic companion which she has ironically named Teksta. This bestseller robotic toy since its release in 2016 promises to ‘excite and inspire children of all ages’ as it ‘actually listens and understands you’:

Teksta listens and understands your voice commands. He happily pants when you pet him. He understands your hand gestures. He loves to play with his favourite ball. Feed him his bone. He’s a hungry puppy.
(Advertisement text on Amazon)

Teksta fits the definition of a smart toy: the dog comes with a free downloadable application that offers the possibility to programme operations including a series of more advanced tricks, which involves ‘training’ the dog to dance and backflip. In a blog, a mother refers to the training option as a positive pedagogical feature because it teaches patience.

Teksta bears little resemblance to a real pet dog. Unlike the smooth velvety surface of Matilda’s LLP bird, the Teksta surface is hard, gleaming white plastic, which includes the tail and even the bone that is meant to be ‘fed’ to the hungry puppy. The blink of the eyes, which is the central marker of ‘liveliness’ in this pet toy, does not attempt to imitate anything real; rather, it is clearly a composition of LED lights flashing across small screens in the head of the puppy. Cumulatively the appearance, movements and sounds of the dog are intentionally robotic: this dog is easily identified as belonging to the emerging species of robotic dogs. A quick internet search shows that there is already a range of breeds belonging to this species, from earlier, more basic generations of Teksta to the \$3000 robotic pet Aibo.

Shall we try something like ‘Bark!?’

Riikka tries and shouts the command but forgets to press the nose.

‘Do you want to start the video again?’

This time Riikka presses the nose—a buzz—‘dog breath’—eye movements (lights go round)—ears move up and down -

‘Teksta bark!’ says Nimona.

‘Woof woof!’

‘Well done Teksta!’ petting her head—‘Good girl!’

When interacting with Teksta, in spite of all the interactive adaptability built in we find ourselves engaging according to a specific script of being human with an animal. This script adheres to the human–animal binary and pushes us towards normative ‘humanness’, to a performance of human mastery. Training Teksta and developing the relationship with it entails making the dog submit and fulfill human orders more and more quickly and seamlessly. The computational process gives no alternative to the ‘vertical relation’ (Duhn and Quinones 2018; Hohti and Tammi 2019) between the pet and the human child. There is also a specific vertical, one-directional idea of care scripted in the Teksta-child relationship, one that actualises for instance in the feeding and petting situations. Turkle (2011) describes human–robot relationships as ‘no risk’ in which the difficulties, exhaustions and disappointments that characterize relationships with living beings are nonexistent. A robotic dog ‘won’t do bad things, won’t betray, won’t die suddenly’ (p. 10). While Puig de la Bellacasa (2017) theorized care in open-ended terms of more-than-human relationality, Turkle also addresses care, stressing that humans are psychologically programmed to ‘nurture what they love, and love what they nurture’. With the type of care scripted in the robotic toys, however, we find ourselves engaging with what Turkle (2011) describes as a rupture in the nature of the robotic connection, a *performance* of care, in which the nurturing dimension is lacking.

To return to the idea of relational play, toys should not be reduced to their design; rather, they are implicated in relational and co-constituted practices involving child, toy and play culture (Berriman and Mascheroni 2019). The scripted ‘as if’ nature of liveliness and care emerging in connection with the advanced technological functions of Teksta, however, seems to lead to a narrowing of these relational practices rather than enhancing or enriching them. Indeed, the moments shared with Nimona and Teksta did not lead to an engagement with temporal layers of shared biographies—the overlapping terrains of curation and care—or the affective qualities of their encounters: the animate qualities present in the encounters with stuffed toys both at Matilda’s and Nimona’s homes did not surface. Rather we were taken to examine and go through all the technical operations of the dog as a technology, and the focus was more on the degree to which the operations happened (or more frequently did not).

Delving deeper into the ‘as if’ human–animal relation scripted in the toys, and the efforts and struggles involved when enacted in practice, reveals another set of tensions around queer kin and the relationalities with robotic pets. At Matilda’s menagerie, several older techno toys, like Gabby-Gabby, were in fragile, fractured states. Scripted functions were performed in peculiar and inconsistent ways, sporadically producing broken voices and writhing in ‘mindless’ movements across the room. Matilda’s mother described them as ‘rather manic’. Nimona constantly apologised for her ‘lazy’ and ‘tired’ robotic toys in need of fresh batteries. Paradoxically, it is precisely the moments in which the toy’s ‘lively’ functions fail that moments of intensity and animacy emerge.

‘The batteries are a bit old, she is now a bit lazy. She does backflips but for them one needs new batteries.’

‘I really like to do this!’

(Nimona turns Teksta around, presses her nose until the green lights stand still.)

‘Teksta come here!’ Nimona has Teksta’s ball in her hand.

Several attempts—‘I don’t think she can do it with this battery’

‘Good night Teksta.’

Upon meeting Nimona, she explained that Teksta's batteries 'are not that good' and that her dad was 'just fetching new ones'. Despite a change of batteries, the difficulties remain.

Teksta makes a noise. Nimona leaves her iPad aside. She says: Teksta play dead! Nothing happens. Nimona presses the button on the nose. Reboots. The lights in Teksta's eyes go on and then they go off again.

reboot . . . and then lights again—lights off

'She played dead!' (But to us it looks like Nimona actually switched it off)

'But with that bird you can do so much!' Nimona moves to her LLP bird

Teksta suddenly barks.

'Quiet!'

When pondering the role of battery power to bring the robot to 'life', we are invited to consider materiality in more detail. Our earlier analyses in connection with stuffed toys and LLP birds inspired us to think about animacy as a continuum; engagements between child and toy animal can be situated according to emerging liveliness. Here, however, the ways in which the scripts of the human and the animal continuously fail lead us to pursue the vibrancy of matter (Bennett 2010). We move onto a more porous and fluid ontological terrain, that of queer animacy and animality (Chen 2012).

8. Something Inside: Earth Energies and Worlding

Childhood geographers Horton and Kraftl (2018) have noted that the recent turn to materiality and relations to non-human life has led childhood scholars to prioritise 'materialities characterised by a singular, plainly-visible, divisible, neatly-bounded presence . . . material practices which are manifestly meaningful and readily-narratable', and promoted an 'uncritically-normative view of encounters with nature as necessarily, axiomatically positive' (p. 4). However, Gallagher (2019) reconsiders material and digital objects in children's lives by opening up connections between smartphones and children as planetary and geological. Instead of the dominant focus on how children use technology, he considers the technicality and physicality of technology and offers an analysis of children's relations with the earth energies and materials of digital media technologies. For us, the battery life incidents with Nimona and Teksta provoked deep thinking about the 'earth energies' at hand, to see if more planetary chains of materiality, affect and care might become visible. Gallagher (2019) and Chen (2012) claim that minerals such as cobalt or lithium are not neutral; rather, they become politically active in capitalist economy, which enables us to see previously erased connections, for example those between the children who work as miners of these raw materials in the majority world and those children who use smart technology in the minority world. As noted in other research (Hohti and Tammi 2019; Gallagher 2019), modern day technologies, despite consumer rights to factual knowledge about them, by design, act to throw back political questions about their materiality, origins or consequences.

Animacy, rooted in the Greek word *anima*, soul, has been employed as a 'a tired and fatal venue for human self-making' (Chen 2012, p. 103) where decisions of inclusion in the sphere of animate beings have been made based on race, class, sexuality, as well as materiality. However, Chen suggests that materials and minerals such as lead and oil are not 'ground zero' in regard with animacy; rather, they belong to a continuum. Chen (2012) queer concept of animacy allows understanding materiality as affective (see also Bennett 2010) and focusing on unlikely connectivities across normative categorizations. This invites us to examine the biopolitics of childhood play. How does matter, the origin and affectivity of robotic toys such as the LLP bird and Teksta connect with children's bodies and what would the consequences of such conjoinings be? The failure to liveliness for the LLP bird and Teksta dog point to the fact that they have 'something inside' (in Matilda's words): energy that comes from batteries, that in fact can be seen as 'earth energy' (Gallagher 2019). It is this energy that allows the toys to extend spatially (Ruckenstein 2013) and to construct digital, social and commercial networks globally. At the same time, the plastic surfaces of the toys remain easily mute in the face of

our wonderings of life and affect: ‘toys cannot tell us the story about their origin’ (Not for Children (The guardian 2019); see also Osgood and Andersen 2019; Osgood 2019).

Chen argues that animacy is a slippery concept and useful precisely because it is animate itself, provoking a wilder, ‘feral’ approach, and acknowledging that very few commonplace categories, such as sexuality, humanity or animality, are fixed. Combining the provocations by Gallagher and Chen, we try to think in more ‘plastic’ ways about the connectivities emerging in children’s robotic play. The task is to go beyond toys as bounded objects, those manifestly visible ‘as if’ animal individuals constituted as others in relation to humans, as well as to go beyond the normative discourses of human exceptionalism and mastery that were evoked in connection with the scripted robotic functions of Teksta. Beyond the ideas of meaning making and connected play, what might a more feral analysis of robots and children look like—how might we make sense of robotic play as ‘stuff of the world’, to use Alaimo (2016) expression, as material, affective, animate and political?

The plastic surfaces and the ‘made in China’ labels upon the LLP bird and the Teksta dog make us wonder about the journeys they and their materials make to China, from China, to family homes of minority world, and beyond. Chen (2012) discusses how lead became affective and animate in connection with the lead panic in the USA in the early 2000’s. Similarly, plastic has recently gained visibility and affectivity, as plastic pollution has emerged as perhaps the most repeated visual reference to current environmental concerns (Osgood 2019). Images and reports abound about the ways in which plastic surrounds our worlds from the bottom of oceans, to bird’s nests, and even to intruding our own bodies (for example, in 2018, ‘a dead sperm whale found in Indonesia had ingested 6 kg of plastic’). At the time of writing, Chinese plastic toys (over 80 percent of all toys are manufactured in China) are being racialised and nationalised again, in connection with the trade war declared by Trump against China. Even if the minority world living standard is unimaginable without the comforts and qualities of plastic, plastic is more and more undesirable and carries a heavy stigma. In addition to the environmentally ‘unwanted’ air lingering around plastic, toys with too much (smart) technology evoke concerns about risking healthy growth and development, which connects to nostalgic ideas of proper and natural childhood play (Taylor 2011). Toxic plastic is also seen as a threat to natural, innocent and healthy childhoods, yet crucially, primarily to childhoods situated in the minority world. The CE marking⁴ hidden under the glowing wings of the LLP bird or under the paw of the Teksta dog is an attempt to establish borders of safety and create assurances concerning quality, to keep the market going. As such, plastic panic emerges in nationalised ways, and also in classed ways, as eco-friendly and plastic-free lifestyles remain a largely middle-class Western privilege.

But it is the awareness of microplastics that has the specific capacity of challenging categories and boundaries of bodies, homes or nations. When microplastic intrudes bodies and elements such as water, a new, obscure atmosphere concerning human safety and stability emerges, one that challenges and blends the boundaries of ‘subjects and objects, recipients and perpetrators and terrorists and innocents’ (Chen 2012, p. 173). In this connection, the nostalgia connected to the more traditional toys also flattens, as in fact, both hard and furry toys are made from the same materials. Crude oil is used to make even the cuddly plush which is one of the main attraction features of soft animal toys (Not for Children (The guardian 2019)). Alaimo (2016) refers to LeMenager’s observation that media meant to create experiences of ‘liveness’ are often utterly reliant on oil: ‘We experience ourselves (. . .) every day in oil, living within oil, breathing it and registering it with our senses. The relationship is, without question, ultradeep.’ (p. 11). The CE markings affixed to the wings and paws of the robotic pets discussed here are rendered fragile attempts to build walls, a non-innocent performance of care, because this ‘care’ directed to minority world children is at once connected to class, race, and nation state.

⁴ The letters ‘CE’ signify that products sold in the EEA have been assessed to meet high safety, health, and environmental protection requirements. The manufacturers affix the CE marking to a product themselves, thus assuming responsibility for its compliance with all safety requirements. (<https://ec.europa.eu/growth/single-market/ce-marking>).

The Bizolutioners website, dedicated to human rights issues within businesses, undertook an examination of toy production in China (Not for Children ([The Bizolutioners website 2017](#))). The manufacturing of toys, centralized in Guangdong province, includes tasks similar to the processes in textile and IT production: production is split into many small parts so that each worker conducts one tiny process, such as sewing one specific seam in a teddy bear's head. The approach guarantees low labour costs and heightens the precarity of worker rights. For the middle-class conscious-consumer parent, there is little relief in being able to afford high-street-brand toys, as many expensive toys are produced in the same factories as the cheap ones. The unfair game of toy production is summed up by the writers in three main interrelated traits: excessive working hours, health risks, and minimal possibility for normal family life. Seen from the Chinese end of the production chain—from the viewpoint of workers who typically meet their children once a year during Chinese New Year—the CE-marked safety and quality are illusory figurations, and at the same time, any global and universal definitions of family, parenthood and childhood fail. Care is non-innocent ([Puig de la Bellacasa 2017](#)) and so too is the relational meshwork involving children, animals, families and toys globally.

Our examination of children and toys takes us to a posthuman state of childhood. It extends earlier reconceptualizations of family through acknowledging that queer relationality is embedded in the very mundane materiality of family practices and childhood play. This way, families and childhoods are 'never natural, never detached, never discrete' ([Alaimo 2016](#), p. 185). There are currently new kinds of initiatives within childhood scholarship to account for these shared worlds for example through examining the 'logic of plastic' ([Osgood 2019](#)) together with children ([Pacini-Ketchabaw 2018](#)) rather than keeping plastic out of sight, as the eco-friendly middle-class parent living in the Western minority world would do. When human is defined through [Alaimo \(2016\)](#) notion of transcorporeality, the task is not only to think about childhoods with plastic but to also engage in thinking *as* plastic, in which this thinking itself becomes 'the stuff of the world': 'To analyze, theorize, critique, create, revolt, and transform as someone whose corporeality cannot be distinct from biopolitical systems and biochemical processes is to think as the stuff of the world.' ([Alaimo 2016](#), p. 185)

9. Concluding Thoughts: Childhood Stuff and Queer Kin

Our analysis first engaged with robotic pet toys and their characteristic liveliness that emanates from the fact that '*they have something inside*', to use Matilda's words. We then went on to examine the child-toy relations as 'connected play' ([Berriman and Mascheroni 2019](#)) that is implicated and co-constituted with discourses of innocence and care, with sticky affects moving across social peer cultures and media materials such as blogs and commercials, and with the grand narrative of living toys from the Toy Story movie. Robotic pet toys include scripts that repeat pedagogical child-animal relations as well as human exceptionalism and care, but these scripts contrast with real-life situations in which ruptures and frictions such as problems with battery life prevent the perfect 'robotic moment' ([Turkle 2011](#)) to be created. Eventually, we returned to focus on the affective materiality of toys, namely plastic.

[Puig de la Bellacasa \(2017, 2011\)](#) considers care to be an inherently non-innocent phenomenon, and a critical analytic that offers a way to engage in detail with the situated tensions of technoscientific phenomena. Foucault's method of genealogy can be put alongside Puig de la Bellacasa's notion of care as critique in that it also emphasises situated and local knowledges: '(...) it is thanks to the reappearance of these knowledges from below, of these unqualified or even disqualified knowledges (...) it is the reappearance of what people know at a local level, of these disqualified knowledges, that made the critique possible.' ([Foucault and Ewald 2003](#), pp. 7–8). The Foucauldian idea of biopolitics as a technology of power has been, according to [Chen \(2012\)](#), discussed too narrowly as a human-centred concept. Through our analysis of robotic pet toys, we argue for a more material understanding of the desires, discourses, practices, and technologies that are embedded in and rationalize unequal power arrangements around childhoods and families in our era.

The natureculture configurations offered by Haraway have since her original cyborg figure of the mid-1980s inspired feminist researchers to examine human enmeshment with other

species and technologies and to challenge the nature/culture divide and human exceptionalism. Taylor and Blaise (2014) argue that '[T]hese entanglements are not only queer in their cross-species forms of kinship, or what Haraway (2008) provocatively refers to as 'queer kin', but they are also generative—they make and remake worlds.' Transcorporeality by Alaimo (2016) is another way to talk about these queer worldings. Alaimo paints a picture of the anthropocenic moment in which minority world people finally realise how they are embedded in, exposed to, and composed of the very stuff of material world. 'Ethics and politics flow into each other, as the empty imaginary space for rational political debate becomes full to overflowing with all sorts of weirdly quotidian things that one would not expect to be there—plastic bags, cell phones, pesticides, bicycles, mercury-laden tuna. The public sphere needs to be reckoned with as if it were a landfill (...)' (Alaimo 2016, p. 8). The local and situated analyses called for in genealogy and feminist theories of care become intensified in the materially situated trans-corporeal subject as the very substances of the world cross through her, 'provoking an onto-epistemology that reckons with self as the very stuff of the emergent material world' (Alaimo 2016, p. 8).

Our analysis opens up for thinking about other kinds of toy stories—about unlikely, hidden and erased connectivities concerning childhoods and family life globally. Robotic pet play is related to the intersecting and overlapping concepts of animacy and animality and extends and challenges the commercialised and taken for granted discourses of childhood, care and responsibility. Thinking through the concepts of worlding and animacy, we argue that these notions have implications beyond just understanding or meaning making; rather, they are world making and political. Thinking with/as plastic makes it visible how we inhabit homes where 'the domestic does not domesticate and walls do not divide' (Alaimo 2016). The materiality of play creates non-innocent connections between childhoods lived on this planet while blurring the ideas of securely bounded humans, families, and nation states.

Author Contributions: Conceptualization, R.H. and J.O.; methodology, R.H. and J.O.; software, R.H. and J.O.; analysis, R.H. and J.O.; data curation, R.H. and J.O.; writing—original draft preparation, R.H.; writing—review and editing, J.O. and R.H. All authors have read and agreed to the published version of the manuscript.

Funding: This study has been supported by the Alfred Kordelin Foundation.

Acknowledgments: We would like to express our gratitude to Matilda and Nimona and their families.

Conflicts of Interest: The authors declare no conflict of interest.

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