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ORIGINAL PAPER

Complicated Mixtures: Repurposing the Chthulucene's Troublesome Trash in *Toy Story 4*

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Abstract

In a world plagued by plastic pollution (among other environmental threats), children's stories dedicated to the positive role of plastic toys in children's lives ought to be categorized as out of touch at best and immoral at worst. Disney's *Toy Story* franchise, however, remains as popular as ever, with the fourth installment released in 2019 netting a slew of nominations and awards, including the Academy Award for Best Animated Feature. This paper examines the merits of *Toy Story 4* as a posthumanist text that productively co-exists alongside and enters into dialogue with environmental critiques of plastic trash. I draw on Karen Barad's new materialist theory of agential realism to reframe what is inherently a pro-plastic narrative into one that exemplifies the necessity of becoming comfortable with trash, with being lost, and with different approaches to reproduction, if, as Donna Haraway suggests, we are to stay with the trouble of irreversible plastic pollution that defines our Anthropocenic era.

Keywords *Toy Story* · Posthumanism · Intra-action · New materialism · Chthulucene · Children's media

> Current toys are made of a graceless material, the product of chemistry, not of nature. Many are now moulded from complicated mixtures; the plastic material of which they are made has an appearance at once gross and hygienic. (Barthes, 2009/1957, p. 58)

"What is it with you and trash?" (Woody to Forky, *Toy Story 4,* 2019)

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Written decades before climate change or pollution became household buzzwords, Barthes' short essay on toys bemoans plastics, linking the "graceless material" of modern playthings with the "techniques of modern adult life" (2009/1957, p. 57) that they emulate in smaller form for child owners, "*literally* [prefiguring] the world of adult functions […and revealing] the list of all the things the adult does not find unusual: war, bureaucracy, ugliness" (ibid., emphasis original). Nowadays, we have also become accustomed to the ubiquity of plastic waste, having been imprinted with documentaries, commercials, and reports featuring "the stigmata of plastic trash…and toxic pollution" (Haraway, 2016, p. 79) infecting Earth's green and blue spaces. The aspects of modern life responsible for the reproduction of plastic toys, repugnant in Barthes' eyes, are also responsible for the reproduction of plastic pollution contributing to the monumental despoiling of land and ocean species. Public recognition of the pollutive dangers of plastic has increased since the time of Barthes' writing, with 44.5% of UK household-generated waste being recycled after incineration instead of dumped into landfills (UK Statistics on Waste, 2020) and bans on plastic bags and drinking straws being implemented across the United States and Europe (Calderwood, 2018).

Nevertheless, Disney's *Toy Story* franchise (Cooley, 2019; Lasseter, 1995; Lasseter et al., 1999; Unkrich, 2010), which hinges entirely on the antics of mass-produced plastic toys, continues to thrive in popularity. If "all the toys one commonly sees are essentially a microcosm of the adult world" (Barthes, 2009/1957, p. 57), then the *Toy Story* franchise represents a microcosm of the webbed relationship between adults, children, toys, and capitalist consumption, encouraging, among other things, a continued consumption of plastic playthings.

One might argue that the greater result of any Disney media production is not in the mass consumption of plastic but rather in the consumption of narrative itself, requiring only one piece of plastic—a smart TV, a laptop or a phone—for infinite viewings. As feminist scholar Donna Haraway points out, however, "stories […] propose and enact patterns for participants to inhabit, somehow, on a vulnerable and wounded earth" (2016, p. 10). Stories about plastic on a plastic-ridden planet matter, particularly those stories that teach us how to "stay with the trouble" (Haraway, 2016, p. 2) that plastic presents. Zoe Jaques notes that "the Toy Story films, in particular […]introduce something of a rulebook as to how toys and humans should interrelate" (2015, p. 233). Tracked across three decades, the *Toy Story* franchise weaves together stories of reproduction, families, kin, and plastic, themes established in the first *Toy Story*. While all three sequels (*Toy Story 2, Toy Story 3, Toy Story 4*) wrestle with questions of plastic overload and examine models of human restraint against overconsumption (e.g. transforming toys into singular cultural artefacts in *Toy Story 2* or donating or "up-cycling" toys to new generations of children in *Toy Story 3*), *Toy Story 4* delivers what I argue is a subtle shift in the franchise's narrative that reflects not only our evolving distaste for plastic consumption, but also a shift in our approach to the other kind of reproduction encouraged by most, if not all, Disney narratives: human reproduction, traditionally mediated by heteronormative familial ties. This category of reproduction, like that of plastic materials, has also been recognized as a troubling cause of the despoilation of our planet, and, like plastic, requires a significant rethinking in our current geological epoch.

We live in an era defined by climate instability and uncertainty, variously termed the Anthropocene (Crutzen, 2002), the Capitalocene (Moore, 2016), and the Chthulucene[1] (Haraway). While the first two terms center the failings of Man and Capitalism, respectively, the latter term centers "multispecies flourishing on earth" and prompts humans to engage in "tentacular thinking" (2016, p. 5), which attends to the entangled nature of humans with other earthly beings and materialities, in the hopes that this entanglement will stave off the complete biospheric extinction threatened by climate change and pollution. Karen Barad refers to this sort of relating as "agential intra-action" (2003, p. 814) or "agential realism" (2003, p. 810). Borrowing from quantum physics, Barad describes agential intra-action as an ontological reframing of individual Cartesian subjects—for example, a child or a toy—as quantum entanglements, or phenomena. In Barad's model, material phenomena are only understood to be separate entities due to local, specific "intra-actions" (2003, p. 815) (a play on interactions, to indicate the underlying entangled nature of what would otherwise be considered an "interaction"). She refers to the appearance of individual subjects as "agential cuts" (2003, p. 815) that do not necessarily reflect the entangled reality.

In this model, a child and her toy may appear, on the surface, to be materially separate entities, but ontologically they are a singular phenomenon—an "apparatus" (ibid.)—defined into individual subjects by specific and meaning-generating actions, behaviors, and material configurations (all of which she considers "agential cuts"). Reconceptualizing material beings as entangled rather than individual, according to Barad and Haraway, is a necessary shift if we want to "become capable, with each other in all of our bumptious kinds, of response" to "a damaged earth" (Haraway, 2016, pp. 1–2). The concept of a damaged earth is arguably backgrounded in the *Toy Story* franchise, but the questions these movies raise and attempt to answer with regards to child-toy intra-actions, toy-toy intra-actions, and the "response-ability" (Haraway, 2016, p. 2) material beings have for each other, propose tentacular, sometimes conflicting, but often surprisingly hopeful patterns of living—and dying—with each other across materialities in the Chthulucene.

The *Toy Story* films present a series of reproductive and non-reproductive apparatuses linking—and at times rejecting—human children, plastic toys, trash, recycling, consumerism, and kinship, all in the service of making persons and/or kin. Haraway insists, somewhat ambiguously, that the key to staying with the trouble of the Chthulucene is to "make kin, not babies" (2016, p. 102), eschewing human reproduction in favor of kin-making across species and materialities. She describes kin-making as "making persons, not necessarily as individuals or as humans" (ibid.), a process that echoes Barthes' point regarding the role of toys in socializing human children into adulthood but discards the strict boundaries between individual designations such as child, adult, toy, and human.

[1] Haraway distinguishes her spelling of 'Chthulucene', with an 'h', from Lovecraft's similarly named beast: "I take the liberty of rescuing my spider from Lovecraft for other stories, and mark the liberation with the more common spelling of chthonic ones. Lovecraft's dreadful underworld chthonic serpents were terrible only in the patriarchal mode" (2018, p. 174).

This article argues that the kin-making reproductive models presented in *Toy Story 4*, released in 2019 in the middle of a record-breaking European heatwave (Carrington, 2020) and worldwide climate strikes (Laville et al., 2019), differ subtly but significantly from the heteronormative, capitalist reproductive model presented by the original *Toy Story* film, released in 1995, and perpetuated in *Toy Story 2* (1999) and *Toy Story 3* (2010). By reframing our understanding of the *Toy Story* franchise through the lens of Baradian agential realism, this article highlights the shortcomings of the "child-toy apparatus" presented in the original trilogy and investigates the new patterns of relating and being suggested by the "toy-toy apparatus" foregrounded in *Toy Story 4*. Just as Haraway simultaneously echoes and discards Barthes, so too does *Toy Story 4* echo and discard its earlier franchise counterparts, leaving contemporary audiences with new patterns to inhabit—and, if not fewer toys to buy, perhaps less impulse, or at least a more reflective choice, to buy them.

From Individual to Apparatus: Reimagining Corporate Reproduction in *Toy Story, Toy Story 2,* and *Toy Story 3*

Past analyses of the *Toy Story* franchise have commonly rested on frameworks invested in individual human subjectivity, with only passing references to materiality and its constitutive production of waste. Karen Cross's "psychoanalytic object-relations approach" (2018, p. 141) to mourning in the *Toy Story* franchise mentions in passing the idea that "toys may ultimately be little more than the debris of history" (2018, p. 147) but links this idea of waste to human sadness, noting that "the sea of waste displayed at the dump configures a landscape of melancholic suffering; a scar born of overconsumption" (ibid.). In Robert Geal's Freudian reading of *Toy Story* and *Toy Story 2*, the human-toy relationship mimics the classical god-human relationship; he notes that "although [toys] exhibit human-like emotional and cognitive behaviour, their man-made construction denies them unfettered autonomous status" (2018, p. 78). Just as pre-Cartesian human subjectivity was deemed entirely dependent on a higher cosmic power, argues Geal, so too are Woody, Buzz, and the rest of Andy's toys dependent on Andy for their continued existence. For a film that "sits within the postmodern tradition" (Cross, 2018, p. 141), the answer to the ontological question of a toy's life origin appears more convincingly rooted not in a cosmic deity but in a corporate one. Toys such as Stinky Pete and the alternative Buzzes from *Toy Story 2,* as well as Gabby Gabby from *Toy Story 4,* possess identities, voices, and conscious awareness without having ever been owned or played with by a child. Andy's Buzz Lightyear himself has a thorough grasp of his own backstory without having been played with, and his pivotal ontological shift from considering himself a spaceman to realizing that he is, in fact, a "child's plaything" comes from viewing an advertisement for the Buzz Lightyear action figure. The analogy is not that toys are to humans as humans are to gods, but rather the other way around; in a capitalist (or Marxist) reading of the *Toy Story* franchise, it is we that worship at the altar of capitalism, with toys as our idols. Alan Ackerman succinctly summarizes the connection between corporate America and religion:

> Disney celebrates the representative self as American and the American self as the embodiment of a prophetic universal design, inverting secular values in the mould of quasi-sacred teleology. But the very idea of origins becomes radically ironic because the sentimental spirit of toys is the spirit of capitalism. Far from positing a theological source or end, a telos, these movies represent infinity above all as a marketing phenomenon, which assumes that children can take a moral pleasure in property and discovers an educative value in the capitalist free market. (2011, p. 116)

What this complicated relationship amounts to, in Ackerman's view, is "a fantasy of unlimited commodification and redemption (i.e., profit)" (ibid.) generated by Disney and upheld through capitalist consumers. Yet "the superficially disposable nature of toys still haunts the [films]" (Jaques, 2015, p. 232); from the point of view of climate change, the notion of unlimited commodification prompts concern, not only in a representational sense when considering the *Toy Story* narratives but in a literal sense when one takes the entire franchise to be "not only the Disney-owned series of movies but also the merchandise, action figures, [and] theme-park rides" (Ackerman, 2011, p. 98). It's one thing to marvel at the seemingly infinite row of Buzz Lightyear toys in Al's Toy Barn; it's another thing to remember that thousands, if not millions, of Buzz Lightyear toys, in production from 1995 to the present day, have mostly been consigned to real-life versions of Cross's sea of waste. More than perhaps any other Disney narrative, the *Toy Story* franchise proposes a paradoxical story pattern for viewers to reproduce with regards to contemporary capitalistic consumption of plastic items, simultaneously tying the purchasing of toys with the formation of a child's individual capitalistic identity (both narratively and in real life) while also consistently nodding towards the dangers of plastic overconsumption.[2]

The reproductive apparatus put forward by the *Toy Story* franchise, consisting of such entangled parts as media narrative, human child, human parent, plastic toy, and money, does not need to be read as rooted in human subjectivity. In fact, in an agential realist model, such a reading is illusory at best, for

> the particular configuration that an apparatus takes is not an arbitrary construction of 'our' choosing […]'Humans' do not simply assemble different apparatuses for satisfying particular knowledge projects but are themselves specific local parts of the world's ongoing reconfiguring. (Barad, 2003, p. 829).

That is, rather than imagining corporate heads of Disney or Pixar as puppet masters pulling parents' strings, or children pulling the strings of a toy (and thus exerting deterministic control over the toy), we can instead think of the corporate reproduction apparatus presented by the *Toy Story* franchise in terms of its intra-actions, reminding ourselves to reframe the Cartesian notion of interaction and attend instead

[2] Although it is outside the scope of this essay, I will note that the narrative paradox presented by *Toy Story* is a neat inverse of Disney's other powerhouse film about pollution: *WALL-E* (Stanton, 2008), which explicitly critiques humanity for destroying the planet with pollutive waste, but undermines that critique by presenting humans, and specifically human heterosexual reproduction, as the fantastical and, arguably, unrealistic key to reviving the planet.

to relationships before individual relata. We can focus on any intra-action within an apparatus: the child-toy intra-action, the toy-toy intra-action, the Woody-Buzz intra-action, the room-child intra-action, or any combination of the above factors, at as granular or as broad a level as we wish.

This mental shift is less of a Matrix-esque "awakening" to any true nature of reality and more of a shift in our "onto-epistemology" (ibid.) of the world—a portmanteau indicating that ontology and epistemology are not separate practices in an agential realist model but rather intertwined ways of being in the world. Agential realism does not suggest that we cease to experience our own first-person subjectivity. Rather, it suggests that we understand our phenomenological experience less as self-generated (in a *cogito ergo sum* manner) and more as a result of ongoing intra-actions with our own materiality and the materiality of the world around us. Reading relationships as apparatuses opens up new understandings of the patterns they create and the world that is created by those patterns. De-centering human subjectivity when reading a narrative that is as much driven by the plastic materiality of its main characters as it is by the subjectivity of those characters reveals new understandings of the different reproductive cycles put forward in different installments of the *Toy Story* franchise, particularly the difference between the "child-toy apparatus", which foregrounds child-toy intra-actions, and the "toy-toy apparatus", which foregrounds intra-actions between toys.

In the original *Toy Story* trilogy, the more generative relationship is the child-toy intra-action, which produces and reproduces narratives of an increasingly cinematic nature as the trilogy progresses. As Jaques notes, the toys' replication of human behavior extends to "[engagement] in (heteronormative) relationships with other toys" (2015, p. 220), yet these relationships are implicitly non-reproductive in a biological sense. The reproduction indicated in the first three *Toy Story* films is instead a reproduction of narrative, which in turn reproduces (heteronormative) human families, which in turn reproduces plastic toys for capitalist consumption. Each of the films begins with a reproduction of a mainstream cinematic or filmic narrative, beginning with *Toy Story*'s prologue: a low-tech heist story involving the evil Mr. Potato Head, the weak and captive Bo Peep, and the brave hero Sheriff Woody. This initial narrative bears a significant resemblance to popular cartoon-Western plots (such as Looney Toons), as does the car-chase narrative at the start of *Toy Story 3*, while *Toy Story 2* features a Buzz-centered space opera narrative in clear homage to *Star Wars* (1977). Where *Toy Story*'s prelude takes place in Andy's room, with Andy's voice narrating the proceedings and ventriloquizing the toys, the preludes for both *Toy Story 2* and *Toy Story 3* are immersive cinematic experiences for the viewer, a *mise en abyme* celebrating the generation of narrative that sits at the heart of the *Toy Story* franchise (and of the Walt Disney Corporation). This child-toy apparatus functions primarily to generate and layer narratives, both the embedded narratives more overtly co-created during child-toy intra-action (a.k.a. playtime), and the overarching narrative that composes the plot of the film.

Both categories of narrative contribute to the production of reproductive human families by centering human growth, particularly the growth of the organically reproduced human child. The prelude of *Toy Story 3* is doubly embedded; once removed from the cinematic intro back to the "real" world, "reality" is shown to be

a video recording from Andy's childhood. Discussions of Baudrillard's hyperreal aside, this series of embedded narratives serves to remind viewers of a key lesson of the entire franchise: "nothing [is] worse than being finished" (Ackerman, 2011, p. 98). *Toy Story 3* brings to the fore questions of materiality only partially visible in the first two films. The toys are at their most existential when the materiality of the child, intersecting with time differently than the materiality of the toys, causes irrevocable changes to the child-toy apparatus, revealing it to have been a *human*-toy apparatus all along, with the cuts within the phenomenon becoming deeper and more permanent with each passing year. Ostensibly, *Toy Story 3* is concerned with "the ephemeral nature of the toy" (Cross, 2018, p. 146), but Jaques observes that although the film

> is focused upon attempting to find a middle ground between a life of downcycled misuse and one of death-by-landfill[…]writing against the purely replicative models of a capitalist culture of waste[…]it nevertheless recalls that still unanswered issue of what to do with an excess of inorganic 'beings' that are continually and perpetually reproduced. (2015, p. 230)

Toy Story 3 sidesteps the issue of plastic materiality in favor of focusing on human maturation (and implied eventual reproduction), wrapping the plot around Andy's assumption of adulthood and the toys' resultant negotiation for survival. Throughout the original *Toy Story* trilogy, the child-toy apparatus promotes the growth of the child, culminating in the abandonment of childish things upon the child's attainment of legal majority and a subtle assumption of future generations, indicated when Woody tells Rex in *Toy Story 3* that "someday—if we're lucky—Andy may have kids of his own". One could easily imagine a version of *Toy Story 3* that ends with the toys breathing a sigh of relief as they head into the attic, only to be awakened years later to be played with by Andy's hypothetical future child, who would go on to receive a new, contemporary toy for their birthday, triggering the same anxieties from the original *Toy Story* all over again. The implied perpetuity of heteronormative human reproduction remains centered and upheld throughout the original trilogy by the loyalty of plastic toys and the narratives they co-create with their child counterparts.

Yet *Toy Story 3* substitutes Andy's personal reproduction (perhaps because, when it was released in 2009, the original intended audience of *Toy Story* was only in their late teens or early twenties, and mostly not yet reproducing themselves) with a lateral donation of the toys to a new child, Bonnie. This act demonstrates the entangled nature of the human-toy apparatus: Andy gives his toys to Bonnie ostensibly *for* Bonnie, but he also does it (out of gratitude) *for* his toys, signaled by his final "Thanks, guys" before he heads off to college. This is the first (and only) moment in which Andy speaks to the toys as if the toys might be listening, acknowledging them as members of a shared phenomenon. This final boundary troubling, a continuation of the "boundary pollutions" (Jaques, 2015, p. 223) generated by toys throughout the films, preludes the integration of the notion of "kin-making" (Haraway, 2016, p. 12) into the *Toy Story* franchise with the arrival of *Toy Story 4* and the introduction of two new, conflicting modes of reproduction into the discourse of the human-toy apparatus.

Settling into the Compost Pile: Trash Becomes Toy Becomes Trash in *Toy Story 4*

Trash and waste make increasingly central appearances throughout the original *Toy Story* trilogy, beginning with a momentary shot of the "'Dinoco' oil company sign that is raised over the forecourt of the gas station [which] emphasizes the dying and outmoded world of fossil fuel consumption along with the ephemeral nature of the toy, as it becomes the lost object" (Cross, 2018, p. 146). Both *Toy Story 2* and *Toy Story 3* feature antagonists—Stinky Pete for the former and Lots-o-Huggin' Bear for the latter—who brandish the threat of becoming trash as the ultimate demise. Yet it is *Toy Story 4* that brings waste to the forefront, returning to the idea of the toy as lost and reconsidering the role of reproduction in the increasing creation of waste. The intervening decade between *Toy Story 3* and *Toy Story 4* demonstrated a heightening rather than a lessening of environmental catastrophe and stress, with a corresponding expansion of anti-waste legislation around the world. Yet most corporations, Disney included, have been slow to respond to the pressures of climate change. Although Disney has implemented a wide array of environmentally-conscious updates to its theme parks in the last decade and change (Pearce, 2009), including a ban on plastic straws and stirrers at all of its theme parks in 2018 (Associated Press, 2018), its corporate model "remains tied to global promotion of trips to its resorts – just about the most environmentally damaging leisure activity you can imagine" (ibid.). Add in the continued production of plastic merchandise, and it seems unlikely that any Disney-produced narrative could, or should, outweigh the material damage perpetuated by the corporation itself.

Yet if we take narratives, such as those presented by the *Toy Story* franchise, as an ontologically inherent component of their viewers, as Barad and Haraway suggest, then any changes to traditional assumptions about reproduction and waste offered by narratives imply a corresponding change, or a chance at a change, in us. Examining *Toy Story 4*'s exploration of alternative modes of reproduction that depart from the corporate-cinematic mode centered in the original trilogy, therefore, offers us a new potential set of answers to the problem of trash presented by plastic toys—even if those answers require us to "stay with the trouble" of trash in a posthumanist fashion, rather than defeat it heroically, once and for all, the way a humanist narrative would have us do.

Our first sign that reproduction has shifted in *Toy Story 4* comes in the film's prelude. Unlike the preludes of the original trilogy, which present the cinematic narratives produced by the child-toy apparatus, the *Toy Story 4* prelude begins with a clap of thunder and a superimposed time stamp of "nine years ago," creating immediate distance between the viewer and the narrative. This departure from previous franchise preludes continues as we observe the toys banding together, under the co-leadership of Woody and Bo Peep, to save remote-control toy car R.C. from becoming a "lost toy". The dangers of becoming lost barely have time to hover threateningly in the background before the prelude works to rehabilitate them, primarily through Bo Peep, who has been suddenly transferred to a new owner and suggests that Woody accompany her:

Woody: What? No! No, no, no. You can't go! What's best for Andy is that...
Bo Peep: Woody. I'm not Andy's toy.
Woody: Wh-What?
Bo Peep: It's time for the next kid.
[…]
Bo Peep: You know, kids lose their toys every day. Sometimes they get left in the yard, or put in the wrong box.
Woody: And that box gets taken away.

Bo's assertion that she's not Andy's toy seems in one sense to be a re-inscription of the franchise's "commitment to individualism" (Jaques, 2015, p. 230), breaking the emotional dependency of the child-toy bond in favor of toy independence. In a Baradian sense, however, this exchange, along with the entire episode dedicated to saving R.C., foreshadows *Toy Story 4*'s exploration of the toy-toy apparatus, in which toys commit to staying with each other in their lost state in recognition of their inorganic materiality and in rejection of the consumptive, wasteful demands of heteronormative reproduction.

At the risk of being repetitive, I want to reiterate that the child-toy apparatus and the toy-toy apparatus are not ontologically separate under Barad's agential realist reasoning. What separates them in the case of the *Toy Story* franchise is the films' centering of one over the other, an example of an agential cut on a narrative level. The child-toy apparatus uses narrative to produce and reproduce capitalist consumption and human bodies; the toy-toy apparatus also makes use of narrative, but its production of narrative becomes toy-focused, local, and detached from human reproduction (and the corresponding reproduction of new plastic toys for children). If each of the preludes can be seen as leaving something behind (e.g. the notion of toys as inert material in *Toy Story*; Buzz's attachment to the "hyper-masculinity" (Jaques, 2015, p. 222) of his "origin story" (Haraway, 2004/1985, pp. 67–68) in *Toy Story 2*; and the franchise's commitment to static, timeless childhood in *Toy Story 3*), then *Toy Story 4*'s prelude can be read as leaving behind the child-toy apparatus. This departure occurs in a literal sense as well, when the prelude concludes with a familiar return to Randy Newman's "You've Got a Friend in Me" underscoring scenes of Andy, and then Bonnie, playing with Woody and the other toys. Combined with an initial scene in which Bonnie is forced to abandon playtime in favor of kindergarten orientation, where toys aren't allowed, this opening montage of the child-toy apparatus-as-memory signals room for attention to the toy-toy apparatus explored in the rest of the film's narrative.

The film's redirection towards toy-toy relationships is supported, ironically, by its own unsettling employment of the child-toy apparatus. Rather than producing and reproducing cinematic narratives, the child-toy apparatus in *Toy Story 4* functions to produce and reproduce new toys, as Woody and Bonnie do on Bonnie's first day of kindergarten, when they work together to create Forky, a toy made from a used spork and other bits of trash. In one sense, Forky's creation and subsequent integration into his status as a toy (instead of trash) represents a departure from the corporate-driven consumerism present in the rest of the franchise—the ultimate intersection of recycling and childhood creativity, two lauded ideals in many twenty-first

century households. In another sense, it represents a perverse corruption of human reproduction, featuring Forky as the child that Bonnie and Woody "raise" together in an oddly traditional parenting structure, with Bonnie as the loving yet overly anxious mother and Woody as the strict, boundary-setting father. (There's a subtle suggestion that Woody played a similar paternal role with baby Andy, when he tells Buzz that he doesn't "remember it being this hard" the first time around.)

In her analysis of puppet narratives such as Carlo Collodi's *Pinocchio* (1996) and E.T.A. Hoffman's *The Sandman* (1982), Anne Lawson Lucas notes that "the relationship between the artificer and the artefact is presented as that of father and child, which betokens a deep attachment and a powerful emotional investment by the creator in his creation" and functions as a "fundamental element" to both stories (2011, p. 50). Yet Forky's creation, while bearing similarities both to those narratives and to Shelley's *Frankenstein*, does not stem from a single human creator attempting to mimic a godhead. Rather, Forky is born from two creators, one toy and one human, working in sync, with the "father" providing the "genetic" material (when Woody throws crayons and trash in front of Bonnie) and the "mother" laboring towards the bodily creation of the "offspring" (when Bonnie crafts and then names Forky). The boundary transgression created by this "family" feels disturbing because it catapults the child-toy apparatus beyond the platonic message of "You've Got a Friend in Me" into a sex-adjacent reproductive relationship, made inappropriate on the grounds of materiality (organic vs. inorganic) and temporality (although appearing ageless, Woody is at least seventy years old, while Bonnie is a kindergartener). Woody's dazed smile when he wakes up in Bonnie's arms the morning after Forky's "birth" is the same expression he makes after Bo Peep pulls him in for a mistletoe kiss in *Toy Story*, another sex-adjacent moment complicated by the aforementioned material and temporal constraints. This rather repulsive, child-toy engendered category of reproduction sits uncomfortably with the values of recycling and creativity, destabilizing the child-toy apparatus and potentially compelling viewers to question its primacy. Barthes' assertion that plastic toys "are meant to produce children who are users, not creators" (2009, p. 59) here becomes prophetic, as *Toy Story 4*'s attempt to center planet-saving measures such as recycling over the purchasing of new toys backfires, introducing instead a grotesque destabilization of the child-toy apparatus that paves the way for an erasure of the child and a refocusing on the toy-toy apparatus.

Forky's very materiality invites exploration of non-consumerist reproduction and continues to redirect the narrative away from the child-toy apparatus towards the toy-toy apparatus. Haraway's promotion of kin-making privileges relationships between *organic* beings, but her imagined purpose of kin nevertheless applies in Forky's case: "Making kin as oddkin rather than, or at least in addition to, godkin and genealogical and biogenetic family troubles important matters, like to whom one is actually responsible" (2016, p. 2). Woody's responsibility for Bonnie transforms into a responsibility for Forky, whose origin story, materiality, and deconstructive instincts certainly categorize him as "oddkin". Constantly on the verge of falling apart, with arms and eyes only ambiguously under his control, Forky is never far away from his material origin as trash. Unlike Buzz in *Toy Story*, who is erroneously "convinced by his own marketing" to misbelieve his "status as a toy" (Jaques, 2015, p. 221),

Forky must be rehabilitated into toyhood, spending a significant chunk of the narrative rejecting toy ontology. This narrative centering of Forky's identity development happens in concert with Woody's own movement beyond the child-toy apparatus:

> **Woody**: Well, then you watch 'em grow up and become a full person. And then they leave. They go off and do things you'll never see. Don't get me wrong, you still feel good about it. But then somehow you find yourself, after all those years...sitting in a closet just feeling...
> **Forky**: Useless?
> **Woody**: Yeah.
> **Forky**: Your purpose fulfilled?
> **Woody**: Exactly.
> **Forky**: Woody, I know what your problem is.
> **Woody**: You do?
> **Forky**: You're just like me. Trash!

By aligning Woody's parental instincts with the typically derogatory concept of trash, Forky simultaneously elevates the idea of what it means to be waste and reframes the value of human reproductive parenthood. From Forky's perspective, parenthood is trash; at the same time, trash isn't as bad as Woody thinks it is. In this way, Forky fulfills a "compostist" (Haraway, 2016, p. 97) function as described by Haraway: "The unfinished Chthulucene must collect up the trash of the Anthropocene[…]and chipping and shredding and layering like a mad gardener, make a much hotter compost pile for still possible pasts, presents, and futures" (2016, p. 57). Forky's materiality is permanently unfinished, made from Anthropocenic trash, and his intra-action with other toys, particularly Woody, chips and shreds at Anthropocentric ontological identities. Ultimately, Forky's creation and material existence works to relegate the child-toy apparatus, celebrated in previous *Toy Story* franchise installments, to an antiquated humanist model that values reproduction of new things over co-existing, or staying with the trouble, of the trash that's left behind. The toy-toy apparatus, as we'll see, functions as a posthumanist model that reverses that value prioritization.

"Playtime, all the time!": Staying with the Trouble of Being Lost

If the existence of Forky works to destabilize the reproductive action of the child-toy apparatus centered in the original *Toy Story* trilogy, then Bo Peep and the other lost toys intra-act in an alternative, kin-making model of non-reproduction. This toy-toy apparatus, comprised of all of the lost toys, engages in what Haraway refers to as "staying with the trouble", which "requires making oddkin[…]in unexpected collaborations and combinations" (2016, p. 4). In Haraway's model, the "trouble" we must learn to stay with involves the main culprits of the Anthropocene: the irreversible impact of climate change, pollution, and nuclear materials on our planet. In the *Toy Story* model, and particularly in *Toy Story 4,* the trouble toys must learn to stay with is being lost—that is, separated from the child-toy apparatus, or ontologically refigured without the child as part of its ongoing phenomenon. From the moment

Woody wails that he is a lost toy outside the Dinoco station in *Toy Story*, the idea of a toy being without its child is cemented as the worst trouble it can get into. Just as Haraway's work complicates our preconceived notions of trouble, *Toy Story 4* works to reimagine what it means to be lost. With her calm suggestion at the start of *Toy Story 4* that "kids lose their toys every day," Bo Peep indicates the possibility of replacing the anxiety of "lostness" that drives the bulk of Woody's actions for the first three movies with the potential of freedom available to a lost toy. This freedom, as we come to learn through the rest of *Toy Story 4*, is a freedom *from* a reliance on the child-toy apparatus which exists to sustain the ceaseless reproduction of both children and toys.

It is no coincidence that Bo Peep, no longer captive and objectified but instead bold and assertive, is the primary character responsible for promoting the toy-toy apparatus and the concept of being lost. Haraway identifies feminists as "leaders in unraveling the supposed natural necessity of ties between[…]reproduction and composing persons," urging contemporary feminists to "exercise leadership in imagination, theory, and action to unravel the ties of both genealogy and kin" (2016, p. 102). Bo Peep no doubt qualifies as such a feminist leader, not only by being female-coded (with a pink and white polka dot skirt that doubles as a cape, a pink hair bow, and belonging originally to Molly, Andy's little sister) but also in her commitment to a collectivist mode of existence that prioritizes toy freedom and intra-action with many different children, over intra-action between individual children and toys. This collectivist model of play, which we see embraced by the lost toys on a campground playground, eschews the capitalist concept of ownership (emblemized by a child's name written somewhere on the toy, a kind of clumsy toy DNA) in favor of toys innovating and socializing on the edges of human existence. When he encounters her at the Grand Basin playground, Woody finds her engaging in covert toy transportation with the use of a mechanical, motorized skunk, running a mobile toy repair unit, and seamlessly coordinating a network of toys across an entire neighborhood to gather "supplies" (i.e., reusable trash) and report on birthday parties. Unlike Andy's and Bonnie's rooms, in which toys are assigned roles within a clear hierarchical order, the toys Woody meets on the playground don't appear constrained by any power structure; instead, information-gathering and decision-making are dispersed throughout the collective. *Toy Story 4* spends no time building the toy revolution, as it were—when Woody arrives on the scene, it's already built and running, ready for new toys to join at any given moment.

Woody initially resists committing to the toy-toy apparatus, a habitual inclination that immediately appears at odds with the fluid ease of the toy-toy configuration. This fluidity is best demonstrated by Woody's dialogue with Bo Peep. The two toys often speak in tandem, beginning with their joint declaration to use "Operation Pull-Toy!" to save R.C. in the prelude and continuing without a hitch when they reunite decades later:

Bo Peep: So, which kid is yours?
Woody: So, which one is yours?
Bo Peep: None.
Woody: No one.

Woody: Wait, you're - you're a lost toy?
Bo Peep: You're a lost toy?
Woody: That's awful.
Bo Peep: That's great. Huh?
Woody: I mean awfully great…that you are lost out here.

These overlapping lines illuminate both the intricate—and fun—nature of the toy-toy intra-action between Woody and Bo as well as the significant divide in their opinion of what it means to be "lost". For Woody, being lost represents an agential cut separating him from "everything […] important to [him]," as he yells at Buzz outside the Dinoco station. Lost toys have no children, and therefore have no reproductive future and no value in a humanist system that prioritizes reproduction over all else. Lost toys, in a word, are trash. Over the course of the film, however, Woody learns that this is entirely the point; to stay with the trouble—to be lost, to be trash—"requires learning to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings" (Haraway 2016, p. 1). The concept of being a "mortal critter" applies to toys differently than it does to organic creatures, with mortality translating not into organic death but instead into an acceptance of their eventual status as trash. Led by his connection with Bo, Woody eventually decides to accept Forky's proclamation that he is trash and stay with the trouble of being lost, letting go of both his individual relationship with Bonnie and his assumption of future apocalypse associated with the concept of being lost.

Despite Woody's ultimate commitment to being a lost toy and the film's corresponding honoring of lostness, *Toy Story 4* nevertheless cannot fully commit to a posthumanist model of children and toys, simultaneously working to preserve the concept of the child-toy apparatus and its implied reproductive futures. This conservative impulse is best represented by the doll Gabby Gabby, appropriately designated as the narrative's antagonist. Functioning as a foil to the Bo-Woody apparatus, Gabby Gabby embodies both pre-feminist womanhood, having been made in the "late 50's" just like Woody, and the anxiety of being lost from a child that Woody wrestles with throughout the franchise, having never been owned due to a faulty voice box. Gabby Gabby's narrative development inverts Woody's progress towards being a lost toy: after decades of rejection, she finally engages in direct child-toy intra-action when she positions herself to be found by a lost child. This mutual rescuing action is presented as equally beneficial for both child and toy; only together, as an "us," can the child-toy apparatus approach a security officer and reintegrate into its reproductive family structure. Such reunification is implied to be the continuous goal of Bo, Woody and their toy kin, as the post-credit scenes center around rescuing carnival toys so they can "take a wild ride with a kid," clearing out an entire carnival stall of its toy prizes.

This teleological conclusion for a supposedly non-reproductive assortment of toy kin reads like a sneaky way to reprioritize reproduction, although it's ultimately unsurprising that Disney would seek to valorize, at least partially, the relationship that underpins its own commercial success. More critically, however, there's a strain

of posthumanist, feminist logic to the film's rescue of the child-toy apparatus. When discussing the role of feminists in determining reproductive theory and praxis, Haraway notes that

> feminists have been leaders in arguing that sexual and reproductive freedom means being able to bring children, whether one's own or those of others, to robust adulthood in health and safety in intact communities. Feminists have also been historically unique in insisting on the power and right of every woman, young or old, to choose not to have a child. Cognizant of how easily such a position repeats the arrogances of imperialism, feminists of my persuasion insist that motherhood is not the telos of women and that a woman's reproductive freedom trumps the demands of patriarchy or any other system. (2016, p. 6)

When applied to a toy's participation in the reproductive child-toy apparatus, this reasoning suggests that although reproduction is not the telos of toys, toys may (or may not) choose to participate in the reproductive apparatus if they so wish. Just as with feminist approaches to sexual reproduction, the crucial component is choice, freed from anxieties around social status or social pressure. More importantly, the choice must be given to the traditionally less powerful member of the apparatus—in the case of *Toy Story,* to the toys. I argue that this conclusive presentation of choice is, finally, a posthumanist one: even as it is enacted, its temporal limitations are preserved by framing the freed toys' condition as taking a "wild ride with a kid" as opposed to going to their forever home or finding eternal happiness. A wild ride is exhilarating but temporary, whereas the community of lost toys, existing in tune with their nature as trash, "in hot compost piles" (Haraway, 2016, p. 4), waits for all toys when their ride finally ends.

Conclusion: To Infinity, and Beyond (Reproduction)!

While there is no reasonable argument against the urgency present in the global problem of plastic pollution, the environmental challenge posed by the existence of the Great Pacific garbage patch seems almost surmountable when compared to the challenge of the Great Acceleration, in which "the incomprehensible but sober number of around 11 billion [people on the planet] will only hold if current worldwide birth rates of human babies remain low" (Haraway, 2016, p. 102). Cleaning up plastic is one thing, a problem we can imagine conquering with enough human ingenuity (and, therefore, in a humanist manner); slowing down human reproduction is quite another type of trouble to stay with, with no clear or easy solutions in sight. In *Toy Story 4*, we find one possible model of staying with that trouble, a promotion of kin-making and "inventive connection" (Haraway, 2016, p. 1) that makes reproduction optional. As Ackerman has noted, the *Toy Story* franchise has considered human reproduction, and its commensurate media consumerism, to be valuable in its self-perpetuation, as signified by Buzz's catchphrase "to infinity, and beyond" (2011, p. 98). What I take from the phrase's disjointed deployment in *Toy Story 4*, in which Buzz says "to infinity" and Woody replies "and beyond" across

many meters of space, is a possible world in which the space 'beyond' infinity is not just *more* infinity, but rather a mode of existence distinct from the infinity of corporate reproduction.

This is not to say that *Toy Story 4* departs so drastically from the Disney norm as to advocate directly *against* human reproduction—but, at the same time, the model of collectivism, of "staying with the trouble" of being lost, of the permanent and inevitable presence of trash, presented by the film's ending aligns too closely with Haraway's theories to *not* be subtly advocating for that very outcome. It is telling that, with the final separation of Woody from Buzz and the rest of Andy's old gang of toys, the idea of a *Toy Story 5* seems unlikely, and in fact, the most recent film out of the franchise was *Lightyear* (MacLane, 2022), a film about Buzz Lightyear on which the Buzz Lightyear toy was ostensibly based. If the *Toy Story* franchise itself (and any associated future merchandise) is beginning to head towards the metaphorical trash heap, ending its own version of narrative reproduction, then the subtle posthumanist undertones of *Toy Story 4* may end up having a small material impact after all.

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