

# LITERARY GEOGRAPHIES

## Does Wall•E Dream of Electric Kale? The California Dream as Post-Scarcity Nightmare

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**Abstract:**

Since Europeans first became aware of the California landscape, they have used it as an imagined blank slate upon which to draw utopias. A legacy of failed communes and speculative schemes has never slowed California's booster class from fashioning themselves as the harbingers of a bright new future: the state's natural geography of abundance, when mixed by the "right" people with the right technology, will bring forth a cornucopia of wealth and leisure. Where material realities feed fantasies, and where fictions shape social-relations is perpetually blurred. This paper uses Pixar Studio's 2008 academy award winning film, *WALL•E*, as a departure point to examine how the California dream is shaped by its nightmarish inversion—technological innovation overtaking and destroying the nature that is the true source of happiness. In the film, a dystopian world appears not from the nuclear war or the strife that incites other dystopias, but from a post-scarcity society driven to mass overconsumption and a labor-less life. The film, however, does not attempt to warn us away from this path, but works to revive the technological fetish as nascent ecological utopia. The audience is shown thinking machines that transcend the boundary between human and non-human, with the heroic eponymous character stumbling its way into reestablishing human social relations, de-alienating their labor, and bringing forth a cyborg-mediated nature. The paper offers a critical reading of how California ideologies are reflected back and reinforced in the world of films like *WALL•E*, not as radical and open, but liberal and confined by their commitments to the status quo.

**Keywords:** post-scarcity; dystopia; *WALL•E*; California.

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‘It matters what worlds world worlds’  
 Donna J. Haraway *Staying with the Trouble* (2016)

## Introduction

Pixar Studios embodies many of the overlapping ethos of the San Francisco Bay Area. A technology driven start-up, nestled into a former warehouse district in the rapidly gentrifying East Bay, the studio became famous for up-ending the animation industry with its computer generated (CG) animations beginning in the 1990s. For over a decade the studio delivered an annual award-winning blockbuster, laden with the liberal-but-non-threatening politics of the Bay Area, right through to 2008’s Academy-Award winning animated film *WALL•E* (2008). The film follows the (mis)adventures of the eponymous robot, WALL•E (Waste Allocation Load Lifter Earth-class), as he goes from building skyscrapers of compressed garbage on a barren Earth to disrupting the complacent, boring lives of the remaining human beings aboard a luxury starship. Though the trash-saturated Earth and media-saturated ship – the two sites that constitute the world of the film—do not physically evoke the landscape of the Bay Area, they reflect a significant strand of its liberal ideology content with admonishing consumers for their destructive behavior. The worlds of WALL•E are what happen if we don’t recycle and then become lazy and complacent in the presence of labor saving technologies.

Pixar’s foray into the politics of waste did not make the studio an environmental justice organization, any more than 2007’s *Ratatouille* made the studio a champion of “good food.” But the studio’s engagement with such themes exposes the paradoxes that emerge from popular culture’s critique of liberal capitalism from within its logics. As one small example, early audiences at theaters in downtown Berkeley, just miles from Pixar’s animation studios, were rewarded with a small blue plastic bracelet in the style of the “Livestrong” bracelets popular in the US at the time embossed with the film’s name and containing a small digital watch face. It was plastic junk, and a less-than ironic gesture for a film that opens with a sequence revealing an Earth abandoned by humans, every square inch of its surface covered in garbage.

Yates describes *WALL•E* as ‘an animated kid-flick with a feel-good message about Earth’s impending doom’ (2015: 525). What she, and other scholarly critics of the film note, is that despite its dystopic world, the film does very little to persuade the viewer to consider alternative futures. Rather, the film accepts the destruction of the planet as a forgone conclusion. In the context of the real world, the junk bracelet-watch embodies the very muddled politics of *WALL•E*, scolding of endless consumerism, but ultimately unwilling to truly condemn it. In this paper, I examine how the world that Pixar builds for *WALL•E* emerges not out of confusion, but a specifically Californian set of ideologies that seek to reconcile a distinctly capitalist erasure of scarcity and a green-future, all enabled

by what Turner has coined ‘appropriate technologies’ (2006). Following recent work from Lipschutz (2018) on the relationship between California based authors and their utopian science fiction world-building, I argue that the world Pixar builds in *WALL•E* both reflects and reproduces a liberal politics concerned with the destructive outcomes of the current modes of production, but incapable of imagining serious alternatives.

Environmentalists (see McKibben 1989) have been working to warn general audiences about global environmental catastrophe for sometime, and recently critical scholars have begun to grapple seriously with how to survive in a planet wrecked by capitalism (Tsing 2015), but neither quite reaches the popular imagination like a Disney-backed Pixar film. As the Haraway epigraph that starts this paper hints, from where we imagine a future on a destroyed planet matters. I situate the peculiar dystopia of *WALL•E* in a longer history of both utopian and dystopian fiction that has imagined many different world-ending events from California. Specifically, I look to Philip K Dick’s *Do Androids Dream of Electric Sheep* as a dystopia that grapples with many of the same themes of *WALL•E*, albeit from an inverted position, around the role of automated labor and empathy in a destroyed terran ecology.

Throughout dystopian literature, there is a tendency towards ecological disasters that cause a collapse of the social order, but leave the planet marginally inhabitable. Earthquakes and nuclear wars are two particularly popular tropes that leave humans scraping out an existence on the planet. At the extreme-opposite end of worlding from *WALL•E*, in the *Terminator* films, sentient robots rise up and destroy a human-dominated earth. In these scenarios, we see technologies that are *inappropriate*, such as nuclear bombs and war-machine robots, as opposed to the *appropriate* technologies like the drudgery-reducing robot *WALL•E*, or his love interest in the film, the glossy, iPod-esque EVE (Extraterrestrial Vegetation Evaluator) who’s sole purpose is to seek out plant life on earth. As with *WALL•E*’s singular determination to clean the planet, both robots represent benign and ultimately beneficial use of an artificial intelligence.

More recently, as the true irreversibility of anthropogenic climate change and its effects on human-environmental systems have become irrefutable, climate disasters have played a more central role in society-ending catastrophes (Johns-Putra 2016; Nikoleris et al. 2017). *WALL•E*’s inciting disaster aligns more closely with climate disasters, but is interestingly not about carbon so much as a broad, trash-centric, total destruction of life on the planet. At the opening of the film we discover every inch of the surface of the earth covered in trash and, it would appear, the only living thing left is a cockroach.

Although imbedded in a children’s cartoon that can be read as a hyperbolic admonition against over-consumption, the world-ending/creating incident of *WALL•E* is part of what provides an interesting twist in dystopian fiction. Rather than nuclear war or the strife that incites dystopias throughout much science-fiction literature and film, the film imagines a post-scarcity society where the lack of human labor divorces us completely from nature, and mass *overconsumption* produces a quantity of waste that blocks out the soil itself. In a universe where industrialization, automation and A.I. provide for all of human’s wants and needs, we do not get a *Star Trek*-esque set of relations in which humans, as well as other species and AIs, flourish while exploring the cosmos (Saadia 2016). Instead,

in a vein similar to Luc Besson's *The Fifth Element* and, more recently, Blonkamp's *Elysium* (2013), as well Kim Stanley Robinson's Mars Trilogy, off-world life is constructed as a luxury in the face of planetary suffering. In *WALL•E*, humans have abandoned the planet they destroyed and languish in a stupor of mindless obesity aboard a fully automated luxury "cruise ship. The inhabitants of the ship float around on robotic chaise-lounges, sipping sodas and watching screens (two behaviors which, ironically, keep PIXAR in business). They never communicate directly, only via devices. And ostensibly worst of all in the moralizing of the film, they have turned over child-rearing to robots, signifying the full severing of the fundamental relations of social reproduction.

The structure and origins of *WALL•E*'s dystopia align the film with a growing genre of work that Goldstein and others have called "green capitalist texts" (Goldstein 2013). This genre consists of mostly works of popular non-fiction, though not exclusively, that contain strident critiques of the environmental destruction wrought by capitalist industrialization, but ultimately imagine solutions grounded in *more but different* forms of 'greener' capitalism. Goldstein argues that these texts can too easily be dismissed as legitimizing 'business as usual,' but should also be read for the ways in which they contain 'real expressions of post-capitalist ambitions' (31). This critique of eco-modernization from economic-geographers has parallels in ecocriticism's engagement with deep ecology science fiction. Similarly, novels and films can often sidestep industrial capitalist modes of production as the driver of ecological collapse, misplacing their concern with population growth and individual greed (Otto 2012: 47). *WALL•E* contains elements of both, and the explanation of the Earth's crisis and the utopian solution to it in reflect the conundrum of green capitalist texts. It offers, on the surface, a scathing critique of both capital and state for allowing a mega corporation "Buy N Large" to destroy the planet. While, at the same time, the film reproduces a fundamentally conservative ideology – aimed at children no less – built around the restoration of a heteronormative nuclear family and specific forms of labor as a way out of "over consumption" (Yates 2015).

Yates' work, which I draw on extensively here, provides an immensely useful critique of how, in *WALL•E* specifically, the post-capitalist imaginary of the film's universe fails to illuminate the very capitalist categories (of labor-production and social-reproduction relations) that lay at the heart of the films overlapping crises (2015); and more generally, how the very conception of waste (the physical manifestation of capital's inherent destructiveness) in green-capitalist critique fails to understand the explosion of waste and pollution the planet is facing as historically specific to industrial capitalism (2011). Where she locates the narrative of the film as 'intimately tied to a myth characteristic of Western environmentalism, what Carolyn Merchant calls an Edenic recovery narrative' (2015: 530), I build from that position to claim that *WALL•E* adds a subtle, but critical, reworking of the edenic recovery narrative rooted in the specific myths of California. The film builds a world derived from an ideological move to fuse a pre-industrial and, importantly, post-industrial imaginary of human civilization.

The merging of pre and post-industrial fantasies is captured most pointedly at end of the film where we see robots planting crops. Here we have a return to a pre-Industrial state, where an imagined small tribe re-conquers and makes fertile a barren earth – mixing their labor with the land to produce a bounty and their own sense of purpose. At the same

time, it is not the backbreaking labor of scarcity, poverty and substance, but made fun and easy by robots with advanced AIs that make play out of the repetitive, difficult and dangerous tasks of agricultural lives. The film does not show it, but we can imagine that robotic labor continues to be responsible for all other necessities, freeing humans from the factory floor and office building, to spend their days in laboring without suffering, still in Eden. This fantasy of the world built at the end of *WALL•E* is, as I show below, exactly the imagined California Dream of a utopia restored and reprojected into a technologically enabled future.

### **The California Utopia, and its discontents**

California, as a place, has often been a work of fiction. Since Europeans first became aware of the California landscape, they have used it as an imagined blank slate upon which to draw utopias. A legacy of failed communes and speculative schemes has never slowed California's booster class from fashioning themselves as the harbingers of a bright new future: the state's natural geography of abundance, when mixed by the "right" people with the right technology, will bring forth a cornucopia of wealth and leisure (Davis 2001; Nicolaides 2002; Starr 1990). Where material realities feed fictions, and where fictions shape social-relations is perpetually blurred. In this sense, *WALL•E* emerges from a set of hegemonic ideologies in the San Francisco Bay Area as center of both ecological mindedness and technological prowess (Walker 2018) despite Silicon Valley's violent and toxic histories (Pitti 2003; Pellow and Park 2002). Pixar's animations are a particularly telling example of how the relationships among the ideologies and fantasies that have driven not just the imagined, but also the real development of California since European conquest, play a significant role in shaping how other worlds are created from that place. Below I give a brief overview of the paradoxical California mythologies, then explain how they become resolved in Bay Area ideologies and manifested in creative works like *WALL•E*.

One promise of California as imagined by its twentieth century settlers has been a preindustrial Eden. This promise takes on countless valences, from the growth of literature and art depicting a romantic pastoral ideal embodied famously in novels such as Helen Hunt Jackson's *Ramona* and John Muir's descriptions of California wilderness. Historians of Southern California have documented at length how early boosters of Los Angeles promised a life of endless sunshine and wealth to new migrants, even those ironically employed in booming industrial jobs (Davis 2001; Laslett 2012). It was the promise of Eden that brought early communalists to the state and fueled the boom in hippie communes of the late 1960s and 1970s (Boal et al. 2012). To a degree, the Edenic imagination underlies the remarkable preservation of open spaces and California's significant role in the development of organic agriculture and urban farming (Guthman 2004; McClintock 2010; Walker 2009). The myth of Eden is not just extremely persuasive and productive of new imaginaries, but also problematically erases countless actual communities and histories across the region. The worlds that *WALL•E*'s characters inhabit are derived, in part, from this older idea that California contains the fertile ground

to which humans might return to a preindustrial way of life and a more “natural” order of social-relations.

At the other end of the imaginary is California as a post-industrial, leisure-filled utopia. Most famously, though not exclusively, the Bay Area offers up the utopian mythology of Silicon Valley: apps and automation to solve all of our problems while making everyone wealthy and happy. But the trope has deeper roots as well, through the “Imagineering” worlds of Disney-fied recreation and leisure – which extends far beyond just Disneyland to project California as a land of infinite leisure (Culver 2010). Even in the agricultural realm, where year-round sunshine and fertile soils were not enough, the promise of innovative technologies to save labor and guarantee fortunes have always been part of California’s agrarian promise (Walker 2004). As with the preindustrial myth, the postindustrial myth has fueled both real innovation in the lives and landscapes of Californians and erased significant violence, destruction and trouble from how we see the place as well.

Throughout the preindustrial and postindustrial myths of California are a shared criticism of industrial capitalism. The concern is, importantly, not capitalist social-relations themselves, but a mode of production understood as ecologically, socially, and culturally destructive. The myths of California are constructed against a perception of Eastern and European cities as crowded, smokestack-filled places, where poverty and dissatisfaction reign. They are meant as antidotes to the soulless lives led by factory workers, joyless white collar managers, and greedy money-obsessed owners. This nightmarish vision of industrial capitalism is echoed in the destroyed world of *WALL•E*. By extension, the merged preindustrial and postindustrial imaginary of California continues to echo back as the salve to this dystopia.

The fusing of preindustrial and postindustrial imaginaries is not as paradoxical as it might first seem. In *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network and the Rise of Digital Utopianism*, communications scholar Fred Turner chronicles how the “new communalist” strands of the Bay Area counter culture created a back-to-the-land ethos in the late 1960s around small-scale technologies (2006). He then traces how those same new-communalists transformed themselves into the progenitors of the ideological apparatuses of the digital revolution, though not necessarily the creators of technologies themselves. According to his research, the “counter” culture that produce such iconic Bay Area totems as the Whole Earth Catalog laid the direct groundwork for the rise of the region’s famed “cyber” culture. The anarchistic-communalism of the former turns out to be easily morphed into the libertarian-capitalism of Silicon Valley, each with an espoused anti-political emphasis on radical freedom that looks to small-scale technologies to enable and reproduce utopian communities.

In Turner’s argument lies the seed of how a film like *WALL•E* can both contain a fierce critique of modernity’s destructiveness and a full embrace of its ability to innovate a utopian way forward from *within* its own logics and relations. The muddling of radical (in the sense of turning against the status quo) agendas does significant work here. Turner shows how the counterculture groups organized around the Whole Earth Catalog eschewed the direct political engagements of the New Left, but are often lumped together in popular memory of 1960s and 1970s narratives. Rather, he shows how many of the men

(and it was mostly men) adopted a liberal market ideology with a new-age patina. They operated with a belief that humanity, when unconstrained by the state and large-scale technologies of corporate computing and warfare, could build a new kind of society through its natural tendency towards networks (both physical and metaphysical). Indeed, Turner suggests that the champions of the digital revolution thought “computer networks would return isolated, postindustrial workers to a state of pre-industrial union,” while “members of the corporate sector thought such networks might bring isolated, postindustrial consumers into a state of postmodern economic communion” (161). The “right” technologies are not simply about labor-saving efficiencies or ecological restoration, but a return to a more “natural” state of social relationships between humans.

The mythos that surrounds Pixar Studios, and their films, is one version of a California ‘it could only happen here’ narrative, and one intimately tied to the rise of modern Silicon Valley. The studio presents itself, and is arguably accepted as, the quintessential disruptive firm: a unique mixture of Bay Area creativity, ingenuity and drive that upended the way animation was done in the hulking behemoth of Hollywood’s corporate system. Briefly, the story goes that a few visionary technologists believed they could make a completely computer animated film, and after many false starts, and millions of dollars of investment from the equally mythologized Bay Area guru, Steve Jobs, produced the revolutionary hit *Toy Story* in 1995. Each year brought more successful films, franchises and wealth. Pixar’s success is regularly attributed to its place within a Bay Area sphere, with a non-corporate structure of collaboration amongst the company’s founders, openness to creative innovation in both technology and story-telling, and development and embrace of the most radical technologies in animation.

*WALL•E* conveys many of these tropes, beginning with the implicit condemnation of corporate lackluster leadership being responsible for the world ending – played to great comedic effect by video recordings of Fred Williard as the head of the Buy N Large company announcing plans for humans to leave on the luxury space cruisers. In the world of *WALL•E*, as at Pixar, remarkable technologies, specifically robots and Artificial Intelligences, eventually free the humans to be their true, creative collaborative selves. By contrast, in *Do Androids Dream of Electric Sheep*, as well as the adaptations into the Blade Runner universe, the relationship between corporate dominance of everyday life and android labor engenders not liberation, but an existential crisis manifested as malaise in the humans and violence in androids. Dick’s dystopia, as written from the milieu of cold-war era fear and countercultural revolts of late 60s California, results in androids being banished from Earth. In contrast, the eco crisis of *WALL•E* necessitates humans leaving the planet, accompanied by androids. The contrast between the two dystopias reflects a difference in Pixar’s embrace of a technological sublime born of California myth-making and Dick’s far more skeptical observations of a mid-to-late-20<sup>th</sup> century California beset by significant, real human problems (Davidson 2015).

The nature of imagined ecological crisis that creates the worlds of both works – over-consumption and nuclear war—reflects not only anxieties of different moments 50 years apart in California, but also the human-technological response to a barely-livable planet. As much of the critical scholarship on *WALL•E* argues, the film does not attempt to steer us towards a radical environmentalism or a departure from capitalism’s destruction

of a human habitable planet (Anderson 2012; Yates 2015). Rather, the film works to revive the technological fetish as a nascent ecological utopia. The audience is shown thinking machines that transcend the boundary between human and non-human, with the heroic eponymous character stumbling its way into producing a cyborg-mediated nature in which humans are no longer alienated from their labor or each other. It is this foundation on specific technologies-as-saviors that I turn to in the following section.

### **Twenty-Four Hours for What You Will**

Though WALL•E was produced several years before Silicon Valley became synonymous with the contemporary *raison-de-êtr*e of venture capital – disruption – it fits exquisitely into that logic. The old, mega-corporation Buy N Large, an amusing mashup of Wal-Mart and Seven-Eleven, motivated only by profit and not innovation, has destroyed the planet due to its lack of vision. The “old way” of doing things cannot solve the problem, and in a cartoon version of a spatial fix (Harvey 1982; Schoenberger 2004) the human-caused crisis forces them to relocate to outer-space where they can continue as consumers *only*. Worst of all, in Silicon Valley terms, the creative energies and “human capital” of the space inhabitants are completely wasted. As WALL•E bumbles his way through the spaceship Axiom in a slapstick fashion, he causes a literal disruption to life on the ship, while triggering a much greater disruption to the very order of things in the film’s universe. The enemy, at the end, is bad software, outdated thinking, and human lethargy. A Silicon Valley worldview takes all three as anathema. Within its own ontology, however, the film raises what has emerged as a central anxiety of the disruptors and champions of full automation: what labor will humans do in the future?

Across Western political-economic ideologies there exists a sense that *laboring* is an important dimension of human life. In the United States, the conservative protestant values of ‘hard work’ are typified by Horatio Alger stories. From the Left, rooted in Marxian theories of labor value and social reproduction, we get the classic slogan from the movement for an eight-hour work day, ‘8 hours for work, 8 hours for rest, 8 hours for what you will.’ Both ideologies are deeply troubled by a proposition that humans may not have to labor at all to sustain themselves. If, in the world of *WALL•E*, life is comprised only of luxury, what will become of humanity? Where some Left/Anarchist traditions would suggest that this freedom might liberate humanity to labor fully in social and mental activities (Bookchin 2004; Srnicek and Williams 2015), the labor of community building and creative arts – literature, poetry, music, visual, and so on – *WALL•E* gives us human life reduced to pure consumption—mass produced media, goods and foods. In short, rather than a left liberation of the ‘human spirit,’ we get the fulfillment of a terrifying promise of liberal capitalism, a fully mechanized society where no human wants for anything material.

The most immediately visible outcome of a labor-less life in *WALL•E*, beyond the trashed surface of the earth, are extremely obese humans, literally floating around in hovering chaise-lounges, sucking on sodas, whom we learn (when they are inadvertently knocked to the ground later), barely know how to walk at this point. This visualization of *individuals* too lazy to care for themselves fits well within the logics of California’s varied



health obsessions that value labor and physical activity. The place has long been identified with valorizing extreme forms of “healthy” living, many of which connect a perception of more “natural” living to the California landscape and ways of life that are imagined as more connected to it (Culver 2010: 20). Against this version of health, *WALL•E* then reproduces many of the contemporary tropes around the so-called ‘obesity epidemic’ that mark fatness as sign of laziness, ignorance, and a disconnection from more ‘natural’ ways-of-being. Although presented at hyperbolic proportions for comic effect, to audiences steeped in anti-fat narratives, the collective *un*healthiness of the film’s characters reads not as an effect of life under capitalist social relations, but an unfortunate outcome of individuals choosing not to labor and exercise appropriately (See Guthman 2011 for a fuller geographic critique of ‘obesity’ under capitalism). I want to emphasize how the framing of the problem with not-laboring is constructed in the film, because it has significant ramifications for the solutions offered by better cooperation with technology.

In terms of the relationship between machines and human labor, the very nature of the robots and A.I. in the film’s universe marks a significant Silicon Valley shaped point of departure for *WALL•E*. In much fiction, from the inception of robots in Rossum’s *Universal Robots* to the genre-defining *Terminator* series, when thinking machines go wrong, they revolt against their directive to assist humans in their labor, often violently. In *WALL•E* however, the glitch in the robots is that they become *more* helpful, even developing human-like empathy toward each other. The effect is that the robots at the end of the film are finally capable of providing the help humans need, working with, rather than for humans, on a beautiful future. I will show below why this is an unusual departure, but one that the ideologies of Silicon Valley depend on. So much of the mythos of the Bay Area tech sector, and all of the apparatus around it, is built on the teleology that every innovation is necessarily progress. And not just progress for progress’ sake, but moving us towards a utopian future (whether the “singularity” or fully automated luxury) where digital machines with advanced A.I.s will relieve us of all worry and strife. For this logic to progress, the ideology must do away with any ethical or economic concerns that such technologies might fail, revolt or bring about a mass of humanity with no resources at all – an unprecedented ballooning of surplus labor, or perhaps more terrifying, surplus life (Mitchell 2010).

The benign malfunction of technology in *WALL•E* has its literary antecedent in fiction that grapples with questions of human’s relationship to technology as thinking machines fail. In a broad sense, anxieties over mechanization and artificial intelligence are part of a long western discomfort with the technological sublime (Marx 1964). The world’s of both E.M. Forster’s *The Machine Stops* (1909) and the first work of Isaac Asimov’s *Foundation* series (1951) are defined by a divorce not only from nature, but also from older forms of social relations, with a dependence on technological systems that are beyond the comprehension, and therefore the control, of humans. The malicious AI onboard the Axiom melds this subordination to machinery with *2001*’s infamous HAL9000, which also tried to conform to its prime mission above all else. Rather than murder its crew, however, the Axiom AI works to prevent humans from returning to earth, as it was secretly programmed to do by Buy N Large. In *WALL•E*, the problem with technology is not that it fundamentally disconnects humans from nature, and from each other, nor that it contains the contradictions of irreconcilable human logics, but simply that it can be put to

the wrong uses in the hands of greedy corporations. It is a narrative that fits comfortably in Silicon Valley tropes of the “truly creative” constantly having to battle against the big guys who lack vision, even long after they have become the most powerful actors.

The world of *WALL•E* shares more with an Asimovian universe, in which robots must comply with the Three Law of Robotics to obey and protects humans at all costs (see Asimov 1950 [2018] for the canonical set of robot ‘laws’), than the more common Frankenstein trope in which robots rise up against their creators. Indeed, the robot revolt against labor is built into the word robot itself, which entered English from Karel Čapek’s 1923 *R.U.R.*, anglicized as “Rossum’s Universal Robots,” from the Czech word “robota” meaning something akin to forced labor (1923). The robots of *R.U.R.* are more android-like than those of *WALL•E*, but serve a similar function of eventually coming to provide all labor on the planet. Except, in *R.U.R.*, they revolt and extinguish all of humanity. It is a motif played out again and again in more contemporary pieces like the *Terminator* films where, after becoming self-aware, robots attempt to exterminate humanity. The *Matrix* universe provides a slight variant, not of destruction, but of enslaving humans as inferior to the hyper-smart machines / AI. Fifty years before *WALL•E* was released, seminal Bay Area science-fiction author, Philip K. Dick, steeped in the ideological debates emerging from the region in the late 60s, struggled with this very question of empathy in *Do Androids Dream of Electric Sheep*. How should humans feel about the machines that can replace us (physically) and how should machines that can think, but not feel, like humans behave in response?

In cinematic circles, *Do Androids Dream of Electric Sheep* is famous as the basis of Ripley Scott’s *Bladerunner*. Since the film adaption was released in 1982, its depiction of a post-apocalyptic Los Angeles has remained a popular topic in theorizing about the future geography of that city (see Davis 1990; Keil 2002). However, the original book used San Francisco as its setting and reflected anxieties with many more parallels to *WALL•E*. In Dick’s dystopian world, nuclear war has left humanity mostly intact, but created an ecological disaster where living creatures are extremely rare and radioactive dust has left most of the planet barren. Corporations manufacture life-like automated animals, including androids who can pass for human but for a lack of empathy. Some humans, known as “specials,” have been genetically deformed into intellectually less capable (though arguably more empathetic) beings. But even the fully functional humans are mostly preoccupied with a globally broadcast 24-hour television comedy show with literally no purpose. Or, in a motif presciently critical of the transition of what Turner called “the new communalists” into the gurus of the early world-wide-web, many characters find their only human connection in the pseudo-religion called “Mercerism.” Mercer, an absurd existential messiah, exists in a mass networked virtual reality that desperate humans plug into, in order to share in Mercer’s Sisyphean suffering. As one of the books main characters explains of the box used to connect, “It’s an extension of your body; it’s the way you touch other humans, it’s the way you stop being alone“ (Dick, 66). *WALL•E* treats the same questions with a necessarily lighter touch, but similarly shows humans alienated from any real purpose plugged into endless mindless screen entertainment, their only meaningful connections made via the machines without any intellectual engagement.

In an inverted position from *WALL•E*, in *Do Androids Dream of Electric Sheep*, the robots, or replicants as Dick named his more android-like creations, have been banished from Earth to labor in space, leaving humans on the surface to continue in mundane work – exemplified in the book as the managerial dimensions of policing and building and maintaining robotic animals. While replicants are capable of doing all of the tasks humans are unable or unwilling to do, such as dangerous mining (parallel to *WALL•E*'s garbage collection), they have become too indistinguishable from humans and are not allowed to coexist with them on the planet. In narrative terms, this allows Dick to sidestep the conundrum of what humans will do if they no longer have to labor for themselves, though as illustrated by both the television and mercerism, along with direct mood-altering technologies used throughout the story, the world of *Do Androids Dream of Electric Sheep* does not offer much in the way of hope or optimism for a robotic future. His California dream was not to be realized by the new communalists and their belief in “appropriate technologies.”

At the heart of *Do Androids Dream of Electric Sheep* is a question of whether machines can be built, by a corporation no less, that care for each other and/or humans. Without delving too deeply here into the corollary question of whether *humans* are all that empathetic either, Dick comes to the conclusion that ever smarter, human-like androids cannot be programmed for empathy and the result is ultimately deeply problematic. In one especially disturbing scene toward the end of the novel, a group of replicants comes into possession of a spider—an immensely rare living thing on the dying planet. Incapable of appreciating its rarity, but with the cold calculation of AIs trying to understand the seeming inefficiencies of biological evolution in contrast to their own superior engineering, they argue over whether a spider truly needs eight legs. Over the horrified objections of their “special” human host, they proceed to remove four of the spiders legs, and then, to prove their point, approach the dying and mutilated arachnid with a flame, to prove it will still run when forced to. Today, in an era of “machine learning” and rapidly advancing artificial intelligences, such a scene would be anathema to the triumphalist Silicon Valley ideologies that promise us only beneficial developments from technologies. The replicants were not, in this case, necessarily meaning to be cruel or malicious, but simply curious. By contrast, *WALL•E*'s sole companion at the start of the film is a cockroach, a symbol of his extensive empathy.

On the whole, the *WALL•E* universe remains unconcerned with such problems, so self-evident is the idea that robots are meant to help. In the film, the great miracle is that *WALL•E* and *EVE* do, through something like divine intervention more than any explanatory reason, discover empathy towards both each other and the humans they are responsible for at the end of the day. Throughout the film we see *WALL•E* appreciating music, dancing, collecting meaningful (to him) objects and creating his own special abode – all symbols of his quite nuanced human-*like* empathy. Significantly, unlike the robots of other narratives who resent not being human, *WALL•E* enjoys other robots and robot-things without actually trying to be human.

Ultimately, the effect of *WALL•E*'s miraculous empathy is to resolve the great conundrum of the film and the California ideology (as I've laid it out here), allowing for a merging of preindustrial and postindustrial futures. Because he is happy being a robot, but

capable of care, and the other robots follow suit, they are able to return to earth and work alongside each other building a utopian agrarian future. Robots love other robots. Humans love other humans, and care for their human children again. And both groups work together restoring a preindustrial landscape of plants and leisure, while comfortably relying on the most advanced postindustrial high technologies of hypersmart, personal robots.

### **On Never Waking from the California Dream**

On the one hand, *WALL•E* is and was a success. Not just because it won an academy award as a computer-animated space comedy with almost no dialogue until the 3<sup>rd</sup> act, but also as an unprecedented, successful film with a strong environmentalist message that landed well with a broad swath of audiences. On the other hand, it fails in fundamental ways to deliver on that message. It is not that *WALL•E* set out to critique capitalism and failed. Quite the opposite, it was a major release from a large film studio meant to make a significant profit. Rather, what I have tried to show in this paper is that the world created in *WALL•E*, as a reflection of our own impending future, fails to address the fundamental issues of ecological destruction as fueled by capitalist accumulation and tendency towards crisis. Instead, the film's worlds, both the destroyed planet and the utopian planet that emerges at the end of the film, reflect the limits of a specific California orientation. Where the Bay Area is imagined both as a once pristine place where humans lived in concert with wild nature and as the hearth of revolutionary digital technologies that take us beyond the woes of industrial life, Pixar creates *WALL•E* as the technology capable of reconciling those two worlds (Carlsson 2008; Solnit 2010). The planet is destroyed by the *inappropriate* use of modern machines—to consume endlessly without appreciating what makes us human, those human connections – rather than by the machines themselves. The world is saved by the right use of technology, along with working out some of the bugs in the AI, to reconnect us as humans and to nature.

What *WALL•E* ultimately provides is a pleasant and uncomplicated (it is a movie for children after all) resolution of the contemporary paradox of liberal ideology emergent from California—especially the Bay Area – the fusing of a preindustrial and postindustrial imaginaries. The film concludes with humanity rediscovering social relations (albeit, as Yates shows, via the restoration of the heteronormative nuclear family) through the shared labor of agriculture. The caveat is that the robots who remain committed to their role as servants work alongside the humans in planting new crops and restoring earth. Here we have the embodiment of ‘work as play’: labor for the joy and meaning inherent in it, not out of necessity for wages or subsistence. And with it comes a restoration of responsibility, to each other and the planet. Post-scarcity can exist, here, in equilibrium.

Taking seriously Goldstein's admonishment that green capitalist texts can ‘identify the confluence of real desires to see the world fundamentally change, and real desires to remain in control of those changes’ (2013: 33), I want to return briefly then to the dystopia of *WALL•E*, setting aside the technological fetishism at the center of the film, and offer a slightly different reading of the trashed world not as a hyperbolic cautionary tale of what *might* happen, but a sobering depiction of what *is* happening. Others have critiqued the film for being fatalist, creating a world where the destruction of the planet is inevitable, but can

be fixed after-the-fact. But what if we take seriously the proposition that humans have already destroyed the planet as we knew it? There are tons of microplastics *already* floating in the ocean, countless ecosystems have already been made toxic with waste that is near impossible to remove, and the quantity of carbon in the atmosphere has shot past the ppm levels that could have stabilized global temperatures. We share with non-humans a world that humans have destroyed, are destroying; WALL•E's world is not solely a future event. In this context, *WALL•E* offers a sliver of optimism that there are ways to find lifeways and alternatives to living on a damaged planet (Tsing et al. 2017).

We can read *WALL•E* as more than an apology for techno-fetish capitalism and also as one of the first popular texts of the 21<sup>st</sup> century to seriously consider life on a destroyed earth. As much as I have argued in this essay against the set of ideologies from which *WALL•E* emerges, they are increasingly hegemonic in a world where economic “growth” depends on the global circulation of data as a commodity and green-energy technologies lie at the heart of any current pragmatic response to climate chaos. Whatever future we are headed towards, it will inevitably involve living *with* the destruction humans have wrought and the new technologies and artificial intelligences that we bring along. In that regard *WALL•E* provides an interesting, if imperfect, starting point to consider not just how we might innovate our way out of a destroyed planet, but what new and more sustainable sets of social relations might be nourished.

In this paper, I have taken a decade-old animated film aimed at children to be a quite serious text on the state of nature, capitalism and social relations in the contemporary world. While it would be disingenuous to suggest that Pixar be held accountable for not producing works of radical political ecology, what I have tried to emphasize is that *WALL•E* provides a significant work from which to understand how geographically specific ideologies, like the entwined liberal-environmentalism and green-techno-fetishism developed in the San Francisco Bay Area over the last 50 years, inform and become embedded in cultural objects with wide circulation. But, as Philip K Dick suggested decades ago, friendly robots will not save us from a world system organized around exploitation and destruction. Something much more revolutionary than a loving AI will be needed.

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