Plastic (in) Paradise: Karen Tei Yamashita's *Through the Arc of the Rain Forest*

Michaela Keck
Carl von Ossietzky University of Oldenburg, Germany

Abstract

This contribution examines the magic-realist metaphor of the Matacão in Karen Tei Yamashita's (1990) debut novel *Through the Arc of the Rain Forest* as a trope that invites us to imagine, reflect on, and explore plastic's cross-cultural meanings, aesthetic experiences, and materialist implications. I contend that through the Matacão, Yamashita engenders a narrative about, as well as an aesthetic experience of, plastic that is inherently ambivalent and paradoxical. While it provides societies with material wealth and sensual pleasures, it poses at the same time a profound threat to life – human and nonhuman. The main part of the article is divided into two major sections: in the first part, I read Yamashita's story about the Matacão as historiographic metafiction that parodies the socio-cultural history of plastic and its utopian promises and failures. In the second part, I draw on Catherine Malabou's philosophical concept of plasticity to explore the Matacão's material agency, as well as the social mobility and economic connectivity of Yamashita's human protagonists in their plastic environments. The theoretical perspective of Malabou's concept of plasticity shifts the focus to the agentic forces of the waste material and allows us to read Yamashita's Matacão as both a site and material that, notwithstanding its devastating impacts, also holds potentialities for resilience and repair, and even the possibility for an, at least temporary, utopia.

Keywords: Catherine Malabou, Karen Tei Yamashita, material ecocriticism, plastic, plasticity, *Through the Arc of the Rain Forest*

Introduction

In her debut novel, Yamashita (1990) narrates the boom-and-bust cycle of a new raw material in the southern region of the Amazon Basin in Brazil – the Matacão. The Matacão first surfaces as "an enormous impenetrable field of some unknown substance stretching millions of acres in all directions" (Yamashita, 1990, p. 16). While the mysterious matter soon begins destroying the livelihoods of local farmers and agricultural laborers, the mass media proclaims the mysterious substance as "one of the wonders of the world" (Yamashita, 1990, p. 17). Quickly, the Matacão turns into an attraction for people from around the globe and becomes a node of local and global economies and ecologies, where hopes for wealth, progress, and sacred powers multiply. The enigmatic, defamiliarizing image of the Matacão points to the wide "range of vision" and "genre" (Lee, 2018, p. 3) that characterizes Yamashita's writing. Indeed, scholars have repeatedly stressed the hybridity, intersectionality, and metamorphosis of her literary worlds, which defy any clear-cut thematic and generic categorizations and equally draw on ethnic, diasporic, postcolonial, and postmodern fiction, magical realism, dystopian literature, satire, science fiction, or speculative fiction (Thoma, 2010, pp. 6–7).

The novel's multicultural cast is caught up in the whirl of the human activities on and around the Matacão: there is the local peasant, Mané Pena, who becomes famous for his healing powers with and knowledge of bird feathers; the young fisherman, Chico Paco, from the northeast of Brazil, who erects a shrine for Saint George on the Matacão and, thus, turns it into a pilgrim destination; Tania and Batista Djapan, a couple from São Paolo, who use the Matacão to expand their communication business of carrier pigeons; and the central character, Kazumasa Ishimaru, a Japanese immigrant, whose lottery win makes him the most important stockholder of the American company GGG, which is short for the telling name of Geoffrey and Georgia Gamble. Sensing new business opportunities in the promising new resource, J. B. Tweep, the New York manager of GGG, invites Kazumasa to the Matacão. With his three arms, Tweep is the epitome of the US-American entrepreneur and Wall Street capitalist. But Kazumasa stands out in his appearance as well, in that a small ball rotates, earth- or satellite-like, around its own axis in front of his forehead. This ball magnetically attracts Kazumasa to the Matacão and, ironically, functions as the novel's extradiegetic homodiegetic narrator. From this ball-narrator, we learn that all protagonists, except Kazumasa but including the ball, have perished in a mass extinction. Even the Matacão material has long crumbled to dust, and the ball is but a memory from the past, conjured up in an Afro-Brazilian Candomblé ceremony. While the initially overt presence of the ball-narrator quickly recedes into the background, toward the end of the novel, we learn from it that, as the mass extinction began, scientists confirmed that the Matacão

> had been formed for the most part within the last century, paralleling the development of the more common forms of plastic, polyurethane and styrofoam. Enormous landfills of nonbiodegradable material buried under virtually every populated part of the Earth had undergone tremendous pressure, pushed ever farther into the lower layers of the Earth's mantle. The liquid deposits of the molten mass had been squeezed through underground veins to virgin areas of the Earth. The Amazon Forest, being one of the last virgin areas on Earth, got plenty (Yamashita, 1990, p. 202).

Notably, the Matacão plastic is both a site and material, where anthropogenic and ecological processes enmesh with each other in unprecedented ways; where local and global forces circulate, clash, and interact; and where material resources and immaterial ideas are exploited.

In its materiality, the Matacão is a paradoxical phenomenon: at once rock-hard yet malleable, it is easily molded yet also molds other – human and nonhuman – matter.

This article examines the Matacão's plastic matter and plasticity as a metaphor that invites us to imagine and reflect on plastic's aesthetic experiences, cross-cultural meanings, and material properties. This is not to say that material such as plastic is not culturally and geopolitically specific. However, materials, ecologies, and cultures need to be placed within larger, globalizing processes, relations, and significations. My position here aligns with Veronica Strang's (2014) assertion that "cultural specificity and cross-cultural commonality in meanings are not mutually exclusive" (p. 140). This article contends that through the Matacão, Yamashita engenders a narrative about, and an aesthetic experience of, plastic that is inherently ambivalent and paradoxical. While it provides societies with material wealth and aesthetic pleasures, it poses at the same time a profound threat to life, both human and nonhuman. The main part of this article is divided into two sections: in the first part, I read Yamashita's story about the Matacão as historiographic metafiction that ironically comments on the socio-cultural history of plastic and its utopian promises and failures. In the second part, I draw on Catherine Malabou's (2008) philosophical concept of plasticity to unravel the Matacão's material agency, as well as the socio-economic mobility and connectivity of Yamashita's human protagonists in their plastic environments. The theoretical perspective of Malabou's concept of plasticity sheds light on Yamashita's Matacão as both a site and a material that, despite its devastating impact, also holds potentialities for resilience and repair, even for an, at least temporary, utopia.

Literature Review

The interpretations of the Matacão, its meanings and functions, tend to cluster around three critical perspectives: transnational Asian American affiliations, cross-cultural global flows and migratory patterns of economies and ecologies, and environmental pollution and justice. Taking their cue from the transnational turn, scholars like Rachel Lee, Shu-ching Chen, or Kandice Chuh have explored Asian American transpacific and hemispheric migrations and entanglements in global capitalism and argued for expanding the scope of identity politics that had focused predominantly on US-American national boundaries. Where Lee (1999) has called for a radical rethinking of "Asian American foundational subaltern identity politics" (p. 253) and Chuh (2006) has proposed a hemispheric approach, Chen (2004) has celebrated the novel's "innovative reconstruction" (p. 610) of Asian ethnicity, specifically Yamashita's use of the genre of the melodrama and the characters' efforts at reterritorialization, that is, the rebuilding of their local cultures and environments by adapting to the forces of global capitalism in "Asian style" (p. 611). Shaini Rupesh Jain's (2016) study of Yamashita's magical realist representation of the dispossession and ecological ethos of the indigenous peoples of Brazil, places Kazumasa without much ado on the side of the American entrepreneurial, profit-oriented developed world.

Ursula Heise's insightful examination of the destructive impact of globalization on local environments and cultures in *Through the Arc of the Rain Forest* has opened up the Asian American focus to a broader investigation of the global traffic of materials, ecologies, cultures, and identities. Heise (2008) reads the Matacão as a key symbol of "the imbrication of the local in the global" (p. 102) while also making a compelling case for Yamashita's subversion of such stereotypical figure constellations as the victimized Third World population (as embodied by Chico Paco, Mané Pena, or Tania and Batista) and their ruthless capitalist First World antagonists (personified by Tweep or Kazumasa).

Building on Heise's contribution, Treasa De Loughry (2017) has provided the first in-depth examination of the resource connections of the Matacão, which she reads as a symbol of "the text's world systemic registration of the uneven effects of petro-plastic pollution and oil financing" (p. 332). Importantly, her contribution makes visible the obscured connections between the oil industry, oil capital, and its by-products – plastic and plastic waste. Oil and plastic have not been the only nonhuman materials explored by scholars in *Through the Arc of the Rain Forest* to date. Aimee Bahng has linked the Matacão to the Amazon rubber boom, specifically to Euro-American and Japanese neocolonial schemes in the early twentieth century at the same time as she has concentrated on Asian American concerns as well. Based on her argument that Yamashita's novel reverses conventional narratives of Asian immigration and otherness in a long lineage of Asian American literature and science fiction, Bhang (2008) has interpreted the Matacão as indicating "the resilience and flexibility of empire, which continues to resurface in mutated form" (p. 127). Recently, Walter Gordon (2020) has elucidated the Matacão's materiality as that of "a unique speculative media ecology" that is "firmly tied to the material world of geology, ecology, and extraction" (pp. 178–179).

This article seeks to expand the scholarship on the Matacão's plastic and plasticity in Yamashita's novel by focusing on the ways in which plastic is represented as a material that shapes social and ecological environments and histories across cultures and places, and that possesses distinct material properties. Malabou's concept of plasticity proves to be particularly fruitful for explicating the agentive aspects of plastic as represented in *Through the Arc of the Rain Forest* at the same time as it provides a theoretical perspective for a better understanding of the workings of the novel's plastic environments, economies, and ecologies. In doing so, my approach attends to what Begoña Simal (2010) has called the "transnatural challenge" of interrogating nature/culture-binaries and asserting the fluidity between nature and artifice, nature, and culture (no. 3 "The Transnatural Challenge").

The Ambiguous Pleasures of Yamashita's Plastic Utopia

Chronicling the rise of the plastic industry in North America and its global interrelations, Susan Freinkel (2011) reminds us that the plastic cornucopia, which presently surrounds us, and the ever-growing mountains of waste, which we eye with increasing alarm – especially such "throwaway items" (p. 140) as water bottles, shopping bags, or food packaging – initially promised developed Western countries "a new material and cultural democracy" (p. 15) and "utopia available to all" (p. 25). As a new industrially produced material, plastic was indeed first hailed as "utopian," in that, ironically, it was extolled as bringing about a "cleaner and brighter" (Meikle, 1995, p. 68) future, as well as halting the extinction of animals, when celluloid combs or billiard balls replaced ivory, hornbill, or tortoiseshell. Because plastic surpassed the limitations of wood, iron, or glass, after World War II the polymer industry cranked up its mass-production of cheap products for everyday and recreational use, the "natural" looks of which signaled not only a sense of "humanity's growing mastery over nature" (Freinkel, 2011, p. 19), but also the pleasure traditionally associated with artistic mimesis. In fact, plastic came to be admired for its imitation, even perfection, of "nature."

Generally, avant-gardists, design artists, architects, and intellectuals across America, Japan, Brazil, and Europe embraced the new Bakelite, polymer, or nylon materials, albeit in culturally distinct ways and, depending on their political contexts, during different time periods. One exemplary art form that incorporated a multitude of plastic materials and even created a specific aesthetic through them, was pop art. Its heydays were the 1950s, and while European, American, and Japanese artists vigorously engaged in pop art's aesthetic potential and diverse

forms, Brazilian avant-gardists like Waldemar Cordeiro, for instance, "displaced pop art into [his] own artistic corpus" (Svanelid, 2017, p. 219).

Paris became one of the international art centers, where avant-gardists and intellectuals from around the world met and exchanged their visions about modern art and society. Roland Barthes's essay "Plastic" (1991), written after a visit to an exhibition of plastic materials in 1957, perhaps best represents the frequently shared "plastiphilia" (Freinkel, 2011, p. 43) and sense of wonder shared among artists and intellectuals at the time. Although he harbored doubts regarding plastic's aesthetic potential (as opposed to the pleasures derived from its usage), Barthes still marveled at its ability of a "sudden transformation of nature" which, he wrote, left the material "impregnated throughout with this wonder" and "perpetual amazement" (p. 97). *Through the Arc of the Rain Forest* revisits and comments on this history of plastiphilia and sense of wonder from a uniquely postmodern perspective of historiographic metafiction. Detailing its characteristics, Linda Hutcheon (1989) explains that historiographic metafiction reworks and "echoes … the texts and contexts of the past" (p. 3) through a self-conscious display of its own fiction and the use of parody.

In her novel, Yamashita (1990) has the ball-narrator – itself a posthuman subject made of Matacão plastic and, therefore, a "source of wonder" (p. 6) – reminisce about the bygone times with a mixture of self-awareness, self-importance, and nostalgia. In glowing terms, it remembers that "the wonderful thing about the Matacão was its capacity to assume a wide range of forms," so that once "the means of molding and shaping this marvelous material was finally discovered, the possibilities were found to be infinite" (Yamashita, 1990, p. 142). Indeed, the ball-narrator gets quite carried away when praising the versatility of Matacão plastic, which could not only be "molded into forms more durable and impenetrable than steel," spread out "as thin as tissue paper with the consistency of silk," but also had the "ability to imitate anything" (Yamashita, 1990, p. 142). The ball's enthusiasm echoes (to use Hutcheon's term) the twentieth-century admiration of and wonder at plastic materials as expressed by Barthes, and as chronicled in the various histories about plastic materials, which have become available since the 1990s.[1] As it does so, the ball smugly comments on its very own contribution to the past, ventriloquizing the self-adulatory pride of an explorer, who has made a revolutionary discovery: "This new era, which some historians would refer to as the Plastics Age, was all made possible because of me, Kazumasa Ishimaru's ball, without which new deposits of the Matacão plastic could not be found" (Yamashita, 1990, p. 144). However, the nostalgia-filled reminiscences of the ball-narrator also contain some disturbing aspects, specifically regarding the worship of the alleged miracle material, which indicate horrors which are, yet, outdone by its shiny new façade:

> At the plastics convention, two tiger lilies, one natural and the other made from Matacão plastic, were exhibited for public examination. Few, if any of the examiners, could tell the difference between the real and the fake. Only toward the end of the convention, when the natural tiger lily began to wilt, bruised from mishandling, were people able to discern reality from fabrication. The plastic lily remained the very perfection of nature itself. Matacão plastic managed to recreate the natural glow, moisture, freshness – the very sensation of life (Yamashita, 1990, pp. 142–143).

[1] Alongside Meikle (1995) and Freinkel (2011), see also Fenichell (1996) and Davis (2015). Davis's brief history relates more specifically to the idea of the Anthropocene.

Here, the plastiphilia reveals its dark underbelly as the public admiration of the industrially produced perfection of "nature" involves the careless violation of the "real" tiger lily. Moreover, the flower symbolism and the juxtaposition of the "real" and the "fake" enhance and complicate the meanings of the mass worship of the nature of plastic. On the one hand, the tiger lily's Asian descent adds a racialized, orientalist dimension to the conventional trope of representing nature as women and their bodies, out there to be dominated, injured, and ravaged (Kolodny, 1975). In this context, the question of the "real" and the "fake" brings into play the question of identity politics. After all, what trans/national boundaries shall decide what constitutes the "real" and the "fake" tiger lily?[2] On the other hand, when considering that the tiger lily also symbolizes "wealth and pride" (Lehner & Lehner, 2003, p. 126), the question of the "real" and the "fake" can be read as an allegory of the (Asian) tiger economies and their roles in the production, marketing, and consumption of plastic matter and, therefore, the despoliation of "nature" and its beauty.

Furthermore, religious connotations abound in the lily as a Christian attribute of the Virgin Mary and a symbol of sacred purity and innocence (Lehner & Lehner, 2003). Importantly, it is the natural flower that is violently robbed of its purity and sacredness – the lily's "mishandling" and "bruises" indicate rape – whereas the artificial lily attains a status of transcending nature. Indeed, the idea of purity is generally confounded, in that the exhibited flowers occupy the interstices between religion, art, and consumption. As a result, the distinctions between the categories of the artificial and the natural, the divine and the profane, the ideal and the real, can no longer be maintained. The religious worship of the Matacão becomes increasingly intertwined with monetary interests as well. In fact, the clergy – even Chico Paco himself, albeit inadvertently – "capitalize on [its] possible spiritual magnetism" (Yamashita, 1990, p. 49). Economic profit also gains the upper hand in Tweep's American dream of Matacão plastic for all. The parodic image of his three busy arms hark back to Udo Keppler's famous caricature of Standard Oil's tentacular powers during the Gilded Age and, thus, make visible the generally obscured relationship between plastic and oil.[3] Furthermore, GGG's corporate structures, including their monopoly on Big Data, presents an updated version of the historically characteristic concentration of the technological infrastructure of Big Business owned and run by one single company. As Matacão plastic "infiltrate[s] every crevice of modern life" (Yamashita, 1990, p. 143) and makes available a vast array of consumer choices – from essentials like food to everyday objects such as clothes to luxury goods like jewelry – so does GGG's monopolistic power shape consumers' lives across the globe.

According to Meikle (1996), the early plastic materials promised a future of mobility and change to Americans at the same times as they helped shape what many considered a democratic culture of material abundance, on the one hand, and a culture of artifice, even "sham" (p. 327), on the other. Among European intellectuals in particular, there circulated the idea of a "plastic America" (p. 330), which they saw epitomized in the invention of Disney World. This plastic world made in the USA resurfaces in *Through the Arc of the Rain Forest* in the form of Gilberto's "wild idea" (Yamashita, 1990, p. 166) to build an amusement park entirely out of Matacão plastic. Tweep, of course, enthusiastically embraces the plans for this "paradise

[2] John B. Gamber (2018) has noted that the novel simultaneously raises questions about the boundaries of categories such as "the natural" and "the artificial," as well as "authenticity" in Asian American literature (pp. 39–40), as Yamashita's distinction between "the real and the fake" lilies can also be read as a tongue-in-cheek nod to Frank Chin's (1991) critical essay "Come All Ye Asian American Writers of the Real and the Fake."

[3] Keppler's caricature was published in *Puck* (1904) and has become a staple of history books and websites about America's Gilded Age.

of plastic delights" called "Chicolándia,"[4] whereas its patron saint, Chico Paco, reacts with a mixture of "love and terror" (Yamashita, 1990, p. 166). By the time Chicolándia is ready to open its doors to the public, however, an unknown typhus fever rages and the Matacão's anticipated utopia has long turned into its opposite – a dystopian world of suffering, disease, and death. On the night of Chicolándia's much longed-for inauguration, its anticipated bright future literally goes up in flames and culminates in a veritable death frenzy, which litters the Matacão in blood and human bodies, foreshadowing the imminent mass die-off of poisoned birds, so that soon the Matacão is covered "knee-deep" by "the lifeless bodies of poisoned birds" (Yamashita, 1990, p. 202).

In contrast to the plastic dreams made in America, utopian projects in Brazil have historically been characterized less by a desire for economic success and mobility than by a creative redefinition of nationality, future visions of "political and social justice," and "a desire for renewal" (Kenneth, 2021, p. 10). Artists used irony and satire, included indigenous and folk materials, as well as everyday objects – also made from plastic – to playfully forge a hybrid aesthetic, while also maintaining an energetic exchange with North American and European artists. Constitutive of the reception of American and European art and culture by Brazilian avant-gardists has been the aesthetic practice of anthropophagia or cannibalism. As an aesthetic model, anthropophagia originated among the Brazilian modernists in Paris in the 1920s, but remained largely forgotten until the 1960s. One of the central essays was Oswaldo de Andrade's "Manifesto Antropófago" (1928), which established the notion of imbibing the values and powers of European culture through cannibalism in an ironic twist of the writings by early explorers and conquistadores, whose reports about the cannibalistic indigenous peoples of the tropical regions of the Amazon rain forest were used to justify imperialistic expansion. Anthropophagia has since remained an important aesthetic and postcolonial practice and model (Kenneth, 2021, pp. 15–16).

According to Kenneth (2021), anthropophagia signifies the absorption of the colonizing forces by a diverse and pluralistic Brazilian art and culture and defines itself by its humor (p. 52), a dialectical tension of cosmopolitan and native forces (p. 49) and exterior and interior worlds (p. 79). In this way, anthropophagia envisions a utopian project that draws on the regenerative and self-assertive anti-colonial spirit of Brazil's indigenous origins at the same time as it absorbs modernist currents in a manner that, rather than being regressive, opens up spaces for hybridity and innovation.

I want to suggest that Yamashita's use of the plastic-eating bacteria brings into play anthropophagia as well, so as to ironically comment on the self-destructive anthropogenic "plastification" of the planet, on the one hand, and the cannibalistic posthuman forces – including the bacteria – of the tropical forests of the Amazon, on the other. As the memory of the ball-narrator fades at the end of Yamashita's (1990) *Through the Arc of the Rain Forest*, we are left with an assemblage of four distinct scenes: the burial of Chico Paco and Gilberto's remains at their "seaside birthplace of multicolored dunes" (p. 209); Batista's energetic guitar-strumming to welcome back Tania at the "enormous pit" (p. 210) that had once been the Matacão; Lourdes and Kazumasa's embrace in the midst of their lush tropical fruit farm surrounded by Gislaine and Rubens; and (4) the Amazon forest, reclaiming the space in and

[4] Bahng (2008), who examines *Through the Arc of the Rain Forest* as both Asian American literature and science fiction, "unearth[es]" in Yamashita's imaginary Chicolándia the intertextual traces of Henry Ford's early twentieth-century imperialist venture of his rubber plantation called "Fordlándia" (p. 123). Ultimately, however, Fordlándia failed, which is why the memory of its fantasy of expanding American progress and civilization is commonly forgotten.

around the now deserted Matacão. These scenes share the indication of a future in diverse local environments that are ravaged yet alive, without Matacão plastic yet distinct from the time before its domination. Or, as the ball-narrator muses, "it will never be the same again. Now the memory is complete, and I bid you farewell. Whose memory you are asking? Whose indeed" (Yamashita, 1990, p. 212). Devoured by the insatiable plastic-eating bacteria and absorbed into the Afro-Brazilian cultural memory of a post-Matacão world, the conjured-up memory of the ball has been cannibalized by both nature *and* culture – a final twist whose irony does not escape the narrator either. In keeping with the characteristic irony of anthropophagia, Yamashita (1990) has the ball comment at the very beginning: "That I should have been reborn like any other dead spirit in the Afro-Brazilian syncretistic religious rite of Candomblé is *humorous* to me" (p. 3; emphasis added).

In contrast to this reading of the novel's ending, Heise (2008) has taken issue with Lourdes and Kazumasa's experience of "bucolic bliss" (p. 105) in a tropical paradise surrounded by rampant environmental destruction, critiquing that the novel offers "a sociocultural solution for a problem that it had earlier articulated in ecological terms" (p. 105). I shall return to this important question once again at the end of this article. Before, however, some clarifications about the concept of plasticity are necessary.

Plasticity and Transdifferentiation in *Through the Arc of the Rain Forest*

Two central aspects of Malabou's concept of plasticity are constant mutability and *transdifferentiation*, processes that underline change with a difference (as opposed to mere imitation or replication). "According to its etymology – from the Greek *plassein*, to mold – the word *plasticity* has two basic senses," Malabou (2008) explains: "it means at once the capacity to *receive form* (clay is called 'plastic,' for example) and the capacity to *give form* (as in the plastic arts or in plastic surgery)" (p. 5; emphasis in the original). Importantly, Malabou (2008) distinguishes the capacity of "receiving" and "giving form," in the sense of the adaptable, malleable, and self-modulating ability of plastic materials, from being "elastic" (pp. 15–16), or infinitely modifiable. On the contrary, Malabou (2008) asserts that plastic always "retains an imprint and thereby resists endless polymorphism" (p. 15).

However, what may at first sight appear as limiting or irritating a common understanding of the properties of plastic, Malabou takes as a central aspect of plasticity's transformative ability, namely plastic's agency for the genesis of new forms and possibilities, or what she terms the "capacity to differentiate and transdifferentiate" (p. 16). This idea entails plastic's potential to reshape with a difference as it were (and as opposed to mere replication). To elucidate this idea of *transdifferentiation*, Malabou (2008) uses the example of stem cells: Some stem cells renew themselves by "generating cells similar to those of the tissue they come from," whereas others "transform themselves into different types of cells," which means that these cells "change their difference" and "transdifferentiate themselves" (p. 16). *Transdifferentiation*, then, relies on the agentive forces of plastic to transform itself into a different type of material. It is this capability of plastic to change its difference, which she considers fundamental for potentialities for repair and resilience, as well as the possibility for utopia.

Strikingly, Yamashita's (1990) Matacão plastic also possesses a capacity that indicates *transdifferentiation* as the following example humorously demonstrates: "Plastic surgeons would be quick to recognize the practical uses of Matacão plastic and adapt the new technology for use in facial rebuilds. … Suddenly, people in all walks of life would appear to be facially younger, glowing with a constantly dewy freshness. Some would also appear to be not at all

the way anyone remembered them" (pp. 142–143). In contrast to the replicant tiger lily in the plastic exhibition, here, a remake with an – ever so slight – difference is highlighted, in which it is not only the plastic sculpting by the doctors, but also the bodily adaptation to the plastic, which results in an – at least temporarily – constructive synthesis and effects a positive reconstitution rather than a mere replication of human bodies. This example can also be read as commentary on yet another aspect of plasticity, which both Malabou and Freinkel insist on, namely plastic's kinship with humans. Where for Malabou plasticity is central to the human mind, Freinkel (2011) notes that "nature has been knitting polymers since the beginning of life," including the "proteins that make up our [human] muscles … our skin and the long spiraling ladders that hold our … DNA," and which are also polymer (p. 14). There is, then, a relatedness between humans and plastic, in that humans are *of* and yet different from plastic and, vice versa, plastic engenders yet is different from human nature.

There are, however, other, incidents of *transdifferentiation* in Yamashita's novel as well, which involve unpredictable, toxic, and even utterly destructive forms of plasticity, the most well-known of which is, perhaps, Yamashita's (1990) "junkyard in the jungle":

> There was […] about seventy-two kilometers outside the Matacão, an area which resembled an enormous parking lot, filled with aircraft and vehicles of every sort of description. […] What was most interesting about the … rain forest parking lot was the way in which nature had moved to accommodate and make use of it. The entomologists were shocked to discover that their rare butterfly only nested in the vinyl seats of Fords and Chevrolets and that their exquisite reddish coloring was actually due to a steady diet of hydrated ferric, or rusty water. There was also discovered a new species of mouse […] that burrowed in the exhaust pipes of all the vehicles. These mice had developed suction cups on their feet that allowed them to crawl up the slippery sides and bottoms of the aircraft and cars. The […] females sported a splotchy green-and-brown coat, while the males wore shiny coats of chartreuse, silver and taxi yellow. The mice were found to have extremely high levels of lead and arsenic in their blood and fat from feeding on chipped paint, yet they seemed to be immune to these poisons. Most animals who happened to feed on these mice were instantly killed, except for a new breed of bird, a cross between a vulture and a condor, that nested on propellers ... (Yamashita,1990, p. 100).

Yamashita's junkyard powerfully dramatizes the agentic nature and aesthetic experience of plastic materials long after they have fulfilled their purposes. Here, they enmesh with other industrial waste, animals, plants, and organisms in ways that are at once generative and toxic, beautiful and disturbing. Although there seems to be some kind of resilience in the toxic beauty of this living junkyard, it also raises questions about Yamashita's Matacão as well as about Malabou's concept of plasticity: Why is the junkyard kept apart from humans? Where does renewal and resilience stop and destructive plasticity begin? And is there an expiration date to resilience, if there is none to plastic? After all, the "recalcitrance" (Davis, 2015, p. 352) of plastic matter, even in its *transdifferentiated* forms, will outlive human and nonhuman life "by hundreds, if not thousands of years" (Liboiron, 2015, p. 123), while the material itself will continue the process of *transdifferentiation* in intimate, unpredictable, and presumably ever more deadly ways "over generations, and even over millennia" (Liboiron, 2015, p. 96).

In line with a reading of Yamashita's (1990) novel as historiographic metafiction, we can, of course, read this "exclusive junkyard" (p. 101) with its bizarre inhabitants as a scathing satire on that epitome of American plastic commerce and culture, Disney World, and – specifically

the mice – as a parody of Disney's iconic figure of Mickey Mouse. On a more somber note, and in an attempt to broach the questions raised by the fascinating yet mutated lifeforms that populate Yamashita's (1990) "rain forest parking lot" (p. 100), the constructive *transdifferentiation* here can be interpreted as being on the verge of, even no longer distinguishable from, the destructive plasticity brought on by environmental damage. Elaborating on these negative forms of plasticity, which, in their most extreme forms, may lead to annihilation. Malabou (2012) states that "wounds – traumas or catastrophes – [which] are not 'creators of form' in the positive sense of the term … ultimately remai[n] an adventure of form" (p. 17). Yamashita's jungle junkyard, then, represents such an adventurous form of plasticity brought on by an environmental wound, or worse, trauma, a form that already contains the terrors of annihilation.

Such constructive and destructive forms of plasticity and their *transdifferentiations* also reveal themselves in the interactions of Yamashita's protagonists with their social and economic environments, which – like their physical and ecological environments – become ever more entangled with and defined by Matacão plastic. Analogously to the "great decaying and rejuvenating ecology of the Amazon Forest," human life also "adapt[s] itself" in "unexpected" and "expected" ways to the Matacão's "vast plastic mantle" (Yamashita, 1990 p. 101), which increasingly stands out as a vibrant node of a larger network of local and global intersections. To probe deeper into the nature of these intersections, specifically into diverse self-adaptations of Yamashita's protagonists to their plastic environment in social and economic terms, Malabou's concept of plasticity proves particularly fruitful, as it is based on a connectionist model "of relations without any centrality" (Silverman, 2010, p. 94). Yamashita's reference to Udo Keppler's well-remembered caricature of Big Business as all-embracing and domineering top-down business model ought not to be mistaken with the novel's general understanding of the operations of social and economic forces. In fact, scholars like Chuh (2006), Heise (2008), Chen (2010) or De Loughry (2017) have stressed the aspects of social and economic interconnections and networks.

As Marc Jeannerod (2008) explains, Malabou's concept of plasticity needs to be placed in the context of a radically modified "economic and social environment" (p. xii), that is, an environment which has become plastic in the sense of being capable to self-adapt to new circumstances. Quoting Malabou, Jeannerod (2008) further explains that such a plastic environment "rests on a plurality of mobile and atomistic centers deployed according to a connectionist model" (p. xii) as opposed to a top-down economic model "managed from above and overseen by a central authority" (p. xii). Specifically, the Brazil-based businesses in Yamashita's (1990) *Through the Arc of the Rain Forest* actively and creatively shape the socio-economic environment of the Matacão despite GGG's corporate power and dominance. Tania and Batista successfully launch an international communication business with their own breed of pigeons; Mané Pena founds "Featherology" (p. 150) as a new discipline at colleges and universities at home and across the world; and Chico Paco launches "Radio Chico," a radio-empire for the spiritual needs of evangelicals across Brazil and worldwide.

Ironically, the protagonists' means of shaping – *transdifferentiating* – their plastic socio-economic environment hardly ever include the use of computers, the Internet, cellphones, the social networks, or any other of the digital media that revolutionized the decades in which *Through the Arc of the Rain Forest* was written and published. Gordon (2020) notes that, in doing so, Yamashita "keeps the Matacão firmly tied to the material world of geology, ecology, and extraction" (p. 179). Only the plastic credit cards with their "wealth of data" (Yamashita, 1990, p. 141) and the hint at digital money allude to the media revolution that was underway,

whereas Yamashita has her characters rely on print media, radio, TV, tape recorders, or videos at the same time as they still mostly travel by bus, trucks, and even barefoot. Even so, GGG and Wall Street's profits depend on the liaison with other economic players, whether these are stockholders like Kazumasa, Mané Pena's institutionalized feather studies, Chico Paco's megachurch, or Tania and Batista's pigeon network. Importantly, and despite GGG's monopoly over plastic molding technologies, Tweep is, thus, required to modify GGG so as to adapt to these Brazilian businesses as well. GGG's ever-changing line of products – from feathers (first real, then imitated in Matacão plastic) to magnetic credit cards to Chicolándia – showcases the adaptive dynamics in a plastic economy, also for the giant corporations.

In spite of these remarkable demonstrations of self-transformation and agency within the context of a de-centered, plastic socio-economic environment, however, some of Yamashita's (1990) characters find that interpersonal, familial, and sexual connections are lost: Mané Pena, who increasingly suffers from the "stress and tension of [his] new life" (p. 121) as feather guru, feels an inconsolable "sadness," because there is "nothing connecting him to any [member in his family]" (p. 151) anymore; Batista, who suffers from sexual frustration, anxiety, and bouts of "depression" (p. 171), longs to be "released from his invisible cage" (p. 128) as pigeon entrepreneur; even Chico Paco, who reunites with Gilberto and his mother in his new home at the Matacão, is "traumatized by Gilberto's inexhaustible energy" (p. 189); and Kazumasa, "the Japanese Robin Hood" (p. 81), who seeks to do good among the poor, sick, and hungry, cannot "find happiness" (88) and experiences the pangs of "*saudades*" (p. 146) – a melancholia brought on by his ceaseless mobility.

Heise (2008) has read the social isolation of all these individuals as the result of the "dispersive projects of globalization" (p. 108), whereas Chen (2004) has attributed it to "the uneven development between the public and private spheres under the influence of Western capitalism" (p. 616). I propose to relate these states of loneliness and disconnection also to Malabou's concept of plasticity, specifically her drawing a parallel between cerebral and socio-economic connections. Malabou (2008) notes that the "absence of centrality and hierarchy," as well as "the necessity of being mobile and adaptable constitute new factors of anxiety" (p. 49). Citing sociologist Alain Ehrenberg, Malabou (2008) writes that "[t]he model imposed on the worker is … that of the entrepreneur of flexible labor" (p. 49) in "an unstable, provisional world in flux" (p. 50). As a result of the demand of constant flexibility, careers become vulnerable to unpredictable ups and downs and the drifting from one project to another without ever coming to rest. For human individuals, this condition of drifting and wandering can create a degree of precariousness that threatens to cut them off from social ties with others. Malabou (2008) concludes that a person suffering from anxiety and depression in a world defined by such a flexible, adaptive connectivity, is a "disaffiliated" (p. 52) person.

When considering the plasticity of the socio-economic environment in Yamashita's novel, Kazumasa, Mané Pena, Chico Paco, and Batista Djapan – the majority of the male characters – stand out in their anxiety, loneliness, and depression, whereas only Tweep finds happiness in the global plastic economy and its connectionist mechanisms with the three-breasted French ornithologist called Michelle Mabelle. In contrast, the wanderings of Tania, Lourdes, and Gilberto – the women and the disabled youth – signify an (at least temporary) gain, as the plastic socio-economic environment affords them increased, albeit differing, degrees of mobility and access to autonomy, wealth, and power. Where Tania overcomes her marital dependency and manages her pigeon empire with power and obvious pleasure, the work for Chico Paco's religious radio program affords Lourdes mobility and reconnection with her loved ones across vast distances. Gilberto, in turn, absolutely thrives in the new plastic world,

because it gives him full access to and mobility within society. His ceaseless activities, which seem to follow the motto "faster, higher, further," hyperbolize what marks the lives of the other characters, too, namely the relentless and absurd human pursuit of achieving ever greater feats. Ultimately, however, Gilberto's restless bustle ends in, to use Malabou and Yamashita's terms, a destructive and "unexpected" form of plasticity, namely his own annihilation: As if seeking to outshine even the climax of the public fireworks over the Matacão, and with the help of a cannon, he launches himself into the air in a glittery spacesuit and explodes.

Conclusion

In *The Arc of the Rain Forest*, Yamashita imagines and interrogates the promises, pleasures, and failures associated with the Matacão as a metaphor for the constructive and destructive forces of plastic. With the ball-narrator's nostalgic memories of the Plastic Age and its dramatic ascent and demise, Yamashita's historiographic metafiction ironically exposes the inherent ambivalence of the Matacão's plastic promises and their, by now, well-chronicled failures. Ultimately, the novel rejects the American dream of a plastic commerce and culture and instead embraces the Brazilian practice of anthropophagia for an as yet unrealized posthuman future, whose outcome remains yet to be seen.

If, however, utopia lies in those chance openings for *transdifferentiation*, as Malabou's dialectical concept of plasticity has it, then another narrative emerges in *Through the Arc of the Rain Forest*. To return to Heise's important point of critique: The ending of Yamashita's novel suggests a narrative, not of great hopes, absurd feats, and futile struggles, which ends in spectacular failure, but rather constitutes a much messier narrative. It is the story of constant change, where persons, goods, and other life forms move about, risk disaffiliation and loneliness, but also self-adapt and transdifferentiate and, thus, experience moments of utopia – if not ecologically, because of environmental damage and trauma, then at least socio-culturally. Finally, I want to suggest that it is such a reparative utopia which lights up at the end of the novel in the scene of Lourdes and Kazumasa's tropical paradise, its clichéd stereotype intimating the impossibility of returning to a life without plastic, as well as the transience and frailty of such moments of resilience.

References

Barthes, R. (1991). *Mythologies* (Annette Lavers, Trans.). Farrar, Straus & Giroux. (1957).

Bhang, A. (2008). Extrapolating transnational arcs, Excavating imperial legacies: The speculative acts of Karen Tei Yamashita's *Through the Arc of the Rain Forest*. *MELUS*, *33*(4), 123–144. https://doi.org/10.1093/melus/33.4.123

Chen, S. (2004). Magic capitalism and melodramatic imagination – Producing locality and reconstructing Asian ethnicity in Karen Tei Yamashita's *Through the Arc of the Rain Forest*. *Euramerica*, *34*(4), 587–625.

Chuh, K. (2006). Of hemispheres and other spheres: Navigating Karen Tei Yamashita's literary world. *American Literary History*, *18*(3), 618–637. https://doi.org/10.1093/alh/ajl002

Davis, H. (2015). Life & death in the Anthropocene: A short history of plastic. In H. Davis & E. Turpin (Eds.), *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies* (pp. 347–358). Open Humanities Press.

De Loughry, T. (2017). Petromodernity, petro-finance and plastic in Karen Tei Yamashita's *Through the Arc of the Rain Forest*. *Journal of Postcolonial Writing*, *53*(3), 329–341. https://doi.org/10.1080/17449855.2017.1337685

Fenichell, S. (1996). *Plastic: The Making of a Synthetic Century*. HarperCollins.

Freinkel, S. (2011). *Plastic: A Toxic Love Story.* Houghton Mifflin.

Gamber, J. B. (2018). "Dancing with goblins in plastic jungles": History, Nikkei transnationalism, and romantic environmentalism in *Through the Arc of the Rain Forest*. In R. E. Lee (Ed.), *Karen Tei Yamashita: Fictions of Magic and Memory* (pp. 39–58). University of Hawai'i Press.

Gordon, W. (2020). "Take a good look at it": Seeing postcolonial medianatures with Karen Tei Yamashita. *Media Tropes*, *VII*(2), 175–198. https://doi.org/10.33137/mt.v7i2.33676

Heise, U. K. (2008). *Sense of place and sense of planet: The environmental imagination of the global*. Oxford University Press.

Hutcheon, L. (1989). Historiographic metafiction: Parody and the intertextuality of history. In P. O'Donnell & R. C. Davis (Eds.), *Intertextuality and Contemporary American Fiction* (pp. 3–32). Johns Hopkins University Press.

Jain, S. R. (2016). Pigeons, prayers, and pollution: Recoding the Amazon rain forest in Karen Tei Yamashita's *Through the Arc of the Rain Forest*. *A Review of International English Literature*, *47*(3), 67–93. https://doi.org/10.1353/ari.2016.0024

Jeannerod, M. (2008). Introduction. In C. Malabou, *What Should We Do with Our Brain?* (S. Rand, Trans.). (pp. xi–xiv). Fordham University Press.

Kenneth, D. J. (2021). *Cannibal Angels: Transatlantic Modernisms and the Brazilian Avant-Garde*. Peter Lang.

Kolodny, A. (1975). *The Lay of the Land: Metaphor as Experience and History in American Life and Letters*. The University of North Carolina Press.

Lee, R. A. (2018). Introduction. In R. A. Lee (Ed.), *Karen Tei Yamashita: Fictions of Magic and Memory* (pp. 1–8). University of Hawai'i Press.

Lee, R. (1999). Asian American cultural production in Asian-Pacific perspective. *Boundary 2*, *26*(2), 231–254. https://doi.org/10.1353/jaas.1999.0026

Lehner, J., & Lehner, E. (2003). *Folklore and Symbolism of Flowers, Plants and Trees*. Dover Publications.

Liboiron, M. (2015). Redefining pollution and action: The matter of plastics. *Journal of Material Culture*, *21*(1), 87–110. https://doi.org/10.1177/1359183515622966

Malabou, C. (2008). *What Should We Do with Our Brain?* (S. Rand, Trans.). Fordham University Press.

Malabou, C. (2021). *The New Wounded: From Neurosis to Brain Damage*. Fordham University Press.

Meikle, J. L. (1995). *American Plastic: A Cultural History*. Rutgers University Press.

Meikle, J. L. (1996). Beyond plastics: Postmodernity and the culture of synthesis. In G. Hoffmann & Alfred Hornung (Eds.), *Ethics and Aesthetics: The Moral Turn in Postmodernism* (pp. 325–342). Winter Verlag.

Silverman, H. J. (2010). Malabou, plasticity, and the sculpturing of the self. *Concentric: Literary and Cultural Studies*, *36*(2), 89–102.

Simal, B. (2010). The junkyard in the jungle: Transnational, transcultural nature in Karen Tei Yamashita's *Through the Arc of the Rain Forest*. *Journal of Transnational American Studies*, *2*(1). https://doi.org/10.5070/T821006992

Strang, V. (2014). Fluid consistencies: Material relationality in human engagements with water. *Archaeological Dialogues*, *21*(2), 133–150. https://doi.org/10.1017/S1380203814000130

Svanelid, O. (2017). AnthroPOPhagous: Political uses of pop art in the aftermath of the Brazilian military coup d'état of 1964. In Annika Öhrner (Ed.), *Art in Transfer in the Era of Pop: Curatorial Practices and Transnational Strategies* (pp. 215–237). Huddinge: Södertörnshögskola.

Thoma, P. (2010). Traveling the distances of Karen Tei Yamashita's fiction: A review essay on Yamashita Scholarship and Transnational Studies. *Asian American Literature: Discourses and Pedagogies*, *1*(1), 6–15.

Yamashita, K. T. (1990). *Through the Arc of the Rain Forest*. Coffee House Press.

Corresponding author: Michaela Keck
Contact email: michaela.keck@gmail.com