

The Anthropocene Catastrophe: The Mystery of the Disappearance of Matacao in *Through the Arc of the Rain Forest*

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Abstract

The Japanese-American writer Karen Tei Yamashita's first novel *Through the Arc of the Rain Forest* discloses the tremendous impact of technological activities on the natural environment in the Anthropocene. Centering on the mystery of the disappearance of Matacao in this novel, the present paper expounds that its disappearance is an environmental catastrophe of the Anthropocene resulting from the retaliation of nature for the replacement of it by human technological activities under the domination of the scientific and technological rationality. Yamashita's presentation of the disappearance of Matacao serves as a warning to the world, aiming to advocate that the technological activities should not be controlled only by the scientific and technological rationality, but should recognize and respect the irreplaceability of nature, otherwise these activities will be retaliated by nature, triggering environmental disasters in the Anthropocene, bringing destruction to the Earth and the technological civilization.

Key words: Anthropocene; Karen Tei Yamashita; *Through the Arc of the Rain Forest*; Scientific and technological rationality

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Karen Tei Yamashita (1951-) is today's well-known

Japanese-American writer, whose acclaimed novel *Through the Arc of the Rain Forest* (1990) won the Before Columbus Foundation's American Book Award and the Janet Heidinger Kafka Prize. Based on the writer's experience of "visiting Manaus on the Amazon" (Lee, 2018, p.180), the novel sets the story in a fictional place called Matacao in the Amazon rainforest in the 1990s, and keenly captures the tremendous impact of technological activities on the natural environment in the Anthropocene.

Until now, although many scholars have expounded the novel from the perspective of ecocriticism, they concentrate on environment and society (Adams, 2018), global environmental problems (Simal, 2010), nature and culture (Koontz, 2018), and dystopia (Larson, 2021) in their studies. It seems that to some extent, they pay little attention to the mystery of the disappearance of Matacao as an environmental issue. Centering on this issue, by a case study of *Through the Arc of the Rain Forest*, the present paper further explores the ecological theme of the novel, and argues that the mystery of the disappearance of Matacao is an environmental catastrophe in the Anthropocene resulting from the replacement of nature by human technological activities dominated by scientific and technological rationality.

The Anthropocene refers to the most recent history of the Earth, which probably began at the end of the 18th century with the huge impact of human activities on climate and ecosystem. This date coincides with James Watt's improvement of the steam engine in 1782. The Anthropocene is inseparable from human activities, and is especially closely related to the frequent technological activities of human beings since the Industrial Revolution. Undoubtedly, one of the most significant features of industrial civilization is the extensive use of technology. The advance of technology has improved human conditions, but it has also revealed its very destructive side. The environmental crises that have erupted since the twentieth century, such as the destruction of the

ozone layer, the “greenhouse effect”, etc., are to a large extent the result of technological activities that ruin the environment under the domination of scientific and technological rationality of mankind.

Scientific and technological rationality is “a form of the development of human rationality” (Pan, 2007, p.38), and it is the most fundamental way of thinking that controls scientific and technological activities. It explores the objective operation of nature, and applies the objective law of nature through human subjective initiative. Though the scientific and technological rationality has promoted the progress of human society, its negative applications also bring many disasters to the nature, the main reason of which is that humans tend to think rationally in the technological practice of changing the external world, and the essence of rationality is “the ability of humans not to be satisfied with reality but to transcend it” (Pan, 2007, p.22). Therefore, scientific and technological rationality becomes a means by which human beings change the external world to satisfy themselves, which implies a potential threat of replacing nature.

In *Through the Arc of the Rain Forest*, the mystery of the disappearance of Matacao is connected with the Anthropocene and the scientific and technological rationality of man. At the opening of the novel, according to the writer’s narrative, Matacao is a place to which everyone aspired. Located deep in the Amazon rainforest, Matacao is named after a magical plastic found underground in this area. The name “Matacao” in the local dialect means “a mysterious place”. In addition, the novel recounts that the mysterious plastic attracts many foreign scientists to explore it, and the American GGG Capital Corp to mine and utilize it. However, at the end of the novel, the writer relates that the place “Matacao” is devoured by bacteria. Buildings, bridges and roads made of the Matacao plastic by GGG have collapsed, slowly crumbling to dust. Finally, Matacao is “a fine powder drawn up in the sigh of an indecisive whirlwind” (Yamashita, 1990, p.209)¹, and disappears, “now an enormous pit” (p.210). Here come some questions. Why does Matacao change so much and disappear? Is there a link between the disappearance of Matacao and GGG’s utilization of the magical plastic found in this place? By addressing these questions, the present paper maintains that the mystery of the disappearance of Matacao is an environmental catastrophe in the Anthropocene caused by the retaliation of nature for the replacement of it by GGG’s technological activities with the Matacao plastic under the control of scientific and technological rationality.

As the novel discloses, Matacao contains a large

amount of “magical plastic” under the ground. The writer depicts the formation of this magical plastic as follows:

The Matacao, scientists asserted, 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. (p.202)

From the above account, we can see that the Matacao plastic is an environmental disaster of the Anthropocene caused by the indiscriminate throwing of technological waste by humans under the domination of scientific and technological rationality. Aristotle’s proposition that “man is a rational animal” denotes that man is superior to other creatures because of his rationality, this statement establishes “the status of man as a subject in nature” (Pan, 2007, p.20), and the entire Western philosophy of rationalism has been formed on such idea. When carrying out scientific and technological activities, especially when dealing with high-tech waste, human beings are often influenced by such rationalistic idea and throw technological waste at will. From this respect, it can be discovered that the magical plastic of Matacao is an environmental catastrophe in the Anthropocene due to human beings’ throwing technological waste indiscriminately under the impact of scientific and technological rationality that man is in the dominant position in nature.

The novel further recounts that though knowing this Matacao plastic is the non-biodegradable garbage, GGG is attracted by its miraculous qualities and intends to create a technological world with it. The special properties of the Matacao plastic pique the interest of GGG. The novel presents that this kind of plastic is “incredible. It is stronger than steel, resistant to extremely high temperatures” (p.113). More importantly, the most remarkable thing about this plastic is its amazing ability to imitate anything. The writer highlights that the Matacao plastic can be “molded into everything imaginable, both life-size and lifelike” (p.167), and even “an entire world could be created from it” (p.167). Because of this incredible molding capacity, in order to show the power of the company, controlled by scientific and technological rationality, GGG attempts to create a technological world with the Matacao plastic.

The writer reveals that, in this technological world, “food” is made of Matacao plastic, which is healthy and recyclable, replacing the food provided by nature for humans. As the novel manifests, not satisfied that the food offered by nature can sometimes be unhealthy, under the domination of scientific and technological rationality,

¹ All the quotations from the novel are from the version: Yamashita, Karen Tei. (1990). *Through the Arc of the Rain Forest*. Minneapolis: Coffee House Press; hereafter the quotations from the novel will be only marked by page number.

GGG produces a kind of “artificial food” with Matacao plastic. The novel exhibits that this “artificial food” has a satisfying taste, meets the daily nutritional requirements of the human body, contains no cholesterol, and doesn’t cause damage to human body. Additionally, this “plastic food” will not spoil. If dirty, just wash and eat again. However, as we all know, “the biological nature of human beings determines that they depend on food sources provided by plants and animals for their survival” (Yu, 2021, p.28). Therefore, food actually “represents our deepest connection and interaction with nature” (Yang, 2011, p.114). In this sense, it can be perceived that the “artificial food” made of Matacao plastic is undermining the intimate connection between humans and the natural world of plants and animals that should be formed through food.

As the novel continues, the writer displays that except from making “artificial food” with Matacao plastic, GGG brings this magical plastic into every corner of people’s lives in Matacao, which further severs the intimate bond between humans and nature. Man is a living natural being, inseparable from nature, and nature provides the material source of human physical existence. However, humans who have undergone the industrial revolution blindly believe in technology and have unrealistic illusions about technology changing the world. In *Through the Arc of the Rain Forest*, dictated by scientific and technological rationality, GGG intends to make Matacao plastic become a source of human survival needs. The novel unmasks the reality that the Matacao plastic infiltrates “every crevice of modern life” (p.143), and every industry from construction to fashion “jump[s] into Matacao plastics” (p.142). To be specific, in Yamashita’s narrative, in Matacao, places where people work and live, such as skyscrapers, parking lots, shopping centers, and even residential buildings, are made entirely of Matacao plastic, no longer relying on nature for the building materials involved. Beyond that, all the common things in everyday life in Matacao, such as bridges, roads, cars, clothes, and furniture are also made of Matacao plastic. In such a technological world, human beings no longer depend on nature to obtain material sources for their survival, which refracts that technology not only challenges nature’s role as the provider of the material basis of human existence, but also splits the originally close relationship between humans and nature.

But more than that, the novel further uncovers that in such an Anthropocene era where human activities have greatly impacted the Earth’s ecosystem, in this technological world, GGG even invents an artificial nature with the Matacao plastic to replace the real one. Dissatisfied with the objective operation of the real nature, driven by the rational thinking of science and technology, GGG uses the magical plastic to build a theme park called Chicolândia in Matacao, which resembles an artificial

nature, but works according to human will. In fact, this artificial nature is a “utopian replication of the natural” (Gamber, 2018, p.52). In this artificial nature, “plants” and “animals” deviate from the normal functioning of the real natural world.

As for the “plants” in this artificial nature, “the drooping orchids” are worth noting (p.168), but the writer doesn’t describe much about them. However, from the features of the “tiger lilies” displayed before at an exhibition by GGG and also made of Matacao plastic, the growth characteristics of these “orchids” can also be detected. When depicting the “tiger lily”, the writer emphasizes that the artificial lily will always bloom, keep its luster and freshness, and remain “the very perfection of nature” (p.142). From this sentence we can see that the “tiger lily” that never dies is challenging the normal reproduction process of angiosperms in nature. Biologically speaking, the flower is the reproductive organ of angiosperms. Its biological function is to combine female egg cells and male sperm cells to produce seeds, a process that begins with pollination, continues with fertilization, and ends with the formation of seeds. Therefore, from the perspective of nurturing life, after the pollen fertilizes the ovary egg and nurtures the seed, the task of the flower is completed and the petals begin to wither, which is the normal reproduction process of angiosperms. However, the “tiger lily”, one of “the angiosperms” made of Matacao plastic, is different from the real one that normally participates in seed reproduction in nature and fades. The artificial “tiger lily” can always bloom, therefore deviates from the normal reproductive process of angiosperms. From the characteristics of this “tiger lily”, it can be found that the “orchids” created by GGG in the artificial ecosystem, one of the angiosperm species, also change the normal reproduction law of angiosperms, just because they can keep blooming.

The writer also presents that the plastic “wild animals” in this artificial ecology also defy the life habits of nature’s true wildlife. As is indicated in the novel, the living environment of these “wild animals” is contrary to the normal habitat of wild animals in nature. The environment in which these plastic animals live is created based on classic scenes from movies that people love, such as *Cleopatra*, *Spartacus*, *Raiders of the Lost Ark*, *Star Trek IV* and other popular films. In other words, these classic scenes have become the habitats of these plastic “wild animals”. The novel also discloses that GGG puts these plastic animals wherever it wants them to be. In such “a bizarre ecology” (p.168), lions that should be in the savannas and grasslands of Africa and Asia appear in the temperate maritime climate of Amsterdam Port, Netherlands; kangaroos that should be in the rainforests and desert plains of Australia and Papua New Guinea are active in the castles of the Mediterranean; and penguins, which usually inhabit the Antarctic, can walk around the

Taj Mahal in the hot weather. However, as is known to all, animals survive in the most suitable environment for them, and they have adapted to this environment during the long evolutionary process. On the contrary, the “wild animals” made of Matacao plastic are left to the likes and dislikes of humans in an environment that is not suitable for them, which is a departure from the environmental needs of wildlife in true nature.

It is due to the aforementioned technological practices with the magical plastic of Matacao that GGG creates a technological world, in which food, clothing, housing, transportation and even nature itself are the products of technological activities. These technological practices carry realistic implications, signifying the replacement of nature, and denoting that humans no longer need the real nature to supply the source of survival. It is because of the replacement of nature by this technological world that nature takes revenge on it. In the final part of the novel, the writer proceeds to relate that bacteria from the real nature devour this technological world. As the novel demonstrates, in Matacao, buildings, roads and bridges made of Matacao plastic collapse, “slowly crumbling to dust” (p.208), and people wearing clothes made of Matacao plastic are naked. Furthermore, as Gamber states, “the artificial ultimately fails” (2018, p.50). The “plants and animals” in the artificial ecosystem are also “invaded by devouring bacteria” (p.206). The Chicolândia park, “once was a plastic paradise, now horribly disfigured, shot full of tiny ominous holes” (pp.206-207). The novel further reveals that on the whole, the Matacao slowly turns into dust, and the land has been hollowed out because of the continuous exploitation of the magical plastic. Eventually the dust of Matacao is blown away by the wind and the whole Matacao disappears. From the above analysis, we get to know that the mystery of the disappearance of Matacao is an environmental catastrophe in the Anthropocene resulting from the retaliation of nature for the technological activities of GGG driven by scientific and technological rationality to replace it.

As a matter of fact, the mystery of the disappearance of Matacao in *Through the Arc of the Rain Forest* is very similar to that of the disappearance of “the Garden of Eden”. Legend has it that “the Garden of Eden” in the *Bible* was the Mesopotamian plain, where ancient Babylon, one of the four great civilizations of antiquity, was located, but eventually disappeared mysteriously. Engels points out in *Dialectics of Nature* that because the inhabitants of the Mesopotamian plain destroyed the forests in order to obtain arable land, the land deteriorated and “the Garden of Eden” disappeared, which was nature’s merciless revenge for man’s destruction of the environment. Although the disappearance of “the Garden of Eden” is not an environmental disaster of the Anthropocene caused by the scientific and technological rationality of man, it is also a revenge of nature for

the destruction of the environment by humans. Karen Tei Yamashita’s *Through the Arc of the Rain Forest* is set in the present-day Anthropocene epoch. With the detailed presentation of the mystery of the disappearance of Matacao, the writer highlights the huge impact of technological activities on the Earth under the control of man’s scientific and technological rationality. Yet, the writer does not stay on the level of exhibiting this mystery, but puts forward her views on how the technological activities should be carried out during the Anthropocene. She asserts that technological activities shouldn’t be controlled only by the scientific and technological rationality, but should recognize and respect the irreplaceability of nature, otherwise these activities will be retaliated by nature, triggering environmental disasters in the Anthropocene, bringing destruction to the Earth and the technological civilization.

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