

Discard as Extractive Zone in Chen Qiufan's *Waste Tide*



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In her book *Pollution Is Colonialism* (2020), Max Liboiron argues for a revised genealogy of environmental toxicity through an emphasis on its connection with colonial history. Departing from critical readings of environmental pollution that locate it within an unspecified and generalized configuration of the Anthropocene, Liboiron identifies in waste a patently postcolonial dynamic, highlighting the ways in which colonization functions through the appropriation of land for settlement, resource mobilization, or outsourcing of unwanted and superfluous matter and populations in order to enforce normative social spaces and their strictly regulated borders. The calibrated logistics that control the large-scale outsourcing of industrial discard—as well as consumer waste to third-world countries and indigenous reserves under the guise of remediation, recycling and management—is, as Liboiron demonstrates, an articulation of contemporary iterations of Western imperial domination and control. Waste and its associated networks of cross-border disposal, landfilling, and overseas recycling legislate global infrastructures within which racially, semantically, and materially marked bodies flourish or perish. Kathryn Yusoff (2018), similarly elaborates on the connections between territorial epistemes and colonial ideologies, showing how colonial geology (be it as the disciplinary production of knowledge about planetary strata or practices of mining, fracking, and archaeological excavations), share a common metaphysical framework. This framework is based on the characterization of land as passive, inert, and brute matter and the extension of these attributes to the body of the colonized other whose labor, as a purely nonhuman resource, can be freely appropriated because it is deemed devoid of human moral and ethical qualifications. Liboiron and Yusoff both point to the dynamic interrelation between ecocidal toxicity, extractive institutions and practices, and the production of certain kinds of resource bodies, both human and nonhuman, as nodes on a matrix of exploitation and control. As Zygmunt Bauman (2004) has persuasively demonstrated, a liquid paradigm of disposability emerges in contemporary neoliberal times as a common threshold for both designating and disenfranchising certain populations, particularly in the Global South, with regard to access to basic infrastructural, medical, and legal facilities, and of relegating them thusly to a (dehumanized) state of discard. In Bauman's analysis, this deprivation of the conditions that ensure normative personhood doesn't just accrue as an abstract ideological decision about who or what qualifies for the position of a life worth saving or sustaining. Rather, it is capitalism's specific

petropolitical imaginary and its attendant mechanism of the combustion and metabolization of matter by turning it into potential sites of extraction and biochemical transformation into fuel—including and preeminently into labor-as-fuel—that leads to conditions of deterioration and the expendability of bodies both human and nonhuman.

Thus, if waste and its associated technologies of disposal, management, and remediation serve as mechanisms of extractive capitalist assertion, is it also possible to conceptualize geographies of waste as enabling forms of situated knowledge and sustaining provisional place-based idioms of subjectivity, community, and coexistence that defy available disciplinary and epistemic framings? How might the epistemic and semantic resources of speculative imaginaries, particularly those emerging out of non-Western/indigenous/Global South cultural landscapes that absorb the bulk of capitalism's toxicities, offer new spatial and ontological articulations? Ones that don't posit waste as what needs to be put away or fed into cycles of profit and use, but rather reconfigure waste as generative of ecologies of precarity and precarious dwelling, fostering ethical challenges to the anthropogenic megalith of the autonomous, individual subject? If pollution, habitat loss, and ecological devastation are the primary modalities through which extraction's territorial ramifications materialize at a planetary and species-wide level, how might local responses and vernacular resistances deploy these extraction and extinction zones in creative, even subversive ways? Myra J. Hird (2021) calls such methods micro-ontologies of matter and meaning: viruses, symbionts, bacteria, algae, and plankton—can we think of them as forms of relational survival in entropic environments, providing alternative expressions of life as vibrational intensities and Spinozist affective valences? In a lecture on the subject of science fiction and waste, Chen describes the catalyst for *Waste Tide* as a deeply personal and disturbing experience of visiting the e-waste recycling district of China's Guangdong province. He offers a blueprint for the novel in a recollection of this experience:

There, I noticed that everything is chaotic and disorganised, and the waste disposal workers are unprotected and directly exposed to this polluted environment. They try to find recyclable metal components containing a certain amount of rare earth among the discarded cables or electronic parts. Such business has caused serious damage to the local environment of Guiyu. Soil, water and even the air are all contaminated and eroded by the electronic wastes, not to mention the impact on unprotected workers, who are the most direct victims of environmental pollution. (2021)¹

Based on the nightmarish reality of Guiyu, Chen's fictionalization is informed by a need to adhere to and anchor literary narrative in the contingency and proximity of specific, mappable, analytically and affectively approachable socioeconomic contexts of precarity, violence, and exploitation. Such a narrative also destabilizes established liberal humanist frameworks for addressing the contentious questions of agency, personhood, rights, and belonging that are at the core of such precarious formations and that involve multiple entangled actants, sites, and histories. Only by securing this discomfiting proximity between the narrative affordances of fabulation and the gritty reality of contemporary neoliberal sacrifice zones and their necropolitics of toxicity, can

we conceptualize new decentralized, multiscalar counterhegemonic modes of apprehending and narrativizing social realities. This particular mode of engaging science fiction as critique is what Chen calls “science fiction realism” (2021).

Extraction in conjunction with and as performed by discard is present in multiple iterations in Chen Qiufan’s speculative dystopia, *Waste Tide* (2013, English translation, 2019). These comprise the destruction of habitats, ecosystems, and species through pollution, illegal dumping, and the contamination of native lands by imported industrial waste; coerced proximity to and symbolic interchangeability with lethally toxic discarded matter enforced upon laboring bodies; exploitation of vulnerable bodies and species for hazardous scientific experimentation; neoliberal algorithmic nexuses of data mining, surveillance, and neural, affective, and perceptual manipulation/control of technophilic subjects and societies; overexposure of precarious populations to regimes of digital and chemical addictions; and transhumanist cultures of prosthetic enhancement manufactured and marketed by corporate conglomerates. In the text, military-industrial waste is both key to decoding the complex cartography of globalized neoliberal apparatuses of ownership, profit, and control, and an underlying conceptual and material link connecting the multiple nodes of mobility, dispersal, access, and transformation that constitute deregulated, free-market economics.

Waste in the novel has a bifurcated structure, existing, on one hand, as the massive amounts of often unmonitored and illegally transported electronic discard exported out of affluent Western nations and dumped into poverty stricken areas that house recycling centers; and as the contamination of and irreversible damage to bodies, lands, and local flora and fauna by the seepage of toxic substances: heavy metals, plastic, and chemicals generated during processes of disassembly. The “waste people,” (*lajiren*, literally “garbage people”) the novel’s migrant workers who inhabit these necropolitical discardscapes, living and working under abject conditions, become synecdochic bearers of ecological exploitation and dispossession, their contaminated bodies mirrored in various mutant nonhuman and cyborg forms of life from rapidly breeding jellyfish and deformed radioactive marine life to Pavlovian remote controlled chipped dogs that respond to wireless signals.

In the stratified and divided world of Silicon Isle, the working class is not only equated with waste, their bodies seen as sites of disgust and ghettoized into unsanitary slums; these bodies also simultaneously become sites of alien and abject embodiment. As Lyu Gungzhao has demonstrated with reference to the novel’s exposition of the plight of migrant communities under contemporary capitalist regimes:

The “environmental concerns” that Chen Qiufan spoke of cannot be detached from the general context where a “waste space” is constructed for economic purposes, a place in which numerous precarious jobs are created, mainly for migrant workers without appropriate occupational training and protection. They are the victims not only of environmental crises and pollution but also of their jobs, their dislocation,

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and the capitalist system, which combine to bring forward all the problems—of which “environmental concerns” is just one of many. (311-12)

These strange corporealities often involve, as we see early in the novel, the mass of discarded prosthetics, augmented body parts, faux sexual organs, and virtual reality devices that the recyclers have to decompose in order to extract precious rare earth metals used in batteries and circuits. Whether it is the dislocated hand of an industrial robot that clamps onto and crushes a young worker, the infected helmet that—when compounded with the protagonist's toxic neurochemistry—creates a posthuman, postdigital viral consciousness, or an abandoned robot that is animated by synaptic command and human reflexes, *Waste Tide* traces the trajectory of consumerist pleasure and fantasies of biological transcendence and incessant technologically mediated enhancement of human life in the Capitalocene as an extractive process: an extension of what Jason Moore identifies as capitalism's pyromaniac drive to subject everything in its path, including planetary matter itself, to metabolic combustion in order to generate usable energy for interminable growth. The figure of prosthetic implants demonstrates how the extractive logic distills and disperses itself inwards from the plantation's territorial demarcation of valuable and appropriable resource—catering to industrial modernity's scheme of national progress, to the neoliberal production of neural subjects whose bodies, pleasures, habits, and interiorities become sites for the extraction and mobilization of consumer capitalist knowledge, modification, and control. The prosthetic waste that travels to sweatshops of disassembly where it instrumentalizes an extractive regime based on the exploitation of debt-laden, economically unstable resource and labor-rich lands of the Global South for the steady maintenance and development of the consumer capitalist military industrial complex, is thus already embedded in a larger extractive topography that Martin Arboleda (2020) calls a “planetary mine,” a transnational infrastructure that not only commoditizes as resource, lands, labor, ecologies, and geological strata, but also mines cognitive, epistemic, affective and perceptual fields on both ends of the circular economy.

In the novel, waste, more specifically electronic and biotechnological waste, is both a constellated figure that serves as an instrument of neoliberal geopolitics, as well as a site for new multispecies encounters and entanglements that destabilize ontological boundaries between human/animal, organic/inorganic, and flesh/machine. Further, the novel examines waste as an example of heterogeneous and hybrid formations that, through recurrent disruptive assaults on hegemonic attempts to construct stable borders and sanitized homogeneous interiors, resist being eliminated or forgotten. *Waste Tide's* setting is Silicon Isle, an ironically named fictional prototype of South China's Guiyu region in Guangdong Province, the world's largest e-waste disposal and recycling center. Here, waste isn't a mere marginal phenomenon occupying designated out-of-sight spaces of containment; rather, waste constitutes the very material and (as the text demonstrates) corporeal and neural infrastructures within which lives, forms of livability, and livelihoods are determined. Likewise, the toxic colonization of waste is not limited to geography alone, but extends to the bodily and psychic scapes of the inhabitants of Silicon Isle, derogatorily called waste people. As Chen Kaizong, one of the novel's central characters, poignantly describes,

the bodies of the waste workers acquire a porous interchangeability with pollution. At a corporeal level, this exchange literalizes the very erosion of their identities as qualified humans that the biopolitics of extractive capitalism seeks to accomplish as a justification of the appropriation of their dehumanized labor as a source of abstract, nonhuman energy:

He saw the pallid, sickly complexions of the young women and their rough, spotted hands, the result of corrosive, harsh chemicals.... He thought of Mimi; thought of her guileless smile, and underneath, the particles of heavy metal stuck to the walls of her blood vessels; thought of her deformed olfactory cells and damaged immune system. She was like a self-regulating, maintenance-free machine, and like the other hundreds of millions in the high-quality labor force of this land, she would work day after day tirelessly until her death. (124)

In *A Billion Black Anthropocenes*, Kathryn Yusoff observes that the conversion of labor into a resource under colonialism's extractive logic is preceded by a metaphysical extraction of the qualities associated with human personhood, thus reducing the colonial subject to a form of pure raw material equatable with mineral ores and plantation produce, and thus legitimately exposable to the same kinds of violence and metabolization. This logic is extended in Chen's text to the workings of toxicity on bodies exposed to injury and harm. The metaphysical extraction of personhood is accompanied in *Silicon Isle's* contested terrain by a permeation, and in the apotheosis of novel's dystopian telos, transplantation of human anatomy by waste matter to create new posthuman corporeal assemblages. The posthuman in this instance, however, is not a transcendent or idealized paradigm informed by fantasies of anthropocentric perfectibility. Rather, the posthuman abject produced by waste's contagious vectors of becoming is an open-ended ontology harboring unpredictable boundary crossings and reactions between disparate species, materialities, and technologies. If proximity to lethal waste constitutes a capitalist strategy of depersonalization, the extractive implications of this process become generative, the text shows, of diminished or minor scales of existence beneath the threshold of the anthropocentric subject.

We see this process embodied in two of the novel's ephelic subjects: the waste girl Mimi and the son of the leader of one the three dynastic clans who share ownership of Silicon Isle. While toying with a strange prosthetic contraption, Mimi is infected with a virus that tampers with her cognitive and sensory capacities. This virus, as we are later informed, is a zoonotic organism originating in the cranial matter of a brutally dismembered primate who is part of a laboratory experiment for inventing life-augmenting neural implants for humans. The same helmet infects and renders comatose the youngest member of the Luo clan. While the boy's uncontaminated body reacts to the virus by shutting down, in Mimi's case, the presence of metal particles in her blood accumulated through the manual handling and inhalation of synthetic substances produces a form of neurological hyperactivity, leading to the production of a secondary and autonomic techno-virological consciousness. The key to Mimi's brain is a fictional Cold War military technology based on remote chemical warfare, the eponymous Project Waste Tide that uses a hallucinogenic drug to immobilize the enemy by producing delusions and psychological terrors.

We learn that Project Waste Tide's postwar toxic terrorism mutates into a commercial enterprise that uses the same military formula to create new kinds of neurological capacities in mammalian brains. Thus, within the novel's speculative imaginary faux organs, are sites of complex ontological enmeshment between human corporeality: body fluids and secretions, skin, tissue, and hair residue, and nonhuman forms of proliferation—virological and other microorganic life that develop and travel through such discard. As carriers of fleshly remnants and facilitators of new kinds of relational accommodations between inorganic and organic forms, discarded prostheses become commentators on the necropolitical regime of neoliberal capitalism where bodies, body parts, identities, digital data, algorithmic code, viral forms, and inorganic matter are mobilized as interchangeable units in a common transnational flow of information and profit. The zoonotic virus that originates in the brain of a lab animal used for a grizzly experiment remains inactive in Mimi's brain until her torture with a VR device stimulates it and renders her into a cyborg capable of projecting her consciousness to external nonhuman bodies.

Waste Tide takes the biopolitical interchangeability between persons and discards through which capitalist societies organize the allocation of resource and power and explores the implications of this interpenetration for a radical reconceptualization of personal autonomy and bounded individuality. The infected brain emerges as a posthuman assemblage of human, animal, viral, and technical agencies whereby the crisis of the normative person becomes a site of ecological and social justice. The discard in this scenario is a specific kind of object indexing economic systems of exploitation and profit but also acting like an object bearing its own chemical, physical, structural, and aesthetic intensities. Waste's tangled materiality, or what Josh Lepawsky has eloquently described as its archipelagic structure: "These discardscapes are a kind of archipelago—patchy, uneven, and not necessarily coherent" (15), also making it generative of specific articulations of subjectivity. Within waste's material economy and spatial arrangements exist new fragmented processual and unstable norms for the configuration of new idioms of subjecthood that are not constructed along linear, unified models of development and heredity but are premised instead on processes of dismantling, incoherent connections and asymmetrical relations between disparate components—immanent assemblages that are engendered by discard's "thing-power," "the curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle" (Bennett 6).

In *Waste Tide*, discard offers a semantic and epistemic paradigm for the subject which, unmoored from metaphysical claims to transcendence and humanist anthropocentric pretensions to god-like omniscience and rationalist mastery, is reconfigured in low, abject, minor, and diminutive registers of being and action. In the face of the minoritarian and relational ontology of trash that harbors both the exhaustion and entropy of depleted totalities, the humanist subject is reduced and rendered down as a remnant of Anthropocene fossil capitalism's pyromania, becoming (in response to the planetary scale of its destruction) an exercise in diminishment. This paradoxical reconfiguration of the historical subject under the cognitively disorienting challenges of the post-Holocene era is termed by Morton and Boyer (2021) a "hyposubject," a conceptual

innovation that both destabilizes the universalist assumptions undergirding the (white, male, protestant, heterosexual) subject as the prototype of anthropos, while also establishing a paradigm of diminished subjectivity as an ethically open and epistemologically receptive formation that can, in turn, offer what Joanna Zylińska (2020) calls minimal ethics as a form of attunement, care, interdependence, and exchange with environments under peril, ruination, and duress.

Notes

1. From the transcript of Chen's public lecture organized by the London Chinese Science Fiction Group on 12th August 2019, and accessed at <https://vector-bsfa.com/2021/03/10/chen-qiufan-why-did-i-write-a-science-fiction-novel-about-e-waste/> (date of last access: 14.01.23) See also *Vector 293: Chinese Science Fiction*, Spring 2021.

Works Cited

- Angus, Ian. *Facing the Anthropocene: Fossil Capitalism and the Crisis of the Earth System*. NYU Press, 2016.
- Arboleda, Martín. *Planetary Mine: Territories of Extraction under Late Capitalism*. Verso, 2020.
- Bauman, Zygmunt. *Wasted Lives: Modernity and Its Outcasts*. Polity, 2017.
- Bennett, Jane. *Vibrant Matter*. Duke University Press, 2010.
- Chen, Qiufan. *Waste Tide*. 2013. Translated by Ken Liu, Tor Books, 2019.
- . "Chen Qiufan: Why did I Write a Science Fiction Novel about E-Waste?" Interview with Guangzhao Lyu, Angela Chan, and Mia Chen Ma. *Vector*, vol. 293, 16 Mar. 2021. vector-bsfa.com/2021/03/10/chen-qiufan-why-did-i-write-a-science-fiction-novel-about-e-waste/. Accessed on 1 December 2022.
- Codeluppi, Martina, "Smog and the Psyche: Chen Qiufan's Reading of the Urban Anthropocene." *Writing Chinese: A Journal of Contemporary Sinophone Literature*, vol. 1, no. 1, pp. 60–81. <http://doi.org/10.22599/wcj.35>
- Foster, John Bellamy, and Brett Clark. *The Robbery of Nature: Capitalism and the Ecological Rift*. Monthly Review Press, 2020.
- Foster, John Bellamy. *Capitalism in the Anthropocene: Ecological Ruin or Ecological Revolution*. Monthly Review Press, 2022.

- Healey, Cara. "Estranging Realism in Chinese Science Fiction: Hybridity and Environmentalism in Chen Qiufan's "The Waste Tide." *Modern Chinese Literature and Culture*, vol. 29, no. 2, 2017, pp. 1–33.
- Hird, Myra J. *Canada's Waste Flows*. McGill-Queen's University Press, 2021.
- Hua, Yuanyuan "The Dual Alienation in Waste Tide." *Comparative Literature Studies* 1, vol. 57, no. 4, December 2020, pp. 670–685. <https://doi.org/10.5325/complitstudies.57.4.0670>
- Jiang, Jing. *Found in Translation: "New People" in Twentieth-Century Chinese Science Fiction*. Columbia University Press, 2021.
- Jiang, Qian. "Translation and the Development of Science Fiction in Twentieth-Century China" *Science Fiction Studies* 119, vol. 40, pt. 1, , March 2013, pp. 116-132. DOI:10.5621/sciefictstud.40.1.0116.
- Jiang, Yuqin. "Ecotech, Alienation, and Science Realism in the Chinese Cyborg Novel Waste Tide." *Comparative Literature Studies*, vol. 57, no. 4 pp. 1 December 2020, pp. 655–669. doi: <https://doi.org/10.5325/complitstudies.57.4.0655>.
- Lepawsky, Josh. *Reassembling Rubbish: Worlding Electronic Waste*. MIT Press, 2018.
- Li, Hua. "The Environment, Humankind, and Slow Violence in Chinese Science Fiction." *Communication and the Public*, vol 3, no. 4, 2018, pp. 270–282. <https://doi.org/10.1177/2057047318812971>.
- . *Chinese Science Fiction During the Post-Mao Cultural Thaw*. University of Toronto Press, 2021.
- Lyu, Guangzhao. "Waste People and the Vampiric Society." *Extrapolation*, vol. 62, iss. 3, 2021, pp. 309–329. [doi:10.3828/extr.2021.17](https://doi.org/10.3828/extr.2021.17).
- Ma, Mia Chen. "Rethinking the Urban Form: Overpopulation, Resource Depletion, and Chinese Cities in Science Fiction." *Ecocriticism and Chinese Literature: Imagined Landscapes and Real Lived Spaces*, edited by Riccardo Moratto, Nicoletta Pesaro, and Di-kai Chao. Routledge, 2022.
- Malm, Andreas. *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming*. Verso, 2016.
- . *The Progress of This Storm Nature and Society in a Warming World*. Verso, 2020.
- Morton, Timothy and Dominic Boyer. *Hyposubjects: On Becoming Human*. Open Humanities Press, 2021.
- Moore, Jason W. *Anthropocene or Capitalocene?: Nature, History, and the Crisis of Capitalism*. PM Press, 2016.

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- . *Capitalism in the Web of Life*. Verso, 2015.
- . “Wasting Away: How Capitalism Lays Waste to the Web of Life, and Why It Can’t Stop.” Working Paper, World-Ecology Research Group, Binghamton University, October 2022.
- . “Marx and the Historical Ecology of Capital Accumulation on a World Scale: Comment on Hornborg.” *Journal of World-Systems Research*, vol. 6, no. 1, pp. 134-139, 2000.
- Ooi, Yen. “Translating the Chinese Monster in *Waste Tide*.” *Science Fiction in Translation: Perspectives on the Global Theory and Practice of Translation*, edited by Ian Campbell. Palgrave Macmillan, 2021, pp. 237-261.
- Patel, Raj, and Jason W. Moore. *A History of the World in Seven Cheap Things: A Guide to Capitalism, Nature, and the Future of the Planet*. Verso Books, 2020.
- Song, Mingwei and Theodore Hutters. *The Reincarnated Giant: An Anthology of Twenty-First-Century Chinese Science Fiction*. Columbia University Press, 2018.
- Song, Mingwei. “After 1989: The New Wave of Chinese Science Fiction.” *China Perspectives*, vol. 1, 2015, pp. 7–13. doi:10.4000/chinaperspectives.6618.
- Wark, McKenzie. *Molecular Red: Theory for the Anthropocene*. Verso, 2016.
- Xiong, Christine. “Rethinking the Cyborg in Chen Quifan's *Waste Tide*.” *Foundation 139*, vol. 50, no. 2, 2021, pp. 75-89.
- Yusoff, Kathryn. *A Billion Black Anthropocenes or None*. University of Minnesota Press, 2018.
- Zylinska, Joanna. *Minimal Ethics for the Anthropocene*. Saint Philip Street Press, 2020.