Plastic Asia: Material Ambiguities and Cultural Imaginaries

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Abstract

This introduction to the special issue of Plastic Asia emphasises the ambiguous and unsettling materiality of plastics. It describes how in Asian contexts, the relationships between plastics, purity and pollution are complex: simultaneously promising purity, quality and hygiene, yet frequently failing to fulfil these promises. It looks at how plastics, for some, have come to signify broader frustrations with modernity and the complexities of plastics when they are incorporated into ritual life.

Keywords: *waste; pollution; purity; plastic modernity; plastic usage*

Introduction

In 2017, Xi Jinping announced Operation National Sword, a new policy that was to ban 24 different types of solid waste imports into China, including the import of low-grade plastic waste (Wang et al. 2020). When the policy came into effect in early 2018, plastic waste inundated parts of East, South and Southeast Asia with a rapidity and volume that shocked the world. In response to proliferating stories of pollution generated from recycling and disturbing pictures of plastics dumped next to low-income communities and into waterways, global news organisations began reporting on the unevenness of plastic waste regimes. Many high-income countries were caught sending large volumes of contaminated and unsorted plastics to low and middle-income nations for 'recycling'.[1] In effect, they were shifting the toxic burdens of disposal and repurposing to less wealthy nations. Questions began to be raised about the 'plasticity' of plastics. Were they really able to be transformed into something new? Was this trade economically and materially viable? And was recycling on balance harming rather than

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helping the ecologies? The crisis demonstrated the vast scale of the creation and usage of plastics globally and emphasised the asymmetries in the palpably unequal global waste regimes that underpin many of the world's major economies.

Before plastics become waste in the short, medium or long term, their abundance and ubiquity influence material, social, religious and economic realities. In this special issue *Plastic Asia*, we turn our attention to the *use* of plastics in different parts of Asia. We investigate ethnographic examples where plastics are being used, from the sparsely populated northern regions of Mongolia to the bustling Indian megacity of Mumbai. Cheap to produce and adaptable in their applications, plastics, made from a variety of sources, have been incorporated into people's lives in unique ways across the world. They are used for containing and protecting sterility (Reichhardt and Abrahms-Kavunenko 2022), ensuring hygiene and obscuring human labour (Pathak 2022) and serving to clothe and or instantiate the sacred (Bhutia 2022; Brox 2022). Asian nations are increasingly flooded with cheap plastic products. These items are frequently purposed to be immediately disposed of, yet they have material properties that persist long after their use. How are plastics, both those purposed for rapid obsolescence and those designed for more durable tasks, transforming societies economically, materially and ecologically?

This special issue pays particular attention to the specific material affordances and ambiguities of plastics as they generate new material possibilities. We will look at their effects on religious, social, economic and ecological realities *before* they are discarded. Noting the relative lack of literature on this subject, McKay et al. (2020: 310) have called for more 'ethnographies of plastic-before-waste'. How do people understand and imagine plastics? Why do they come to desire and depend upon plastics? And how do they use, reuse and repurpose plastics? Ethnographic research focusing on the use of plastics constitutes an emerging field that includes broad anthropological approaches to plastic (Abrahms-Kavunenko 2021; Pathak and Nichter 2019) as well as highlighting understandings of colonialism, authenticity and modernity (Chao 2018; McDougall 2021; McKay, Perez, and Xiaoyu 2021), affect and emotions (Hawkins 2001; McKay et al. 2020), hospitality (Steger 2021), gender and masculinity (McKay and Perez 2018; Meiu 2020) and the use of plastics in ritual life (Abrahms-Kavunenko 2022; Bhutia 2022; Bredenbröker 2020; Brox 2022; Wirtz 2009).

Each article in this special issue draws attention to the material and psychological dissonance that plastics can create. Often lauded as the

modern material par excellence, failures of plastics to live up to the progressivist promise of modernity have been read by different groups as a proxy for this disenchantment. In all of the cases in this collection, plastics in some way complicate commonplace understandings of pollution and purity, whether framed within scientific discourses, religious understandings or both. Björn Reichhardt and Saskia Abrahms-Kavunenko investigate how the encouraged use of plastics to package and distribute dairy are occasioning new ways of interacting with microbial life in Northern Mongolia, with a significant and unknown effect on longstanding human/microbial symbioses. Gauri Pathak examines how during the COVID-19 pandemic in Mumbai, some plastic-wary peoples have adopted moderated positions, balancing fears about toxicity against immediate concerns regarding infection. Trine Brox traces how plastics can become the skin of religion, forming the foundation for mimetic copies of important Buddhist teachers, providing a barrier to protect the sacred from disintegration and creating troublesome materialities of the sacred after specified use. Kalzang Dorje Bhutia describes how the changing materialities of ritual Cham masks in Sikkim inflect the action of purification rituals with concerns of material pollution. This special issue focuses on the imagined and material qualities of plastics (both beneficial and damaging) as they imitate other materials, form new kinds of material constitutions, become incorporated into cultural imaginaries and quotidian practices and as they transform ecological systems and human bodies.

Using Plastics in Asia

Asia is a particularly important setting for the study of plastics. It is both the biggest producer of plastics and the largest recipient of plastic waste. It has large wealthy and relatively wealthy populations, whose rising living standards accompany the increasing use of plastics for packaging and other consumables. It also has large populations living in poverty, some of whom rely on plastics in order to make their incomes, to use as a source of cheap clothing, to carry clean water in or to meet other material necessities. As elsewhere in the world, Asian nations are using plastics in increasing volumes but do so in highly variable ways. Parts of Asia, such as India, are relatively low plastic users with per capita usage estimated to be one-tenth of those living in the United States (Liang et al. 2021). Other Asian nations, such as Japan, use large amounts of plastics. By some estimates, in 2017, Japan

generated the second-highest per capita amount of plastic packaging waste, coming in second after the United States (Steger 2021: 2). This highly variegated, though generally increasing, use pattern amongst some of the world's largest populations, alongside asymmetrical exposures to the toxicities involved in the production, recycling and discard of plastics, make the region a particularly relevant one to investigate the 'social life' (Appadurai 1988) of plastics.

While most contemporary plastics are derived from synthetic sources, particularly petroleum-based derivatives, plastics can be generated from non-synthetic sources such as dairy, from which hard casein plastics can be derived, or a combination of non-synthetic and synthetic sources, as for instance in the production of fibreglass (Meikle 1995). The first completely synthetic plastic, Bakelite, was invented in 1907 (Meikle 1995: 5). Used to make objects such as radios and for other uses such as insulating electrical wires, Bakelite was originally touted for its sturdiness and for its ability to hold its moulded shape for a relatively long time (Meikle 1995: 5). As designers and chemists generated novel kinds of plastics for applications in a wide variety of situations, plastics, now able to take on nearly any colour, form or shape, were used both to imitate other materials (which they did with mixed success, see Liboiron 2021: 3) and to generate new kinds of material possibilities (Meikle 1995). The middle of the twentieth century saw the development of new designs, from children's toys to nylon stockings, to non-stick cookware and plastic flowers that bloomed seemingly forever. In the 1950s, the apparently unending capacity for 'infinite transformation' (notably transfixing Barthes 1972 [1957]) in plastics became a promising source of a world-changing material revolution. Yet in spite of the myriad applications of plastics, their material ambivalences, as cultural historian Jeffrey Meikle (1995) has argued, seem, throughout their history, to have simultaneously enthralled and repelled people. The plastics industry, as Meikle notes, has had to insistently combat negative perceptions of plastics. In the United States, as he explores, anxieties, from concerns about toddlers suffocating on plastics bags to fears of astronauts choking on the fumes of plastic aeronautical equipment (Meikle 1997), to fears surrounding the plastic coating on non-stick pans, have arisen in response to dramatic increases in their application (Meikle 1995).

In the middle of the century in the United States, the plastics industry began to adopt a new radical design opportunity in the generation of 'single-use' plastics (Meikle 1995). The influence of this new idea,

frequently linked to the proclamation by Lloyd Stouffer in 1956 at a Society for the Plastics Industry conference in New York that the future of plastics is 'in the trash can' (quoted in Hawkins 2018: 98), generated the initiative to design new kinds of plastics that were specifically intended for fleeting usage. From the late 1950s onwards, plastics were increasingly generated with planned obsolescence in mind. By 2015, the UN Environment Report estimated that around 47 per cent of plastics were made for single-use.[2] As sociologist Gay Hawkins has written of PET (the type of plastic that is used to make single-use water bottles), waste does not follow accidentally from their design but, rather, the bottles are '*made to be wasted*' (2013: 50). This forms one of the key ambivalences of plastics: they are materially durable and unable to biodegrade, yet they are frequently used as if they were essentially ephemeral.

Today, just over half of the world's plastics are produced in Asia. Since the 1950s when the industrial-scale production of plastics began, an estimated nine billion tonnes have been manufactured.[3] For each year that passes, around 300 million tonnes of plastic waste is generated,[4] with predictions indicating that the production of virgin plastics will double in the next twenty years (Nielsen et al. 2020). In 2020, it was estimated that around 51 per cent of all plastics were made in Asia with approximately 31 per cent of global production based in China.[5] The volume of plastics generated in Asia has grown significantly over the last decade. From 2013 to 2015 alone, plastic production in Asia increased from 114 to 131 million tonnes, with China, India and Korea as the largest producers (Liang et al. 2021).

Plastics do not behave like other materials. Most are unable to biodegrade and can only photodegrade, fractiously disintegrating into ever smaller particles. Due to their unusual materiality and because of the sheer volume with which they are used, plastics have the alarming distinction of being found more or less everywhere on earth, from the heights of Mount Everest to the deepest ocean trenches. As well as permeating the unfathomable expansiveness of the oceans in arresting volumes, plastic fragments can also be found in the planet's air, soils and human and non-human bodies. Though ubiquitous, the degree to which plastics pollute is uneven. Low-income nations and communities shoulder a larger burden of plastic toxicities in their bodies, communities and proximate ecological systems. Plastics can pollute during all phases in their lifecycles. They pollute at sites of extraction, during the transportation of their raw materials, as they are moulded,

during use, when they are being recycled (if this happens) and when they become waste. Some of the additives and plasticisers used to give plastic polymers their specific forms are known hormonal disruptors and have been associated with miscarriages, obesity, diabetes, obesity, cancer, neurological problems and infertility (see Bergman et al. 2013; Grün and Blumberg 2009; Halden 2010).

As well as becoming problematic sources of contamination during their extraction, production and their nebulous afterlives as waste, plastics off-gas and leach during their usage. During their lifespan, around 98 per cent of plastics release monomers into the surrounding air, liquids or solids that they are in contact with and can continue to off-gas after they have been discarded.[6] As global warming is predicted to influence poorer nations and low-income communities more forcefully (since they are less able to generate buffers to mitigate its effects and due to climatic and geographic contingencies), plastics, which in 2019 emitted around 860 million metric tonnes of carbon emissions (CIEL 2019), also disproportionately influence poorer communities and nations negatively through global warming.

In 2016, Asian countries were importing around 74 per cent of the world's plastic waste, with roughly half of these imports entering from regions outside of Asia (Liang et al. 2021). Whilst much of Asia's imported plastics come from wealthy countries in Europe, North America and Australasia, many Asian countries, particularly Japan, Thailand, Korea, the Philippines and Singapore, export their waste to other Asian nations (Liang et al. 2021). Before China's plastic import ban came into effect in 2018, China was the largest importer of plastic waste in the world. Following China's import ban, some of the plastic waste streams were diverted to Indonesia, Malaysia, Thailand and Vietnam, quickly overwhelming the capacity of these countries to deal safely and effectively with the waste of other nations (Wang et al. 2020).

Plastics as waste, when they cause the congestion of streams and assemble into garbage patches, or when plastic debris spills out of the bellies of dead birds on a remote atoll or are munched upon by sacred cows in India, can provoke strong visceral responses. In response to this and to broader concerns about plastics, some nations in Asia have created national campaigns that make combatting plastic litter a primary concern. In India, as Pathak has discussed (2020a), some policymakers have categorised pollution problems in primarily aesthetic terms. In this view, the problem with plastics stems from the incorrect management of waste, and the blame is placed upon India's 'unruly

citizens' (Pathak 2020a: 7). Operating within these discourses, in 2014, Narendra Modi launched *Swachh Bharat Abhiyan*, the Clean India Mission, a government policy to improve waste management infrastructure and eliminate open defecation (Pathak and Nichter 2021). Connected to this campaign in 2018, Modi promised to make India free of single-use plastics by 2022 (Pathak 2022). As Tridibesh Dey and Mike Michael (2021: 11) write critically of this campaign, it focuses on placing plastic in its 'legitimate place', which through administrative and technological fixes create 'undesirable living and breathing environments, especially for the marginalised communities' as well as threatening 'to displace traditional waste-labour networks and recycling enterprises, rendering the urban working poor even more vulnerable' (ibid.: 15).

The perceptions and realities of the afterlives of plastics have implications for how they are used and imagined. In order to combat problems generated by plastic waste, plastic bag bans have been introduced in various parts of the world. Japan's recent plastic bag ban has arisen in part as a response to growing international pressure around plastic waste regimes (Stenger 2021). This ban has been interpreted by some Japanese convenience store customers as a sign of stinginess, as not providing plastic bags in convenience stores complicates hospitality norms (ibid.).

Plastic Modernity

Whether ambiguously, negatively, positively or neutrally perceived, plastics do important 'social work' (McKay et al. 2020: 312). From the cases discussed in this collection of articles, we can see how plastics are *perceived* as having particular qualities, such as keeping milk fresh or the sacred pure, and that they *have* material properties, such as being able to contain and preserve. Brox distinguishes between the affordances and enactments of plastics, discussing how plastics 'enact their material properties even beyond our sensual experiences of them' (2022: 91). The 'gloved hand' (Pathak 2022: page reference) worn during the pandemic is ascribed purity, sterility and hygiene, even though COVID-19 has been found to survive longer on plastics than other materials (Pathak 2022; McKay et al. 2020). Tetra packs, plastic bottles or other kinds of packaging are perceived as maintaining sterility and avoiding microbial contamination (Reichhardt and Abrahms-Kavunenko 2022), even though aspects of plastic packaging can leach into food. Emblazoned with brands, food packaging can render irrelevant the histories

of production (Hawkins 2018; Pathak 2020b), yet these histories still impact the qualities of the food that they contain. Acting in the role of skin, plastics provide protection for the sacred as it appears to have the material properties of impermeability, imperviousness and longevity (Brox 2022), but these material properties eventually degrade.

In parts of Asia, the introduction of plastics has been linked to modernity, rising living standards and material abundance (Pathak 2020b; Schlehe and Yulianto 2020). For some people living in the Indonesian city of Yogyakarta, where the use of plastics has grown exponentially within a couple of generations, plastics have come to have positive associations with being an affluent modern citizen (Schlehe and Yulianto 2020). For some Japanese convenience store shoppers, plastic bags are connected with notions of hospitality and generosity (Stenger 2021). In Mumbai, the introduction of plastics was initially associated with economic abundance and material improvements (Pathak 2020b).

Yet plastics have also formed what McKay et al. call (2020: 307) 'crap modernity', wherein the material deficiencies of plastics are linked to failed 'desires for a durable modernity'. For anthropologist Sophie Chao's (2019) interlocutors in West Papua, the arrival of junk foods wrapped in plastic have come to symbolise colonial domination by the Indonesian state, domestication and a loss of the reproduction of social and ecological ties. In this special issue, there are many examples of how plastics cannot keep their promises: when they change the flavour of fermenting mare's milk (Reichhardt and Abrahms-Kavunenko 2022), when masked dancers must endure the weight of carrying heavy fibreglass masks (Bhutia 2022), when plastic containers crack and spill their sacred content (Brox 2022), and when they become little more than 'hygiene theatre' in Mumbai (Pathak 2022).

Plastics are, of course, often made to fail. As they frequently need replacement, they generate and further their demand. For many people, cheap plastics have come to be synonymous with particular parts of Asia, not only because plastics are produced in Asia and plastic waste is often sent to Asia, but because low-quality plastics have been framed as a problem originating in Asia (McKay et al. 2020). In spite of vast quantities of global plastic waste being exported to Asia, the presence of plastics in the oceans is frequently blamed on Asian nations, in particular, China, Indonesia and the Phillipines. As McKay et al. (2020: 315) discuss the label 'Made in China': 'Plastics come with an attributed quality tied to the place of production and, with that, slot into a contentious hierarchy of reliable places of manufacture'. The association of cheap plastic

things with China means that 'China has… become the metaphorical locus of complaints about "crap modernity"' (McKay et al. 2020: 318).

These global discourses have not gone unnoticed in China. Before the release, subsequent viral spread and then censorship of his documentary *Plastic China* (*Suliao wangguo*, 2017), director Wang Jiuliang explained:

> China is the world's biggest manufacturer of cheap goods; it's the 'factory of the world'. When those goods are shipped overseas, what goes with them? Resources and energy. What gets left in China? Pollution. Chinese products move to your country, and the waste comes back. Manufacturing and waste disposal both happen in China. You consume, and our role is to serve. When people overseas enjoy the convenience of goods 'made in China', do they consider the huge price paid elsewhere?[7]

Within Chinese nationalist discourses, plastic waste has been portrayed as 'foreign waste' (*yang laji*) (Schulz 2019) which is dumped on China. The word 'plastic', when used to imply something superficial that is of low quality, has been utilised within China as a way of critiquing the failings of economic growth. As Wang Jiuliang continues, plastic has come to refer to the perceived shallowness of China's growth and success:

> At a deeper level, [plastic] refers to the weakness beneath our surface prosperity; the way plastic surgery only improves appearance, not the reality. Years of rapid growth have made China appear prosperous, but pollution is having a huge impact on health. If your life is at risk, what use is earning money? Smog, water pollution, soil pollution… while China's growth appears incredible, it is actually cheap and fragile.[8]

These links between plastic and façade, long associated with the English and French uses of the term (Barthes 1972 [1957]; Gupta-Nigam 2020; Meikle 1995) are also common in parts of Asia. The word plastic has become a derogatory term in many places. It is, for example, a way for Filipinos to critique social relations or people as being hypocritical or fake (McKay and Perez 2018). As McKay and Perez write:

> In Filipino, *plastik* is not just a noun – a substance – but also an adjective that denotes insincerity, inauthenticity and unreliability. As well as being the cheapest, most accessible material – the material of the poor that clogs their living areas, underpins their squatter shacks and figures strongly in their purported preferences for bright, kitsch and easily-disposable home and personal decorations – *plastik* describes hypocrisy (McKay and Perez 2018: 177).

Likewise, in Sophie Chao's (2018) discussion of the 'plastic' cassowary among the Marind of West Papua, she describes how the use of the

term *plastik* has come to describe things, people and other beings associated with lost sovereignty and deceit. Shiny plastics attract the young to urban areas, thwarting the village's reproduction of social and ecological ties. Modern foods which come in plastic packaging never satisfy, just as nicely dressed government officials and businessmen 'pledge to support community development but fail to deliver on their promises' (Chao 2018: 839). For Pathak's (2020b: 6) middle-class urbanite interlocutors in Mumbai, whilst the promise of hygiene and purity of pre-packaged food are attractive to some, fears of contamination from toxicity leaking from plastic packaging frequently outweigh the uncontaminated ideal that plastics promise. For some of Pathak's interlocutors, plastic packaging is seen as part of a 'defective' form of modernisation, an imported problem that is seen in contrast to 'ecotraditionalism', an idea that pre-colonial Indian practices were inherently eco-friendly (Pathak 2021: 12-14).

Plastics in some parts of Asia has come to stand in for frustrations with modernity and global capitalism. In spite of the utopian advancements they promise, in many places the increasing use of plastics has co-arisen with ecological degradation and pollution (Pathak 2020b; Pathak and Nichter 2019; see also Steger 2021). Whilst for many in India plastics are seen as reflective of development and enabling hygiene, for others plastics are synonymous with pollution from the moment they are created (Pathak 2020a). The materiality of plastic, for some in Asia and elsewhere, is associated with its unrelenting progression towards becoming waste. The term plastic not only refers to malleability or 'the very idea of its infinite transformation' (Barthes 1972 [1957]: 97; see also Abrahms-Kavunenko 2022), it is also now inextricably connected to its telos as future garbage (Hawkins 2013). Perhaps this identity reflects the fact that the longest part of the social life of plastics is their afterlives. As Gabrys writes, 'plastics simply refuse to go away, and their material recalcitrance forces us to acknowledge the ways in which plastics persist long after their use' (Gabrys 2011).

Purity and pollution

In many of the cases in this special issue, people incorporate scientific understandings of hygiene and pollution into ritual and into religious and spiritual ideas and practices. In Sikkim, fibreglass masks used to purify negative elements and maintain ritual balance between human

and non-human worlds produce pollution and imbalance in the very relationships they seek to balance (Bhutia 2022). In northern Mongolia, herders ambivalently incorporate scientific discourses of microbial contamination into local dairying practices, which see dairy as inherently ritually and metonymically pure (Reichhardt and Abrahms-Kavunenko 2022). Along Himalayan circumambulation routes, polyethylene jars preserve the purifying aspects of the sacred yet leach toxins into their surroundings (Brox 2022).

In Asian contexts, the relationships between plastics, purity and pollution are frequently ambivalent. They may simultaneously guarantee purity, quality and hygiene, yet leak other kinds of pollution into the air, waterways and soils. As Pathak describes, some middle-class Indians are scared of 'chemotoxic transmission', a fear that builds upon the idea of the body as permeable and therefore receptive of 'chemicals'. Plastic packaging, in this context, threatens to penetrate the body and pollute it (Pathak 2020b: 8, see also Colombijn 2020 on the fear of recycled plastic in Indonesia).

In ritual circumstances, the incorporation of plastics can disrupt ordinary notions of pollution and purification. Ritual items made from plastics offer different material affordances from previously used materials. They can incorporate brighter colours that may more easily generate spectacle. Rituals in certain parts of Asia are performed, in part, as a response to ecological pollution (Abrahms-Kavunenko 2019; Bhutia 2022). Yet, when the ritual items used to purify spiritual pollution are made from plastic, spiritual purification can produce ecological pollution, thus complicating ritual processes. The difficulties of what to do with broken plastic ritual items, such as a broken plastic prayer wheel (Brox 2022) or polyester prayer scarves (Abrahms-Kavunenko 2022), can complicate ritual life. Polyester prayer scarves tied to trees can eventually kill the tree they are trying to protect (Abrahms-Kavunenko 2022), and tampering accidentally with ritual items that have specific biographies can cause extra-mundane problems for those who accidentally come into contact with them (see Abrahms-Kavunenko 2022; Wirtz 2009).

As mundane consumption practices change throughout Asia, incorporating more and more plastic items into everyday life, notions of spiritual pollution and purification are changing. When plastics 'fail to entirely disappear' (McKay et al. 2020: 318), they can create mundane and extra-mundane problems. Diemberger and Skrivere (2021: 4) have described how local ideas of pollution are insufficient

when dealing with plastic waste in Nepal's sacred landscape. As one of their interlocutors Tsewang Lama, an MP in Nepal, explains:

> The notion of pollution, *dip*, was used to protect sensitive… spots, such as springs, from biological contamination. These were the sites protected by the spirits of the springs, the *lu*. These ideas of pollution, however, do not encompass the new types of pollution that are rapidly arriving in these remote areas; some people are aware of the dangers of new types of waste, but most are not (Diemberger and Skrivere 2021: 4).

With the new materiality of plastics come new challenges, extending from ecological damage to ideas about spiritual contamination.

Conclusion

In this special issue, we delve into four ethnographically rich cases of plastics as they are incorporated into Asian societies. The areas we cover are geographically diverse. Some are rural, such as the northern herding communities in Mongolia and the Cham dancers of Sikkim. Others are in small urban areas, such as the Himalayan circumambulatory routes, or larger cities, such as Mongolia's capital Ulaanbaatar or the megacities of Chengdu and Mumbai. In all of these cases, plastics are radically influencing lives and connecting them, in various ways, to the material realities that characterise current forms of globalisation. The Asian regions in this special issue are all experiencing growing global connections; themselves connected to the cheaper forms of production and transportation that plastics have enabled. As Deirdre McKay et al. (2020: 307) have written, plastics are 'a pervasive, material element of the global'. Through their capacity to mimic other materials and their ability to generate novel forms, plastics are generative of new ways of living.

Through examining how people in areas separated by vast distances use and imagine plastics, this special issue delves into the ways that plastics are transforming lives. Plastics and their effects on human bodies and ecosystems are unsettlingly ambiguous. Largely unable to biodegrade, plastics photodegrade fractiously, separating into ever smaller particles. Lauded as impervious to microbial contamination, they off-gas, absorb and leach environmental contaminants. Frequently imagined as infinitely suitable and adaptable, they are often unable to be remoulded or repurposed.

Following from Pathak and Nichter's (2019) call for an anthropology of plastics for effective policy development and Abrahms-Kavunenko's

(2021) call for an anthropology of plastics that is 'politically engaged and adaptive' along with being 'comfortable with ambiguity and doubt', this special issue highlights the material affordances and cultural imaginaries of plastic.

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