

# Plastics in the Pandemic: Packaging, Risk and COVID-19 in Urban Middle-Class India

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## Abstract

Anti-plastic discourses have been gaining momentum in the last two decades, increasingly prompting plastic control policies and plastic avoidant behaviour. The COVID-19 pandemic, however, has brought a profusion of single-use plastics and plastic packaging. What can this change tell us about shifts in subjective experiences of risk in an environment of hypervigilance? The case of India reveals that the pandemic has shifted attention among the middle class from the uncertain, future risks of plastic toxicity toward the more immediate risks brought by COVID-19. It also illuminates how plastics are implicated in the logics of ritual pollution that inform frameworks of secular hygiene. For middle-class consumers, plastics function as a boundary between the outer world of the Other and the inner world of the Self, and the use of plastic packaging becomes a token gesture that provides a sense of protection in the face of a heightened awareness of vulnerability.

*Keywords: plastics; COVID-19; risk; hygiene; pollution; India*

## Introduction

In late December 2020, at lunch at a restaurant in Mumbai, I requested 'regular', i.e., unbottled water, only to be told that the Mumbai Municipal Corporation's rules only allowed serving bottled water. India's commercial capital – like most of the country – had been under extended COVID-19 restrictions and was inching its way to recovery after case numbers had shown a first peak around November. Unbottled water in restaurants, it seemed, had become yet another casualty of restrictions related to the pandemic. The municipal body had deemed bottled water safer in terms of COVID-19 transmission

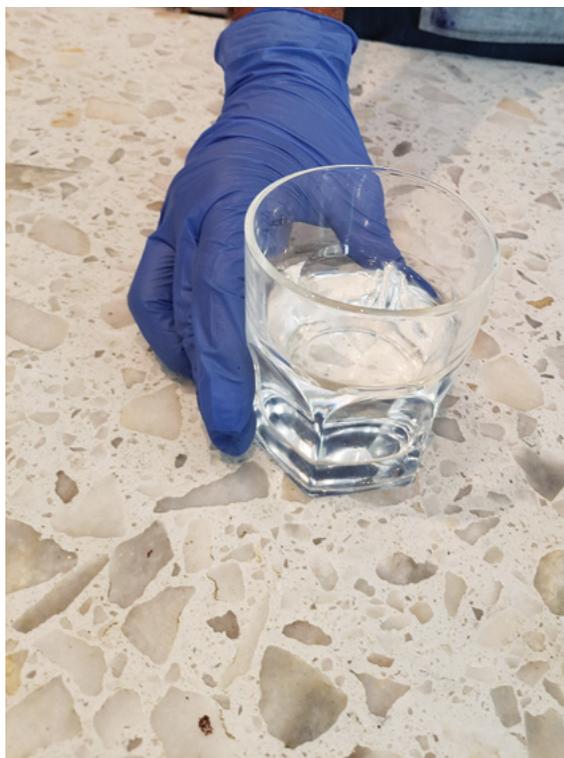
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than tap or filtered water. By this time into the pandemic, initial concerns regarding the virus spreading through contaminated surfaces had been walked back, aerosols – not touch – had been identified as the main medium of transmission, and scientific consensus was that the risk of surface-to-human transmission was slim and had been vastly exaggerated (Goldman 2020).<sup>1</sup> This, though, seemed not to have seeped through to the standard operating protocols put in place by many retail and customer-facing establishments in India. I saw plastic gloves worn by waitstaff, non-woven polypropylene (a type of plastic) hair nets and feet covers in grocery stores and hair salons and stores no longer allowed customers to bring their own containers to be refilled when buying food, grains or other supplies – those goods were wrapped in small plastic packages instead. The pandemic had brought a profusion of single-use plastics – not just in the personal protective equipment (PPE) used by those in the health professions, or even in terms of the packaging necessitated by an increased reliance on food delivery and online shopping, but also in terms of the practices that were being associated with hygiene that relied on disposable plastics.



**Figure 1. Waitstaff wear gloves in restaurants and cafes.**

*Source:* Photo by Gauri Pathak, February 2021.

A few years prior to the pandemic, in 2018, the Indian prime minister, Narendra Modi, had pledged to make the country free of single-use plastics by 2022. Several regional and local bans on single-use plastics were already in effect (although not always consistently enforced). A nationwide ban on single-use plastics had also been foreshadowed. Some expected that ban would be put into effect in October 2019, but it was postponed as the country was experiencing an economic downturn; it was thought to be an imprudent time for further shocks - which the banning of single-use plastics would bring - to the economy. The pandemic meant a further delay to the ban's implementation. Plastic control initiatives and plastic avoidant behaviour had been placed on the backburner, as concerns about plastic pollution had been displaced by the more immediate cares brought by the pandemic. Moreover, single-use plastics - especially those in PPE and medical equipment - were being framed by plastic industry associations as crucial to efforts to control the spread of the coronavirus.

What can this unfettered profusion of single-use plastics after a period of mounting pressure on governments, corporations and consumers to engage in plastic control tell us about shifts in subjective experiences and assessments of acceptable risk? From December 2020 through May 2021, I conducted observation and participant observation in Mumbai, India, paying particular attention to the use of disposable, single-use plastics in spaces of consumption such as retail stores and shopping malls, restaurants, coffee shops and salons. This fieldwork included both a period when COVID-19 case numbers had significantly dropped in India (December 2020 through roughly February 2021) and a period of a second wave and second lockdown (roughly beginning around March 2021). The spaces I focused on are considered middle-class milieus, associated with the new practices of middle-class consumption (and single-use consumer plastics) that followed upon the liberalisation of the Indian economy beginning in 1991 (Fernandes 2006; McGuire 2011; van Wessel 2004). Middle classness in post-liberalisation India is generally recognised by scholars of India to be a performative socioeconomic grouping based on practices of consumption (e.g., Deshpande 2003; Donner and de Neve 2011; Fernandes 2006; Mazzarella 2003). Within the urban middle class, Fernandes and Heller (2006) have outlined three key segments: a segment whose members possess professional educational credentials, a *petit bourgeoisie* of merchants and shopkeepers and a segment in lower ranking, non-professional jobs. My focus was on members of the professional middle class and

the petit bourgeoisie, who possess the economic and cultural capital to access new practices and spaces of consumption.

Fieldwork revealed that the pandemic shifted attention among this consuming middle class from the uncertain, future risks of plastic pollution and the toxicity of plastics toward the more immediate risks brought by COVID-19. It also revealed how single-use plastics are implicated in the logics of ritual pollution which inform frameworks of secular hygiene in India. The disruption caused by the pandemic brought these to the fore, such that contamination through touch (established to be negligible in terms of spread of the SARS CoV-2 virus) often became more of a preoccupation than exposure through aerosols (the primary mechanism of its spread). Against this backdrop, for middle-class consumers, the use of single-use plastics functioned as a 'token gesture' (Nichter 2003), an act of harm reduction and an expression of agency to alleviate anxiety, that allowed them to continue engaging with their lifestyles. Plastics were foregrounded as representing a boundary between the dangerous outer world and the inner world of the Self.

## **Plastic Pollution and Plastic Control**

Plastic pollution, defined as 'the introduction of plastics (regardless of sizes, shapes or types) into the environment, resulting in potential threats to the environment, organisms, or even human health' (Li et al. 2021: 577), has emerged as a major global environmental challenge in the last two decades. Even though ecological concerns related to plastic litter, pollution resulting from the incineration of plastics and plastics in the oceans had been raised as early as the 1970s (Meikle 1995), it has only been in the last two decades that these concerns have gained enough momentum to result in widespread plastic control policies such as single-use plastic bans (Pathak and Nichter 2021).

India has been no exception to this trend. In the last couple decades, India has seen the extensive circulation of anti-plastic discourses. Besides concerns related to the aesthetic dimensions of plastic pollution, which often conflate plastic pollution with plastic litter, anxieties have also revolved around the toxicity of plastics (Pathak 2020a; Pathak 2020b). These concerns centre on the 'chemicals' – synthetic substances seen to lie outside the domain of 'nature' – thought to leach out of plastics, particularly plastic containers or plastic packaging, and into the foods they contain. Elsewhere, I have conceptualised this concern with

the bodily absorption of such ‘chemicals’ as a concern with ‘chemotoxic transmission’ (Pathak 2020a). The ‘chemicals’ thought to leach out of plastics do not correspond to endocrine disrupting chemicals, such as bisphenol-A, that are often added to plastics, nor are they analogous to micro- or nanoplastics, whose harms have not yet been elucidated. Instead, fears of ‘chemicals’ represent a lay, rather than technocratic, discourse on toxicity. The pathways of harm of these ‘chemicals’ are not elaborated upon, and they are thought to result in cancer or a general loss of health. These concerns about the toxicity of plastics form part of a larger discourse in India on ‘defective modernisation’ (Nichter 2001). Such discourse links anxieties regarding the harms of plastics to the harms of other manmade substances such as pesticides and fertilisers. It recognises the body as permeable and contains within itself a political ecological critique of industrial modernity and capitalist extraction.

These anti-plastic discourses, along with the unease caused by visible plastic litter, have driven plastic control policies and interventions throughout India (Pathak and Nichter 2019; Pathak 2020a). Various states, such as the state of Maharashtra, have instituted single-use plastic bans (although patchily implemented), and regional or local bans on plastic carrier bags, especially bags below a certain thickness, have also been put in place. Proscriptions on the sale of alcohol and liquor in plastics have been debated, and extended producer responsibility schemes, which make the producers of packaging waste responsible for that waste after consumer use, have also been discussed. As mentioned earlier, Modi has pledged to make India single-use plastic free by 2022. This focus on tackling plastic pollution has been key to India’s nation branding project, one dimension of which has focused on the country’s green credentials and prospects (Pathak 2021). Consumer plastic avoidance is also an emerging trend among the comfortably middle class, especially urban middle class, and a plethora of products purporting to be ‘traditional’, ‘chemical free’ and/or ‘eco-friendly’ are marketed to these consumers.

## **Plastics and Hygiene**

Since the pandemic began, however, many of these plastic control interventions or plastic avoidant practices – whether state- or consumer-driven – have experienced setbacks. The ‘Draft Notification’ on the ‘Plastic Waste Management (Amendment) Rules, 2021’, suggests that the Government of India is still planning to go ahead with

a single-use plastic ban from 2022.<sup>2</sup> However, the pandemic has made plastic avoidance difficult given the sheer preponderance of single-use plastics and plastic packaging that it has encouraged. For example, plastic avoidant interlocutors who used to carry their own containers to stores to get refills spoke of items coming prepacked in plastics. Refusing bottled water at restaurants or eateries in favour of filtered water was not always an option (although this was inconsistently applied). Online meal delivery was one of the few sectors of the economy to see a massive boom; not just the customer base of online food delivery services but also the number of orders placed by customers increased significantly, almost doubling.<sup>3</sup> Meal delivery initially saw a hit because of worries regarding hygiene and exposure, but by the time I reached India in December 2020, delivery services and restaurants advertised their strict hygiene standards through packaging (typically in plastics) and regular sanitation. The pandemic also saw surges in online shopping, with its associated plastic packaging and stuffing material.<sup>4</sup> An environmentally conscious interlocutor in her 60s told me that she had ‘stopped thinking about it [plastic waste] for now’ given her increased reliance on food and shopping delivery. These deliveries came with a surfeit of plastic packaging, and avoiding the packaging would have meant foregoing



**Figure 2.** A McDonald’s outlet advertises its “single use only” policy.

*Source:* Photo by Gauri Pathak, January 2021.

goods and services. Moreover, food aid (whether uncooked supplies or meals) provided by volunteers to low-income families struggling in the midst of lockdown-related job losses and economic hardship was also packed in individual disposable packaging.

It was not just these COVID-19-related restrictions that had made plastic control difficult; interlocutors, even those who had engaged in plastic avoidant practices pre-pandemic (whether out of a fear of plastics' toxicity or from commitments to reducing non-biodegradable waste), spoke of adopting new behaviours out of a sense of vulnerability. One interlocutor, for example, mentioned that she had switched from bottled milk to milk sold in plastic pouches during the pandemic as she thought it guaranteed 'quality and sanitisation', even as she was concerned about the toxicity of plastics. For the course of the pandemic, she was willing to put up with the leaching of 'chemicals' to avoid the household being infected by the coronavirus. Another waste-conscious interlocutor spoke of spraying sanitiser on the plastic wrapping of vegetables (which she earlier made a point to buy loose) to avoid virus exposure. Hema, a home maker in her 60s who had been scrupulously plastic avoidant and concerned about the toxicity of plastics, told me she was 'now having to rely on plastic'. Although she found ways to reduce the time her food spent in plastics, she was no longer as plastic avoidant as she was prior to the pandemic.

All this was even before considering the profusion of PPE. Not only had PPE become integral to the management of COVID-19 itself, but medical interlocutors, even those not related to the diagnosis or management of COVID-19 such as dermatologists or dentists, told me that they were seeing patients in full PPE even for routine consultations. As mentioned earlier, I saw several people wearing plastic gloves when out and about in Mumbai. Although cloth masks seemed to be predominant in non-medical settings, plastic surgical masks were not uncommon. At the same time, the plastic recycling carried out through the informal sector saw setbacks because of restrictions on mobility (which hampered the work of waste pickers and itinerant scrap traders) and a plummeting oil price (which made the use of recycled plastic commercially unviable). Much of this may seem like stating the obvious. What I am interested in exploring, however, is how this increased reliance on plastics functions as a lens into calculations regarding acceptable risk in an environment of hypervigilance.

In the public imagination, plastics are understood to be impermeable materials that protect the contents stored within them from the outer

environment. Most plastic packaging is, in reality, permeable to small molecules, including certain gases and water vapor (Siracusa 2012). Nevertheless, as Susan Willis (1991: 2) points out in *A Primer for Daily Life*, plastic packaging ‘promotes the notion of product purity’, promising products protected from ‘the air as well as the hands and coughs of salespeople’. Plastic packaging, by being a protective barrier that is nevertheless ‘barely there’, assures consumers that the items they buy are not being contaminated by hundreds of other hands (Hawkins 2018: 400). Beyond that, it creates the illusion of the commodity inside as untainted by human involvement by obscuring the labour of production. In India (as elsewhere), people speak of plastic packaging as a guarantee of quality, purity and hygiene (Pathak 2020a; Solomon 2015). They may be concerned about toxics leaching out of the packaging, but they do not question plastic packaging’s ability to function as a firm boundary against the outside.<sup>5</sup>

In India, however, this seeming guarantee of purity carries particular salience. Anthropologists such as McKim Marriott (1968, 1976, 1990) and E. Valentine Daniel (1984) emphasised South Asian conceptions of the person as permeable and fluid. They highlighted how all interactions – such as those of eating, touching or kinship – between humans and their environment were implicated in the exchange of constitutive ‘biomoral’ substances; persons were constantly transmitting parts of themselves and absorbing substances from others and from the environment. Social contact was also a moral entangling, and all interactions therefore posed not just biological but also moral risks that had to be carefully negotiated through the regulation of contact.

The permeability of the person (and therefore the body) also allowed for the transfer of ritual pollution between people. Castes were seen to embody certain qualities, as well as varying degrees of purity and pollution, and caste groups deployed different transactional strategies to enhance or maintain their ritual status by policing their bodily boundaries. Such strategies, which depended upon restrictions and norms governing contact and exchange with castes deemed lower in the hierarchy, served to limit market transactions, especially in food – seen as a transformational medium (Liechty 2005). Notions of an embodied ritual purity have thus been crucial to social hierarchies in South Asia, especially – but not only – among Hindus, and against this backdrop, the issue of touch is a highly charged one.

Scholars of India have noted that conceptions of ritual purity should not be confused with secular notions of hygiene; the two interact in

complex ways and do not necessarily correspond to each other. Cow dung, for example, is considered ritually pure even though it can elicit feelings of disgust when evaluated through ‘modern’ frameworks of hygiene (Wadley 2000). Nevertheless, there are significant overlaps between the two, especially when it comes to notions of cleanliness (Alley 2002; Bean 1981; Dumont 1980; Hansen 1999). Plastic packaging, imagined as an impenetrable and ritually neutral protective barrier and marketed as an indicator of superior hygiene, has therefore been crucial to expanding market exchanges in India by mitigating the threat of not just ritual contamination but also of adverse microbiological exposure from those exchanges (see also Pathak 2020a). At the same time, the centrality of notions of biomoral substance exchange and the transmission of ritual pollution through touch in everyday life are being gradually eroded, especially in urban areas. These notions have, however, by no means been eradicated, and their logics continue to pervade dimensions of contemporary urban social life, such as in the valorisation of vegetarian diets (Osella 2008), resistance to non-kin blood, organ and sperm donation (Copeman 2013; Bharadwaj 2003) and, as I argue here, in conceptions of hygiene and sanitation during a pandemic.

### **From Chemotoxicity to Purity**

Amid the pandemic, concerns with hygiene, purity and touch have once again come to the fore. In the early days of the pandemic, the World Health Organization and other governmental advisory bodies such as the USA’s Centers for Disease Control and Prevention emphasised the possibility of transmission of the SARS CoV-2 virus through surfaces, and practices such as hand washing and the sanitisation of surfaces were recommended as crucial to preventing its spread.<sup>6</sup> The possibility of surface-to-human transmission was soon established as negligible, but by then the damage had been done. Practices of what the journalist Derek Thompson called ‘hygiene theatre’ – the obsessive sanitising of surfaces and deep cleaning – had become routine and ritualised across the globe.<sup>7</sup>

In India, I found that even in late 2020 and early 2021, touch was still more of a concern than aerosols. For example, as I was browsing in a store in early January 2021, the sales assistant told me that they had a ‘no touch’ policy and sprayed the items I had unknowingly handled with sanitiser. Shoppers were asked to refrain from touching products as they browsed, and as I paid for my purchases, the checkout person

sprayed sanitiser on the items in my shopping basket and placed them in a plastic envelope. Meanwhile, however, I observed several shoppers wandering the store maskless or with their masks at their chins; they were not reminded about the mask mandates in force across the country. This was not an isolated incident, and I observed similar practices – for example, the sanitisation of physical infrastructure but no injunctions to the many who were maskless (or insufficiently masked, with their noses and mouths exposed) – across stores, restaurants and residential buildings.

The focus on contaminated surfaces is of course not unique to India. In Denmark, ‘hygiene theatre’ was a persistent feature at the university where I am based all through 2020; the fall saw guidelines on the constant sanitisation of door handles, lift buttons and other surfaces, instructors were tasked with constantly reminding students to sanitise their hands and desks prior to and just before entering or leaving rooms and food in cafeterias and canteens was served pre-wrapped in plastics. News articles recount similar practices in places as diverse as the US and Hong Kong.<sup>8</sup>

What was different about India, however, was that for one, sanitisation and touch were fixated over even more than the wearing of masks, despite seemingly stringent mask mandates that had been put in place very early into the pandemic. I constantly observed people being asked or reminded to sanitise their hands when entering stores or residential buildings, whereas the same diligence was seldom applied to asking the numerous unmasked or insufficiently masked people to wear their masks or to cover their noses and mouths with their masks. Second, I also observed manifestations of hygiene theatre peculiar to India that suggest the implicit influence of logics of ritual pollution on practices aimed at avoiding exposure to the SARS CoV-2 virus. Thus, the building I was staying in during fieldwork segregated its elevators during the second peak of the pandemic in April and May 2021: ‘outsiders’ such as vendors, domestic help and other visitors were only allowed to use one of the three operational elevators; the other two were reserved for residents. I heard of some households requiring their domestic helpers to change clothes upon entering their apartments and prior to beginning work. Interlocutors also spoke of discontinuing their *dabba* – regular lunches, typically cooked by small-scale caterers or home kitchens and delivered in steel or other reusable containers – for fears that the food may be contaminated. The practices I chronicle were, of course, neither uniformly implemented

nor uncontested. They do, however, reveal how models of ritual pollution inform conceptions of hygiene, even in the urban and cosmopolitan spaces of middle-class Mumbai, and how their logics – and a subsequent focus on touch rather than air – are used to comprehend and act upon new realities brought by the pandemic.

In this climate of heightened vigilance, then, plastics take on renewed significance as materials that represent safety. Plastics and plastic packaging allay concerns over touch and contamination through their seeming impermeability. In the initial days of the penetration of plastics into the Indian market, they were seen to bring improved hygiene and purity. Over time, as the harms of plastics became more apparent, the improvements plastics were seen to bring were slowly debated in the context of these harms, and growing anti-plastic sentiment suggested that many of those harms were thought to outweigh benefits (Pathak and Nichter 2019; Pathak and Nichter 2021). Nevertheless, those harms were now seen as secondary. Concerns over the toxicity brought by plastics are about long-term harms – they represent fears regarding uncertain future outcomes. Moreover, in public discourse, the chemotoxicity of plastics is tied to a general weakening of the body or to eventual cancer, and in this, it references a lack of wellness that can go on to lead to illness rather than illness *per se* (Pathak 2020a). When faced with the more immediate, tangible threats brought by the pandemic – threats of illness but importantly also of economic downturn or changes in consumer lifestyles – these concerns over toxicity have receded; the temporally more urgent risk of biological exposure and a concern with getting through the pandemic have supplanted anxieties surrounding toxicity.

These shifting concerns illuminate larger trends in epidemiology and public health. After the early focus of public health efforts in the nineteenth century and twentieth century on infectious disease control, the prevalence of those diseases began to wane. Writing about the ‘epidemiologic transition’, Abdel Omran (2005: 736-737) noted that this shift brings with it changes in disease patterns, as ‘pandemics of infection are gradually displaced by degenerative and man-made diseases as the chief form of morbidity and primary cause of death’. With longer life spans, future quality of life, wellness and harm reduction, as reflected in concerns with toxicity, become more salient. Omran’s framework has been criticised for not recognising regional and intra-population variations.<sup>9</sup> Paying attention to socioeconomic inequalities reveals how concerns with toxicity, and the ability to act upon them, are mediated

by class. As I have pointed out, discourses about chemotoxic transmission through plastics in India are discourses aimed at consumer-citizens. The low-income producers of plastics are seldom the targets of or features in these discourses, and my low-income interlocutors did not associate plastics with toxicity as did my middle-class interlocutors, who engaged more heavily with plastics as consumers (Pathak 2020a). For these middle-class consumers, the COVID-19 pandemic has forced their attention back to the present – rather than future – quality of life. Consumption practices are crucial to the performance of middle-class lifestyles and identities (McGuire 2011; van Wessel 2004), and to engage with these practices to whatever extent possible while staving off the threat of virus exposure, middle-class consumers turn to an arsenal of protective instruments – sanitisers, cleaning products and plastic packaging.

### **Vulnerability, Acceptable Risk and Agency**

Theorists have suggested that the concept of risk acquires more salience in modernity, as society is increasingly preoccupied with the future amid the harms and insecurities brought by techno-scientific innovation and increasing complexity (Beck 1989, 1992, 1999; Giddens 1990, 1991, 1999). While catastrophe and adverse events are not new, these theorists argue that the anticipation of adverse events – and the visualisation, calculation and planning surrounding such anticipation – are characteristic of modernity. Living in late modernity involves living with risks and constantly engaging with calculations – at both the individual and population level – that balance risk taking, and the pleasures and advantages brought by it, with risk avoidance and harm reduction. Nevertheless, risks are increasingly marked by 1) high degrees of uncertainty, which make it difficult to form a calculable probability of those risks materialising, 2) long latency periods as a result of which their effects over time cannot be reliably determined and 3) interactive chains of consequences which make it difficult to assign causal relationships (Beck 2013).

This climate of incalculable risks co-exists with a deepening demand for institutionalised security, and states and governing bodies, tasked with risk control at the population level, often find the political costs of omission are greater than the costs of overreaction. In the case of the COVID-19 pandemic, therefore, regulations and measures that do not require sweeping systemic changes and are relatively easy and inexpensive to implement – such as hygiene theatre or regulations

forbidding the serving of unbottled water – become an accessible recourse, despite a lack of techno-scientific evidence. Plastics are cheap materials that became even cheaper when oil prices fell during the initial stages of the pandemic, and they exist within a clearly developed infrastructure of production and distribution. They are already associated in the public imagination with hygiene, purity and safety from microbial exposure, despite scientific studies which established that the SARS CoV-2 virus survives longer on plastic surfaces than on paper, cloth or other surfaces (Corpet 2021). Meanwhile, the risks they bring, those of plastic pollution and toxicity, have longer temporal horizons and are characterised by higher degrees of uncertainty than the risks brought by exposure to the virus.

At the individual and household level, middle-class consumers of plastic packaging face similar trade-offs. The middle class must balance the risks of SARS CoV-2 exposure against the pleasures of consumption, pleasures that are imperative to their performance of middle classness. Lay assessments of risk differ significantly from expert knowledge and are formed in the context of people's everyday lives, historical experiences, networks of communication and economic contexts rather than on the basis of professional advice or knowledge (Abbott, Wallace and Beck, 2006; Brown 1992; Harvey 2020; Wynne 1989, 1996). They also draw from existing frames of reference and mental models. Similarly, the work of Mary Douglas on risk shows how, during health crises, people redraw, reproduce and maintain symbolic boundaries between the Self and Other to alleviate feelings of vulnerability (Douglas 1992; Douglas and Wildavsky 1983). In the case of notions of hygiene and protection from SARS CoV-2 exposure, this has meant drawing from conceptual frames of biomoral substance exchange and protection from ritual pollution. A focus on plastic packaging as a visible boundary between the 'outside' – a world of germs and pollution – and the 'inside' – the domain of the interior of both the home and the body – helps reduce that sense of vulnerability and provide a sense of agency. Since the days of Malinowski (1948), anthropology has known that rituals focused on controlling future threats help decrease anxiety and provide a sense of control. Consuming plastic packaging becomes another ritual, an act of 'precautionary consumption' (MacKendrick 2010) through which consumers attempt prophylaxis against harm. For consumers, too, the risks of the chemotoxicity of plastics, characterised by uncertainty and long latency periods, become acceptable risks in the larger risk landscape.

Retailers respond to this need to assuage consumers' sense of vulnerability to protect profits. Plastic packaging, gloves, hairnets and so on – cheaply, readily and abundantly available – become visible symbols of their caring for their customers' safety and their vigilance with regard to hygiene and sanitation. In implementing these symbolic acts, they rely on the same existing frames of reference that suffuse their customers' practices; the gloved hand – rather than just the masked nose and mouth – becomes indicative of their vigilance.

Plastic industry associations have been capitalising on the opportunities presented by these shifts to improve the reputation of plastics and to lobby for changes to plastic control policies. The All India Plastic Manufacturers' Association (AIPMA) website states, for example, that 'the pandemic has definitely established the significance of plastics'.<sup>10</sup> When I attended an online policy workshop organised jointly by the UN Environment Programme and the National Productivity Council (an autonomous body within the Ministry of Commerce and Industry) titled 'Countermeasures for Riverine and Marine Plastic Litter in India', representatives from AIPMA repeatedly asserted that the pandemic had shown how the demonisation of single-use plastics was unfair; single-use plastics, they stated, were crucial for hygiene and PPE. In a similar vein, the PET Packaging Association for Clean Environment, an association representing the interests of firms manufacturing and relying on PET (polyethylene terephthalate, a type of plastic used to make beverage bottles), held a webinar titled 'PET/Plastics in Time of COVID-19' that again emphasised the centrality of plastics in efforts to control the pandemic. How long this sense of plastics as a source of protection and harm will last after the pandemic, and how far industry associations' lobbying will be successful when it comes to the implementation of the 'Plastic Waste Management (Amendment) Rules, 2021', remains to be seen.<sup>11</sup>

## Conclusion

Times of pandemic, like times of all health crises, are periods of disruption. Habitual patterns are unsettled, norms change and new anxieties are brought to the fore. Such times also refocus attention away from the future towards the present (Lupton 2021). The COVID-19 pandemic has been no different. Prior to the pandemic, rising anti-plastic sentiment had prompted a growing number of plastic control policies by governing bodies and increased plastic avoidant behaviour from



**Figure 3. PPE disposal bin at the entrance of a commercial building.**

*Source:* Photo by Gauri Pathak, December 2020.

consumers. Much of these policies and behaviour were aimed at single-use plastics and plastic packaging. The pandemic, however, has disrupted this anti-plastic momentum and brought a profusion of disposable plastics.

Fieldwork in India during the pandemic revealed how these shifts in attitudes towards plastics revealed calculations of acceptable risk at both the population and the household level. Since the early days of the permeation of plastics into everyday life, the materials have been marketed as promising hygiene, purity and safety from microbial exposure; in the public imagination, plastic packaging functions as an impermeable barrier that protects the goods it contains from contamination. For governing bodies, regulations such as protocols requiring increased plastic packaging are relatively easy measures that suggest that they are taking action to protect their consumer-citizens against the pandemic while still encouraging consumption and economic activity. For middle-class consumers, plastic packaging comes to function as a visible yet 'barely there' boundary between the 'outside' – a

world of germs, pollution and the Other – and the ‘inside’ – a world of the Self and the home. Consuming single-use plastics helps reduce their sense of vulnerability and allows them to balance the pleasures of consumption with subjective fears of exposure. These subjective fears, besides being based on notions of secular hygiene, also draw from logics of biomoral substance exchange and ritual pollution; at a time of a heightened sense of vulnerability brought by COVID-19, latent anxieties about purity and pollution interact with concerns regarding hygiene to foreground contamination through touch – a contamination from which disposable plastics offer protection. Meanwhile, the uncertain and long-term risks that these plastics bring, those of plastic pollution and toxicity, are judged to be temporarily more acceptable than the risks brought by exposure to the SARS CoV-2 virus.

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