

3

Insides and Outsides

A Theory of Power

Who and what must be gotten rid of for wider systems, structures, and cultures to persist and maintain themselves? Any system must find ways to discard people, places, and things that threaten its order or, conversely, find ways to include them so they are neutralized as threats. Such ordering practices create many kinds of unevenness. How such unevenness is achieved and with what consequences is a core question of discard studies. We call the maintenance of such unevenness “power,” an example of which can be found in chapter 2: banning plastic straws can only be considered “good” by erasing, dismissing, or ignoring people with disabilities. For disposables to be consistently produced and wasted, advertising and waste infrastructures for disability, including recycling, had to be put in place. We will expand on these ideas in this chapter by talking about how dominant systems and forms of wasting always entail power.

Power refers to a collection of techniques that maintain the integrity of some systems at the expense of others. That is, power is recognized by the unevenness

and differences within and between dominant and nondominant systems. One way to understand power is as the reproduction of order at one scale and context and the simultaneous contravention of order at another (Liboiron, Tironi, and Calvillo 2018, 335). For example, chronically low levels of arsenic in water interrupts the reproduction of fish but maintains the ability of mining companies to store mining tailings in open-air mounds (Sandlos and Keeling 2016). Here, power isn't about having power *over* something (though coercion is certainly one technique of power) but rather about how some things are maintained, counted as good, become normal, and thus become uneventful while others struggle for recognition, are debated, or are discarded (Murphy 2017a, 2017b).

Discarding is one technique of power among many. Discarding involves rejecting, wasting, annihilating, destroying, prioritizing, or externalizing some things in favor of others. This is a normal part of all systems. Discarding isn't inherently bad—indeed, in chapter 4 we talk about discarding well—but it does produce unevenness that have different effects for different systems, environments, people, and ways of life, especially if those systems become dominant.

Unevenness is not automatically about oppression. For example, affirmative action practices ensure women, Black people, Indigenous people, people of color, and people with disabilities, among others that labor law calls “equity-seeking groups,” are hired because

these groups are systematically discriminated against in hiring practices, resulting in their underrepresentation in many domains. As such, affirmative action is a form of curation that means discarding certain types of applications and elevating others. It is one type of unevenness (targeting hires) to address a more systemic type of unevenness (wider patterns of privilege and oppression that skew the workforce). This doesn't mean affirmative action is inherently good. Indeed, some people believe it is abhorrent and actively fight against it. Others find it necessary but critique it because it fails to address whether the workplace is a safe or inviting place for affirmative action hires. Still others think it is the best way to address discrimination. In all cases, affirmative action as a sorting technique that deals with and produces discards can be analyzed according to theories of scale and relationality introduced in the last chapter as well as theories of unevenness and power covered in this chapter.

Power can be thought of as the integrity of systems, particularly in terms of maintaining boundaries and flows, the insides and outsides of dominant systems. One hallmark example from discard studies is curbside recycling and waste pickup. This allows both the flow of waste from private domestic spaces into industrial-scale landfills and the flow of packaging from industry into domestic spaces (Liboiron 2013). Without curbside waste management that allows disposables to "go away" there is no disposability, as packaging would accumulate to unmanageable and impactful quantities (Coverly

et al. 2008; Liboiron 2018; Reno 2016; Strasser 1999). To maintain this flow, packaging industry groups advocate for this kind of recycling system because such a system allows their production of disposable packaging to be maintained, even to grow, instead of being interrupted (Killinger 2010; MacBride 2012; Liboiron 2015b). Chapter 2 introduced a theory of scale to describe how relationality is uneven within and between systems: some relations matter more than others. This chapter extends scale to consider unevenness in terms of power—the ability to create, maintain, or interrupt certain systems of discard.

This is to say that waste infrastructure and systems are *not* inevitable, coherent, smooth, or permanent. Waste structures have multiple histories, relations, politics, and agencies that “while seemingly coherent, rarely cohere” (Arefin 2019). Nor can infrastructures and systems be “characterized by the political or ideological epoch in which they were first constructed or designed . . . they are constituted by and constitutive of diverse and disparate political rationalities” (Arefin 2019, 6; Gupta 2018; Hawkins 2001) involving “a rich set of negotiated compromises” (Bowker and Star 2000, 34). Indeed, waste infrastructures and systems are particularly “flaky, falling apart forms that constantly call out for projects of management, maintenance, and repair” (Anand 2015). These practices can be studied. Indeed, most of the discussions and case studies in this text and in discard studies broadly are about the management decisions,

maintenance structures, and repair efforts that work for or against the interests of powerful actors. Put another way, discard studies is the study of how systems maintain themselves and how they cohere.

Commercial Content Moderation as Discarding

Other systems that have nothing to do with municipal waste or pollution also discard to maintain their order. For example, social media feeds also have integrity in how they flow and what is centered, externalized, and discarded. The flows of these feeds are kept “clean” and clear using what the social media industry calls commercial content moderation (CCM). CCM is the for-profit creation and maintenance of social media feeds so they are free of content that violates a platform’s terms-of-use-policies (see Facebook’s and Twitter’s respective policies). CCM is enacted via a set of delete/ignore decisions made by CCM workers about what posted content must be removed (deleted) and what may remain (ignored). Common examples of material targeted for deletion include nudity and sexually explicit material, gore, extreme violence, and hate speech (Gillespie 2018; Roberts 2019).

Garbage hauling and CCM might seem worlds apart, but their shared dependence on human workers as labor to keep them running links them. Moreover, both types of labor are unusually harmful to workers. Employment in the municipal solid waste world is dangerous,

especially for frontline workers doing curbside pickup and sorting materials. Data from the US Bureau of Labor, for example, show that refuse and recyclable material collectors are three times more likely to die on the job than are police officers (US Bureau of Labor 2019; see also Cole 2018 Neilson 2019; Nagle 2013). CCM workers are also vulnerable, albeit in different ways—they face precarity, low pay, no or poor benefits (e.g., health care, including mental health), and psychological harm from their work. The psychological dangers to which CCM workers are exposed are significant enough that physical self-harm and suicide are real risks for these workers (Block and Riesebeck 2018).

In the following sections we use plastic recycling and CCM as two case studies to clarify core questions of discard studies: How do systems, structures, and cultures work? Who and what do they get rid of, how, and under what conditions? To briefly preview our argument, consider that curbside recycling and CCM are both about discarding through the use of similar activities—sorting and removing—based on classification systems, infrastructure, and labor. At their core they are both about what stays in and what stays out. Together these two cases illustrate that the principles, practices, and politics of discard are a regular part of broader systems. Discard studies is not a “waste systems” theory but a theory to explain how (and why) all systems waste, as well as waste’s relationship to power.

Recycling as Discarding

Recycling is an industrial practice that collects used materials and transforms them into their constituent parts to create raw materials for new objects. The way we use the term is relatively new, having been coined in 1926 to describe sending partially refined oil back through the refining process. Yet the first curbside recycling program was introduced much earlier, in Baltimore, Maryland, in 1874 to manage urban waste and simultaneously create “wealth from waste” by diverting useful materials to industrial processes (Liboiron 2012a). By the turn of the twentieth century, peddlers and small collectors in the United States and Europe were replaced with specialized trans-Atlantic businesses that traded in massive quantities of consumer and commercial discards. This scale and genre of recycling was rebranded as environmentally friendly in the 1960s and 1970s, including through the creation of the recycling symbol, which was sponsored by the Container Corporation of America (Zimring 2005; Liboiron 2009).

While recycling is often more environmentally friendly than obtaining and processing virgin material, especially for materials like aluminum and its ore (bauxite), it is not environmentally benign. First and most significant from an environmental perspective, recycling institutionalizes disposables by treating them *after* they have been created, giving disposables a managed place

in commodity flows that allows them to be produced at massive scales (MacBride 2012). Second, while recycling can decrease resources required to make a product, it still necessitates expenditures of energy and virgin materials and produces pollutants, greenhouse gases, and waste. For example, recycling paper involves using water and electricity to separate paper fibers that must then be deinked, a process that results in toxic sludge (Smith 1997; Virtanen and Nilsson 2013). Recycling can create products that are “down-cycled”—products of lower value and quality than those originally recycled—because they are not as robust as their predecessors, nor are such products usually recyclable themselves; polyurethane plastics, for example, are often turned into asphalt or other end-of-the-line objects (McDonough and Braungart 2002). The industrial process of re/down-cycling looks different in the various regions and countries in which it is carried out, but all versions share the environmental burden of industrial processing.

Moreover, as discussed in previous chapters, there is a widespread assumption that recycling “cuts down on the need to extract (conservation), which in turn prevents some of the environmental damage from extraction that would be taking place without recycling (preservation)” (MacBride 2019). While this *may* occur in certain times and places for specific materials, the data show it often does not. Instead, figures show “growing rates of metals extraction taking place *alongside* growing recycling rates worldwide” (MacBride

2019; emphasis in original). This is also true for plastics and other materials (PlasticsEurope 2016). Recycling also does not save (conserve) money, as the price of virgin materials is often more stable and lower than recyclables (MacBride 2019, 2013; Ackerman 1997). Given these limitations, we can join economist Frank Ackerman in asking, “Why do we recycle?” (1997). Or, from a discard studies perspective: What *are* the systems that recycling maintains and keeps in place, if they aren’t based in environmental sustainability or economic recovery?

We argue that recycling is best understood as a form of discard because maintaining its green and good reputation is crucial for allowing the production of disposables—that is, recycling as currently practiced enables waste and wasting. We can use the case of New York City’s tumultuous polystyrene ban as an example. On July 1, 2015, a New York City ban on disposable Styrofoam single-serve containers came into effect under Local Law 142 (City of New York 2013). The mayor’s office estimated that the ban would keep up to 30,000 tons of waste from landfills and waterways, which is a lot considering Styrofoam’s light weight. That April, the DART Container Corporation and Restaurant Action Alliance NYC, among other entities, sued the city over the proposed ban, arguing that Styrofoam (otherwise known as “polystyrene foam” or “EPS”) is recyclable. DART Container Corporation even offered to “pay every dime of the start-up costs for recycling” EPS (DART 2015). But

the ban went through. On September 22, 2015, Manhattan Supreme Court justice Margaret Chan overturned the ban, again on the basis that EPS is recyclable (Plastic News 2015).

Why the fuss? Why is there a power struggle that seems to pivot on whether a foamed plastic is recyclable or not? Since the 1970s, industry has consistently championed recycling because it is profitable (Killinger 2010; Dunaway 2015). If a company has reusable bottles it has to pay for those bottles to return, but if it makes cheap disposables, other actors (e.g., municipalities, citizens, nongovernmental organizations, other businesses) pick up the bill for running them to the landfill or recycling station. Perhaps more important, is that recycling has a green reputation that makes disposables appear sustainable as a genre of waste, regardless of whether people actually recycle or whether recycling processes create pollution.

But even with significant and powerful backing, the flow of disposables-as-recyclables was recently interrupted at a global scale when, in July 2017, China announced its ban on imports of solid wastes. This announcement included many forms of plastics. Over the next two years the media in Canada, the United States, and Europe—each main exporters of recyclables that China banned—was devoted to covering what many presumed to be “the end of recycling” (e.g., Albeck-Ripka 2018; Cole 2018; Parker 2018; Parker and Elliot 2018; Wong 2017). Actual changes or outright cessation of municipal recycling

programs that occurred in some jurisdictions in these regions seemed to bear out this storyline. It would seem that China was tired of being an “away” for waste and bit back (more on this in a moment because it’s quite a bit more complicated!).

Commercial Content Moderation as Discarding

“Away” is not so much a physical place (though it often involves one) as a designation of a devalued periphery created in the interests of the more powerful center. Things that seem less material, like digital files or content, have an “away” as well. As Sophia Stamatopoulou-Robbins has written, waste infrastructures “are rarely just the technologies that make waste disappear, in part because waste—like the total volume of water on earth—never truly disappears. Waste merely changes place and form. . . . Waste infrastructures are technologies that redistribute waste’s burdens rather than making them disappear” (2019, 23). This holds not only for discards like household trash but also for unwanted elements like violence or sex on your social media feed.

CCM requires the labor of thousands of human content moderators working “behind the screen” (Roberts 2019) to curate social media feeds on platforms such as Facebook and Twitter. CCM has rules to help make these decisions, such as Facebook’s now infamous rule about gore that allows “no insides on the outsides” (Radio Lab

2018; Lepawsky 2019). What stays in and is valued versus what gets moderated out and discarded is both a part of the flow of social media content feeds and an exemplar of complex patterns of power in terms of the cultural assumptions behind the types of things that are understood as valued or vile and the way human bodies and health are maintained or discarded through CCM labor.

A documentary called *The Cleaners* (Block and Riesewieck 2018) provocatively captures the workaday lives of people based in the Philippines who work as commercial content moderators for US-based companies like Facebook. The documentary interviews workers as they describe their experiences weeding out content that violates Facebook's and other platform's terms of use. One woman describes the "hundreds of beheadings" she has had to watch as part of her job of taking down material that violates company policy. Another woman jokes about all the sexually explicit images she sees and new terms she had to learn to understand what Americans were talking about in posts flagged for her to either leave up or take down. In the words of one of the documentary's main interviewees, "the main goal and mission of a content moderator is to clean up the dirt" (Block and Riesewieck 2018, 00:06:20).

But the normal process of content moderation also makes a mess because moderators often experience harms such as clinical depression and post-traumatic stress disorder (PTSD). CCM contractors' brains and hearts become the dumping grounds for that which threatens the social

media platforms' continuance as moral, safe, and stable virtual spaces. Psychological counseling services are available to moderators when they are employed (Newton 2019a, 2019b); however, the moment they leave or are fired, those support systems end, which is even more pernicious as abrupt endings compound psychological trauma (Perez et al. 2010).

Content moderators are not only devalued in terms of how their mental and emotional states are required to operate as “sinks” (repositories for waste) for violent or explicit media content. They are also wasted as workers. In 2017, Facebook relied on some 15,000 content moderators at twenty locations around the world—including Germany, Ireland, Latvia, Spain, Lisbon, Philippines and the United States—who were mostly hired by third-party contractors (Silver 2018; O’Connell 2019; Newton 2019a, 2019b). This means that most CCM workers for Facebook do not actually work for Facebook (or other platforms), and their wages do not reflect Facebook’s norms. Outsourced content moderation pays at or close to minimum wage in a region. For example, in Dublin, Ireland, content moderators make 12.98 Euro per hour, equivalent to between 25,000–32,000 Euro per year. An average Facebook employee in Ireland that is not hired by contractors makes 154,000 Euro per year (O’Connell 2019).

Beyond low pay, many other aspects of contracted content moderation make for poor working conditions. Labor laws that protect employee scheduling, dismissal,

and benefits such as sick leave typically do not cover contract employees (or do so in much weaker ways). This precarity is intensified in a workplace where moderators work under conditions of constant surveillance by managers who require they maintain 98 percent accuracy on their delete/ignore decisions (Block and Riesewieck 2018). Even if they make the correct decision to delete but do so for the wrong reason, their employee quality score goes down, which can lead to loss of employment.

Just as recycling maintains the flow of disposable materials *by design* rather than by accident, CCM has also designed strategies to ensure that the stream of worker disposability is maintained. Content moderators must typically sign nondisclosure agreements (NDAs) that bar them from speaking publicly about the specifics of their employment (Newton 2019a, 2019b). A result of this collection of unequal power relations in favor of contract managers over workers is that the third-party contract staffing firms are at least partially shielded from employee criticisms of their work conditions. Meanwhile, the clients of these third-party firms—Facebook and other brand-name social media platforms—are shielded from criticisms about working conditions because content moderators do not, from a legal point of view, work for Facebook. This shores up the continuation of poor working conditions, and when problematic content does slip through, legal systems intersect with the business of content moderation to make the social media platform less accountable.

Here we note the various forms of externalization that keep the system running smoothly: content deemed problematic by a platform's rules (based in culturally specific values and practices) is removed from its system, yet the normal operation of the process can cause harm to moderators in the form of clinical depression and PTSD. This allows one part of the system to flourish at the expense of another. Workers are externalized by being expunged from the system when they are no longer needed as well as through precarious contract work, surveillance, and nondisclosure agreements ((NDAs). The workers are forced to take with them the emotional and financial costs of the psychological harms their work has caused them.

But much like the case of China banning plastic imports, which revealed the location of “away” for a massive portion of the world's recyclables, the usually invisible labor of keeping harmful content away from social media feeds recently faltered when the COVID-19 pandemic caused content moderators to be suddenly sent home and replaced temporarily by algorithms. The switch was noticeable to platforms users because algorithm-powered moderation resulted in mass blockages of social media posts—the overestimation of filth—rather than a flood of sketchy content: “Facebook sent home content moderators yesterday, who generally can't [work from home] due to privacy commitments the company has made. We might be seeing the start of the [machine learning] going nuts with less human

oversight” (Matsakis 2020; see also Roberts 2020). While Facebook’s vice president of integrity (a real position) denied the loss of human moderators to be a problem, both the mass-glitch of gratuitous content blocking in March 2020 and the interruption of recycling networks point to how discarding in systems is one technique that allows those systems to act seamlessly. When discarding is interrupted significantly, the systems warp, buckle, and even fail, allowing us to see discarding as a fundamental process that maintains *seemingly* massive, coherent, and inevitable structures.

Power, Dirt, and Matter Out of Place

British anthropologist Mary Douglas’s book *Purity and Danger* (1966) is a hallmark text in discard studies. While the text primarily focuses on religion, her theorizations of religion, power, and “dirt” are intimately related. Building on the work of psychologist William James, who theorized that dirt is a matter of classification (1929, 131; Fardon 2013), Douglas writes that dirt “implies two conditions: a set of ordered relations and a contravention of that order. Dirt, then, is never a unique, isolated event. Where there is dirt there is system. Dirt is the by-product of a systematic ordering and classification of matter, in so far as ordering involves rejecting inappropriate elements” (Douglas 1966, 36). To think of this another way, where there is a system, there must

be rejected elements (dirt), and one way to investigate systems is by studying what and how they reject, abject, and oppress.

When systems are dominant, what they devalue and discard becomes widespread, normalized, and systematic even when some people do not want to participate in those systems. This is power. Douglas writes about how she can “divide the whole of human society into those whose sense of community is for the center and those who are against it. We notice how the center sees the periphery as menacing, and how, seen from the border, the center is repressive” (1980, 1046). While the way Douglas understands power (as a form of strategic control and even coercion by a dominant group) is not the way we articulate power as a function of systems and variously coordinated and uncoordinated actors at different scales, many of the points in Douglas’s theory of dirt and systems resonate with our claims about waste and wasting. In this sense, discard studies can be understood to be a theory of systems (as opposed to systems theory) of power *through* wasting.

Many have critiqued *Purity and Danger* and its conception of “dirt” to describe waste (Furniss 2017; Fredericks 2014; Reno 2016), including Douglas herself (2002). Twenty years after *Purity and Danger’s* publication, Douglas wrote that the universalist tendency to classify impurity based on cognitive disorder to categories was a “major mistake” (2002, xiii), citing the text’s examples of Leviticus and Jewish food categories as particularly

“reductive.” Jamie Furniss, in his body of work on how waste means different things in Cairo than in other regions, persuasively argued that

while all societies produce waste, and its trans-historic and universal demand to be managed seems incontestable (Stamatopoulou-Robbins 2011: 55), it is also profoundly contextual. Even the most obvious of such contextual factors, such as the make-up of the waste stream (organic/inorganic; high density–low volume/low density–high volume), the repercussions of different urban fabrics on collection service, or the articulation of governmental infrastructures with the local informal sector, are nevertheless often sidelined in attempts to reform “solid waste management.” . . . Rather than adopting a universalist approach—asserting, for example, that all waste is ultimately “matter out of place” (Douglas 2002)—our premise should be that although all societies generate waste, what constitutes the category, where it comes from, who is responsible for its creation and management, what sort of a problem it poses and how best to deal with it, are subject to huge variation across societies and to debate within them. (Furniss 2017, 302, 305)

According to Douglas, garbage is not automatically dirt. She writes, “rubbish is not dangerous. It does not even create ambiguous perceptions since it clearly belongs in a defined place, a rubbish heap of one kind or another” (Douglas 1966, 160). Furniss writes that “many contemporary applications of Douglas pay too little attention to the specificity of ‘dirt,’ treating it as interchangeable with cognates such as rubbish, waste, junk, trash

or garbage” (2019, 306) rather than paying attention to the specific and fundamentally different cultural, material, political, and regional differences in what constitutes waste (Fardon 1999). We agree.

The rest of this chapter is dedicated to specificity and understanding how, when, and under what conditions waste *might* be considered dirt or out of place and when it isn’t, with an eye to using the concept as a way to nuance our understanding of power. Our main argument is that to act as if something is “out of place” means it is a genuine threat to overthrowing systems in power, not that something is simply tossed to the side of the road. By using this argument through the lenses of recycling and CCM case studies, we can see how power works by discarding and also how power can sometimes be threatened by discards.

Matter Out of Place, or Simply in the Wrong Place?

When Douglas writes about cultures “rejecting inappropriate elements,” she doesn’t mean sorting activities like those that characterize recycling. Her main examples of rejection are killing and eradication—what we referred to as purification and eradication in chapter 1. She references drowning babies, strangling roosters, and eating pangolins when they threaten ordering systems that maintain power and normalcy:

When a monstrous birth occurs, the defining lines between humans and animals may be threatened. If a monstrous birth can be labelled an event of a peculiar kind the categories can be restored. So the Nuer treat monstrous births as baby hippopotamuses, accidentally born to humans and, with this labelling, the appropriate action is clear. They gently lay them in the river where they belong. . . . Or take night-crowing cocks. If their necks are promptly wrung, they do not live to contradict the definition of a cock as a bird that crows at dawn. (Douglas 1966, 39)

Genuine threats to order must be eradicated, not sorted out and neatly laid in bins at the curb. Sorting something spatially, the more geographical meaning of “out of place,” is quite different than killing. A theory of power in discard studies must distinguish between the stakes and politics of sorting (trash in the bin, shoes off the table) versus eradication (murder, annihilation, complete assimilation). To return to our example of CCM, we must be able to understand the wasting of workers, and not merely pressing the ignore/delete button, as a central discarding action in the system. Wasting workers is a way to maintain interlocking and uneven systems of class, profit, and accountability (a common practice under capitalism, as the COVID-19 pandemic makes acutely visible; see, for example, Aljazeera 2020; Beech 2020).

This does not mean that littering or pressing delete on a social media post will never be “matter out of place” and a threat to power. Materials, practices, and

their interlocking meanings shift within different arrangements in structures (Furniss 2017). Take litter for example. By definition “litter” is not where it belongs from a spatial perspective. It sits at the edge of the road, in the schoolyard, or on the shoreline when it should be contained in a bin, a landfill, or a recycling center. But that doesn’t make litter “dirt.” Litter generally does not challenge systems of power, nor does it confuse or contradict cherished classifications that matter. Except when it does.

In the 1960s, when disposable cans and bottles were first being produced in the United States, they began appearing in ditches and cows’ stomachs. The public concern was enough to threaten the new order of industrial production as stakeholders began demanding the eradication of disposables (Ackerman 1997; Dunaway 2015; Leonard 2010; Royte 2005). One industry response was Keep America Beautiful, which appropriated Native American imagery to fuel an antilitter campaign, moving accountability to litterers rather than producers of disposables. In *Seeing Green*, environmental historian Finis Dunaway writes that

Keep America Beautiful [KAB], composed of leading beverage and packaging corporations and staunchly opposed to many environmental initiatives, sought to interiorize the environmentalist critique of progress, to make individual viewers feel guilty and responsible for the degraded environment. Deflecting the question of responsibility away from corporations

and placing it entirely in the realm of individual action, the commercial castigated spectators for their environmental sins but concealed the role of industry in polluting the landscape. . . . David F. Beard, a KAB leader and the director of advertising for Reynolds Metals Company, [wrote:] “The bad habits of littering can be changed only by making all citizens aware of their responsibilities to keep our public places as clean as they do their own homes.” (2015, 81)

This is a scalar argument: it articulates individual action, not production, as the activity that matters (“individualization”). This is also a spatial argument because KAB frames disposables as objects that sometimes “leak” out of waste infrastructure (as litter) and shifts discussions from locations of production to questions about where to best put disposables after they’ve been created, where disposables are and are not allowed, and how to keep flows moving through space in the right direction. This allows the production of disposables to continue because litter and (later) recycling has been recast as the problem rather than the production of disposables.

Litter becomes deeply “*in place*” based on this social order—in other words, this framing of litter *maintains* systems of power rather than disrupts them. Litter is a case where trash was potentially dirt as a threat to power—citizens were demanding that industry eradicate disposables—but was then made nondirt as individualized litter when industry found a way to neutralize the threat of citizens’ demands for regulation on the

production of disposables by convincing the public that litter has a place (i.e., in the trash can or the recycling bin). But litter can become dirt again, as the case of New York City's 2015 polystyrene ban/reversal/new ban exemplifies. Recyclability makes disposables like polystyrene "in place" by greening them, and arguments that they are not green make them a threat to the established industrial order.

The way waste flows in some ways and not others, to the benefit of some groups more than others, in line with certain ideals and values but not others, is power. These are the norms and structures that are at stake of disruption when trash becomes "out of place," a rare but not impossible occurrence. Our examples show that there is a wide array of struggles, strategies, and infrastructures dedicated to maintaining order and that much effort is expended to ensure waste is kept in place and neutralized as a threat to power, rather than being out of place. "Out of place waste" seems to be rare, and the gift of Douglas's work is to frame how contests over power are constantly being maneuvered by actors in different positions.

Discarding Is a Technique of Power

Sorting, segregation, and cleaning are often *techniques of power* via eradication that are manifested at various

scales. Anthropologist Hugh Raffles discusses hygiene as a technique of power in 1920s Germany:

It was at this time that the new discourses of hygiene (which brought together eugenics, social Darwinism, political geography, bacteriology, parasitology, and entomology), new technologies of quarantine and delousing, and the development of bureaucratic institutions initially dedicated to the eradication of disease shifted with little friction to the eradication of people. The elimination of disease purified both race and society—by the mid-1930s, one and the same—and, increasingly, the human victims of disease were seen as indistinguishable from its nonhuman carriers: rats, lice, and other invasive and parasitic “vermin.” (2017, 176)

Social order in this context refers to ordering the world, and dangers to that order—threats to power—must be eradicated. “New” technologies or practices around waste and pollution are often inscribed along old lines of power and disempowerment, as Raffles’s foreshadowing of genocide reveals. Today, researchers can see this in action during the COVID-19 pandemic in Canada and the United States, as reported by Robyn Maynard and Andrea Ritchie (2020):

A white woman calls police on a young, Black Bahamian man she perceives as breaching social distancing protocols in Halifax, Nova Scotia, leading to his arrest and potential exposure to COVID-19 through contact with the officer and others at the police station. Dr. OmiSoore Dryden, an associate professor of

community health and epidemiology at Dalhousie University and witness to the event, reports that when she protested the officer's actions, he told her that social distancing did not apply to law enforcement officers.

Another example: In a predominantly Black New York City neighborhood, a woman out with her boyfriend reports being tear-gassed, arrested, and forced into a filthy cell with two dozen other women and no soap for thirty-six hours. Now her employer won't allow her back to work for fears she has been exposed to COVID-19 (Speri 2020; see also Oppel et al. 2020; Narayan 2020).

In these examples Black people are not simply spatially "in the wrong spot": there are also certainly elements of racism and exclusion. In a white supremacist state, Jews, Black people, Indigenous people, migrants, people of color, and those deemed "other" are threats to established power. Efforts at ordering society, whether in terms of public health, policing, or wasting, will always attempt to discipline threats to power.

We can use Douglas's work in *Purity and Danger* "unfaithfully" (Murphy 2017a, 149) by recognizing the limits of her primitivist and reductive framework and instead focusing on her catalog of *techniques* to keep matter in place when threats to power emerge. We now use examples from different empirical studies of waste and discard to show how some techniques of power operate through discarding. While Douglas enumerates each technique in *Purity and Danger* as if they are separate and escalating strategies, they also work in concert,

and any case of keeping waste “in place” can be subject to numerous intersecting strategies.

First, Douglas discusses how “labell[ing] an event of a peculiar kind [allows threatened] categories to be restored” (1966, 39). Her example is “monstrous births,” or deformed babies that are labeled as “baby hippopotamuses, accidentally born to humans and, with this labelling, the appropriate action is clear. They gently lay them in the river where they belong” (1966, 39). Angeliki Balayannis’s work on toxic waste removal demonstrates that such labeling and categorizing can be a lot of work (2019, 2020). Balayannis studies how the removal of stockpiled pesticide waste is managed in a coastal Tanzania site through contracts, inventories, photographs, categories, and protocols as well as material sacks, linoleum, boots, and personal protective equipment. Through these techniques, she writes, “the bureaucratic spectacle creates a controllable world where matter can be contained” (2020, 20). Of particular interest is the categorization of “stockpiled pesticides” that are contracted to be removed versus “pesticide-contaminated soil” that the stockpiles rest on and are not part of the contract: “Daniel (partly) jokingly explained that decision-making about what to ‘bag’ and what to leave behind was based on the ratio of pesticides to soil . . . if a patch of soil appeared to be over fifty percent constituted of pesticides, then this was a part of the stockpile. Anything less, and the material was merely ‘pesticide contaminated soil’ and had to be left at the site” (2020, 11).

This type of categorization, which creates a demarcation between stockpile versus spill and organizes action accordingly, is a way to keep matter “in place” by showing action has occurred to address the stockpiled pesticides: “with this labelling, the appropriate action is” not only “clear” but has demonstrably been completed. Indeed, these categories, paired with other techniques such as before-and-after photographs that show the visual absence of a pile of chemicals, are “necessary for this heterogeneous mass of matter to become legible for globalized disposal economies” (Balayannis 2002, 18) and they create “a controllable world where matter can be contained” (2020, 20; for more on the categorization of unruly hazardous waste as control, see Wynne 1987). Of course, Balayannis’s investigation of the process uncovers spills, seeps, and residues, but the important work has occurred for global infrastructures of environmental justice and waste disposal: business as usual is able to proceed by leveraging existing dominant modes of categorization, understanding, and circulation. The pollution “disappears.”

Yet categorization and its bureaucracies are not inherently the enemies of waste justice; they can be used in attempts to articulate and leverage matter out of place. Plastic pollution scientist Chelsea Rochman and her colleagues (2013), for example, made headlines in 2013 when they published a paper in *Nature* entitled “Classify Plastic Waste as Hazardous.” They framed their main argument using scientific categories and logics of toxicity: plastics are currently treated the same way as food

scraps and grass clippings in municipal solid waste management, but plastics not only absorb known hazardous industrial chemicals at a rate of one million times more than the environments around them but also they break down into tiny micro- and nanoplastics that flow more like chemicals than consumer objects. Since plastics act, move, and harm like industrial chemicals from a chemistry perspective, they should be classified as such. Rochman (2013) and colleagues argue, “With a change in plastics categorization, numerous affected habitats could immediately be cleaned up under national legislation using government funds” (2013, 170). In a 2020 triumph, Environment and Climate Change Canada indicated that the federal government will designate plastics as toxic (Baum 2020). Plastic lobby groups are contesting this decision, indicating that it is indeed a threat to their power (Fawcett-Atkinson 2021).

A second technique of power, Douglas writes, is that “the existence of anomaly can be physically controlled” (1966, 39). Her example is killing roosters that crow before dawn. A lion’s share of waste studies focuses on the physical control of waste and how geographical containment, circulation, and deposit are central to keeping waste “away” and thus in place. We’ve already touched on some examples: deleting violent content on social media platforms, industry-sponsored recycling of disposables, police officers arresting Black people who are not “behaving,” and the removal of stockpiled pesticides. These all show physical controls that keep the normal flow of things intact.

Indeed, much of the literature in discard studies theorizes “away” and its shortcomings, both in terms of justice (e.g., Bullard 1994; Davies 2019; Solomon 2019) and logistics (e.g., Beckett 2020; Gray-Cosgrove, Liboiron, and Lepawsky 2015; Reno 2016) and, of course, how they intersect. For instance, Coverly et al. analyze the social effects of what they call “smoothing mechanisms” that keep municipal solid waste “from becoming visible and [thus] kept in its proper place” (2008, 2) such as trashcans, curbside pickup done in the early morning or late night, rare interactions with sanitation workers, single-stream recycling that reduces the need to sort, and litter campaigns. All of these physical infrastructural mechanisms, they write, maintain an “established social order” (2) that allows unsustainable economic systems of overconsumption.

In Vanessa Agard-Jones’s work on the pesticide chlordecone, she shows how the physical control of certain materials creates and maintains colonial “peripheries” (2013). While chlordecone was banned in the United States and most of Western Europe by 1976, it continued to be used in French colonies like Martinique until the 1990s. Martinique now has some of the highest rates of prostate cancer in the world, which is linked to the pesticide. This difference in the physical control and circulation of a known harmful chemical shows how peripheries are made, not born. It’s how colonies are kept in place through pollution.

Other waste literature focuses on what happens when the physical control of waste fails. Vincent Ialenti’s

(2021) exposé of the Los Alamos National Laboratory documents how neglecting the safe handling of radioactive waste resulted in an exploded canister of nuclear waste in the US Waste Isolation Pilot Plant. Ialenti shows how social, managerial, class, and physical systems intersect inextricably to succeed, or fail, to produce an infrastructure of containment. A common thread of this diverse literature, from Balayannis to Ialenti, is that physical control is highly orchestrated, never complete or entirely successful, and always contingent.

Douglas's third method for keeping matter in place is avoidance. She writes that "a rule of avoiding anomalous things affirms and strengthens the definitions to which they do not conform. So where Leviticus abhors crawling things, we should see the abomination as the negative side of the pattern of things approved" (1988, 39). Much research on waste describes the use of othering, social taboos, and stigmatization of people associated with waste, but even the "smoothing mechanisms" like trashcans and nighttime pickups that allow waste and sanitation workers to become invisible can be understood as tactics of avoidance.

Some new work in waste studies goes a step further to show how rules of avoidance are often resisted and even leveraged to change what counts as disgusting, abominable, necessarily invisible, and wrong and to make space for often devalued social positions, showing how systems of power are never complete nor monolithic (Reno 2016). Waqas Butt (2019) argues that focusing

on abjection and caste to understand waste workers in Lahore, Pakistan, misses not only significant factors in who becomes a waste worker (such as colonialism and land settlement laws) but also how waste workers maneuver social relations to obtain work and even rights as waste workers. He notes that the monopolization of waste work by certain classes allows for political organization: “Because of the avoidance of polluting materials by caste Hindus and others, lower status groups occupied positions of power and influence as functionaries within departments of medicine, public health, and sanitation” (2019, 23). While he acknowledges that this power is fundamentally limited, he also outlines how some waste workers in Lahore are able to own land and exceed imagined rigid caste and religious categories.

Douglas’s fourth technique is that “anomalous events may be labelled dangerous. . . . But it would be a mistake to treat institutions as if they evolved in the same way as a person’s spontaneous reactions [such as disgust]. Such public beliefs are more likely to be produced in the course of reducing dissonance between individual and general interpretations. . . . Attributing danger is one way of putting a subject above dispute. It also helps to enforce conformity” (1988, 39–40). Examples of this abound in the criminalization of land protectors (Estes and Dhillon 2019), labor performed by people experiencing homelessness (Solomon 2019), and informal recyclers (Wittmer and Parizeau 2016). There

are also many examples of equating waste with danger as a way to legitimize racialized gentrification (Dillon 2014; Solomon 2019), clearing slums (Akese 2019), and broken-windows policing (Harcourt 2009).

However, we focus on an example that seems more benign: the tragedy of the commons. The tragedy of the commons, argued its originator, Garrett Hardin (1968), is that humans will overuse, pollute, and otherwise trash shared spaces and their resources without state containment and control. Yet, rather than basing the foundations of his theory in “human nature” (Liboiron 2020), Hardin was keenly motivated by fear of low-class and racialized others, according to several scholars, promoting “an idea he called ‘lifeboat ethics’: since global resources are finite, Hardin believed the rich should throw poor people overboard to keep their [higher class] boat above water” and “that only racially homogeneous societies could survive” (Mildenberger 2019a; see also Goldstein 2013; Fortier 2017; Mildenberger 2019b; Brinkley 2020). Through much of his work, Hardin framed poor and “diverse” populations as dangerous on an individual level and as a threat to planetary stability. The racialized and class premises of the tragedy of the commons have become naturalized and are rarely known to the many environmentalists and others who take up the theory. This example points to the import for researchers of waste to carefully consider how waste is kept “in place” through such techniques.

Indeed, Grace Akese (2019) has shown how researchers’ well-intentioned labeling of e-waste processing in

Agbogbloshie (a scrap and e-waste processing area in Accra, Ghana) as “dangerous” to health and environment has been readily leveraged by the state military and police to clear scrap-worker housing and dispossess them, their families, and their neighbors of land. She writes, “the land on which Old Fadama/Agbogbloshie [OFA] sits has been a contested space since the pre-independence era when Accra was a colonial city of significance for commerce and colonial administration. This important history, as I will show, despite being directly relevant to the site today, is rarely mentioned in accounts of the economies of waste that have emerged there” (40). Journalism, art, and research that paint Agbogbloshie as a filthy, dangerous “Sodom and Gomorrah” (2019, 68) “add to and invigorate the AMA’s [Accra Metropolitan Assembly] privileged interests in the land around Korle Lagoon. In this fashion, the dominant narrative of OFA within e-waste discourse is weaponized and used against the very people who bear a disproportionate burden from the processing of this waste and are fighting for their right to stay on the land amidst unequal power relations” (69–70). We choose these two examples of “dangerous” waste to show how the politics of this tactic are not always, or even often, on the side of justice, even when researchers are using or citing the tactic with the best of intentions. Power relations are not just “out there” to be studied, but are also manifested in how, where, and by whom research is done (more on this in chapter 5).

Finally, Douglas’s fifth strategy to keep threats to power in place is about how “ambiguous symbols can

be used in ritual for the same ends as they are used in poetry and mythology, to enrich meaning or to call attention to other levels of existence" (1988, 40), folding filth into power structures to give them more ritualistic, symbolic, or other transformative powers. A short description of this technique might be, "if you can't beat them, ceremonially assimilate them." Amelia Fiske (2018) documents this phenomenon in action: To protest dangerous and invasive oil extraction in the Ecuadorian Amazon, people who lived in toxic environments placed their hands in open pools of Chevron's spilled and abandoned oil, holding up their oil-coated hand as way to make the harm visible and embodied. As the gesture gained social and political meaning, Fiske documents how politicians and celebrities who were "politically and materially insulated from toxic violence" (2018, 19) appropriated the gesture in front of cameras, including Ecuadorian President Coreta, who "opened the door to oil extraction in one of the most bio-diverse regions of the world with one hand, and launched an international campaign to denounce the history of Texaco with the other" (2018, 27). This technique of integrating symbols of resistance to annul threats to power is not unique to President Coreta (also see Arefin 2019). Sociologists Bell, Fitzgerald, and York look at the

central strategy of these public-relations campaigns . . . a process we term "Identity Co-optation," which entails appropriating and reconstructing the identities of fossil fuel industries' fiercest opponents—concerned

women and mothers—in the delivery of their counterclaims. We argue that the strategic mobilization of women in defense of coal, oil, and gas is a clear example of hegemonic powers attempting to appropriate, embody—and ultimately neutralize—threats to their influence and authority. (2019, 323)

Douglas's techniques to keep matter in place can and do work together. At the same time, these five techniques can be used by activists to *create* threats to power, or at least mitigate oppression, as shown in Butt's (2019) work on waste workers in Lahore. In a similar vein, Syantani Chatterjee (2019) shows how residents of Shivaji Nagar, the area surrounding Mumbai's massive landfill, actively leverage demonstrations of "'failure' to their advantage to stake claims of belonging to the neighborhood, and demand state assistance, albeit often with punitive consequences" (2019, 49). One informant tells her, "You think failure is achieved by doing nothing? A lot of work goes into it. . . . If they ask us to fail, we will fail more forcefully, so the politicians and the government can give us something in return. So, that's our way!" (51). Hijacking representations of failure to become "a medium of exchange" (51) to achieve (always limited) government services uses Douglas's fifth technique in reverse by holding powerful actors hostage to their statements of good government. Of course, much like in Butt's (2019) work, the agency of such actors is heavily constrained, and his work also highlights how the state casts waste workers as "criminal elements and miscreants" to keep the residents of Shivaji Naga "in place."

In the previous examples we've shown that none of the meanings, materialities, or norms of waste and discard are set in stone. In each case, the same symbol, material, or action can be dedicated to either conserving or disrupting the status quo. Simply saying that trash is "matter out of place" or even a threat to power is grossly insufficient.

Accounting for *whether* and *how* acts of discarding, sorting, containing, and cleaning create and maintain or threaten systems of power is crucial for theories of and actions for change (which we discuss more in chapter 5). Bringing reusable bags to the grocery store does not get rid of plastics and their power relations. Deleting your Facebook account doesn't get rid of CCM or online hate speech. Not being racist does not get rid of a white supremacist state. Systems of power that maintain insides and outsides, safety and threats, are at different scales than instances of power. We started this book with a theory of scale—about the relationships that matter—to scaffold this discussion of power as keeping things in and out of place. The next chapter builds on this theory of power to articulate a theory of difference and how differentiation is both key to maintaining order and disrupting power.