

An Ambiguous Matter:
A Socio-Historical Analysis of Waste and Waste
Management Systems in the United States

by

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Class of 2015

An essay submitted to the
faculty of Wesleyan University
in partial fulfillment of the requirements for the
Degree of Bachelor of Arts
with Departmental Honors in Anthropology

“Tradition and habit can give the weight of Truth to assumptions about how the world works and how relationships within it are structured.” -Robin Nagle, *Picking Up: On the Streets and Behind the Trucks of the Sanitation Workers of New York City*

“No! C’monnnn,” I cried despairingly, in a voice that must have been a bit too loud judging by the faces of classmates who glanced curiously in my direction. I averted my eyes in embarrassment, but not before my brow furrowed from frustration. My summer session class was touring the neighborhood that we would soon be excavating, learning about the rich history that the houses embodied, and it was in front of one of these houses, presently occupied by Wesleyan University seniors, that I watched a male student throw his school-issued blue compost bucket into his curbside trashcan.

Although I was trying my hardest to focus my attention on my professor’s lecture, with every step I took forward, my mind directed my feet toward the trash bin. *This is not the right time to fix this-- please let it go*, I urged myself, silently this time, so as to not distract the students who had been oblivious to the tragedy I had seen take place less than 20 yards away from us. As part of my job for the Wesleyan Sustainability composting program, I had been spending the past month of May sending emails to remind students to return their clean and emptied blue buckets to the university. As the end of finals neared and only a few buckets had been returned, the other Residential Compost Intern and I had begun to send more urgent emails. We also extended the due date and changed the drop-off location: at first the designated collection site was at a central location on campus, the University Organizing Center, but as time passed, we began to suggest students take their buckets to whichever

black composting bin was nearest their house, hoping that the convenience of dropping off their bucket at one of the multiple locations across campus would combine with the fourth email of the month entitled “BUCKETSBUCKETSBUCKETS” in order to persuade students to turn in their buckets. We had worked hard to issue eighty buckets to students the previous semester, and we had hoped to get all eighty back. Yet despite our intensified efforts, by the end of May we had received only thirty buckets, and out of these, more than half still had wet streaks of residual food lining their walls. It seemed most students could not or would not take the time or effort to clean the buckets before returning them to us.

Thus it was with a sense of defeat that I saw this too-recent grad’s blue bucket fall into the trash bin like the very last truffle tree of them all. How could students think that it was ok to throw away a compost bucket that they did not own and that they knew we had repeatedly asked to be returned? Was the title of “Compost Intern” not official or straightforward enough for our emails to warrant authority? Where were our fifty missing buckets now, and how many of them had, at the very least, been recycled rather than thrown away? With my eyes still downcast, I let these anxieties fade and noted the unevenness that a patch of newly repaired sidewalk made over the older, cracked square beneath it before returning my gaze to the motioning hand of my professor.

I wish I could say this was the only difficulty that the other Residential Compost Intern and I experienced during the school year as we tried to encourage students to compost. Yet unfortunately this incident of disrespect was indicative of a

much wider pattern of student non-compliance to the composting program. Our yearly interaction with students begins with bucket distribution, during which we provide the handful of dedicated students with a blue composting bucket for their on-campus housing. Typically, these are students who compost at their parents' homes, consider themselves "eco-friendly" or work on the farm and thus know the value of finished compost, and are more than eager to start composting at the start of the school year each fall. Yet only a few students seem to share this passion, and after a few two-and-a-half-hour sessions of posting up at the campus library, telling passersby that "it's really easy, you just have to empty the bucket when it gets full or starts smelling," we must resort to other methods of distributing buckets. Last year for example, we managed to increase the total distributed buckets from 80 to 130 by going door-to-door and explaining to our audiences how easy the process of composting on campus is. While this took a lot of time and effort on our part, it did help to circulate buckets to different areas of the campus. To us, getting a bucket established in the home represents the first step in getting the student or their housemates to begin composting. Even if it sits on their porch for most of the year unused, it at least familiarizes the house and its neighbors to the image of a blue composting bucket and its potential in terms of waste reduction if it's used properly—at least, that's what we like to think whenever we pass by conspicuously unused buckets sitting neglected on senior house porches on our way to class.

Student unfamiliarity with the Wesleyan composting program leads to other issues too. Throughout the year, we often have a problem with students expecting someone to come and pick up their full buckets rather than emptying the buckets

themselves. Whether they set their full bucket near their community-area black composting bin or email our compost account asking us to empty the full, smelly bucket sitting on their back porch, a handful of students seem to assume that our system of waste collection is akin to that of trash disposal and curbside pick-up services—a service that we have never portrayed as part of the Wesleyan compost program. In fact, we send an email containing information that explains the intricacies of our unique program in order to familiarize new student composters. We attach a map of all the black bin compost drop-off locations on campus to each student who receives a bucket, and also provide a brief explanation of our composting program as a way of welcoming them into our community of people interested in maintaining a sustainable waste management system. We also plaster brightly colored, 6”x8” stickers on the face of each bucket explaining what is and is not compostable. Yet despite our design, redesign and implementation of these pictorial stickers, informational emails and detailed signage, we regularly find non-compostable items such as (animal) bones, plastic forks, twisty ties and rubber bands in both the black compost bins and the Earth Tub composting machines, the receptacles within which we place student-generated compost. Although in reality the presence of these items are negligible compared to the value of the food waste that comes intertwined in them, it is still a bother for us to have to remove these small pieces from the compost by hand—a very meticulous chore that reminds us that our directions are not always heeded. While it is clear that students are interested in composting, their participation varies in regularity, efficiency and adherence to proper procedures.

In fact, it may very well be that the only reason the residential composting program on campus appears so successful in spite of the underachievement of student composting is because the majority of the space in the Earth Tubs is occupied not by residentially-generated food waste, but by the massive amount of food scraps that are generated in the kitchens at the dining halls. For the 2013-2014 school year, the average weekly production of residential composting was 0.11 tons, compared to the 0.22 tons produced by what we call “pre-consumer” compost from the dining halls¹. For the current 2014-2015 school year, the average weekly production of residential composting has dropped to 0.09 tons while the dining halls’ weekly contribution has risen to 0.57 tons (Composting Data 2013-14; Composting Data 2014-15). And while this means we are now receiving more compost materials overall, the source of the food waste does reflect community participation in the composting program. Unlike residential composting, which is composed primarily of rotten produce from the last week’s co-op share and the leftovers that someone finally dug out from their fridge, pre-consumer dining hall compost consists mainly of food waste created in large quantities when dining hall chefs are preparing the hand-cut fruit and vegetables for the daily meals. After the compost is placed in buckets by staff members with whom most students only interact when they are served their meals, these food scraps are picked up by Wesleyan employees and driven out to the school’s farm, to be mixed with what little food waste has actually touched (non-Wesleyan employed) student hands. Though the composting program has grown over the course of my four years

¹ When I say “dining halls”, I am referring to the Usdan dining hall and Summerfields. Although efforts have been made to change this, we do not yet collect from Usdan Café, Weshop, Weswings, Star & Crescent or Red and Black in a regulated manner.

at Wesleyan, the majority of the food waste that is generated is handled not by the students, but by staff members and student employees.

While I am fascinated with waste management and excited at the prospect of being able to directly affect how we as a campus community handle our refuse, it is sometimes difficult to accept the complexities of the relationship between Wesleyan students and their waste. At my most cynical, I consider myself a low-income student condemned to perform the role of sanitation worker amongst my more affluent peers.

² Driven by my financial need for a work-study job and my personal interests in environmental studies and waste management, I perform a duty similar to that of other sanitation workers throughout high-income countries³, who work as what Robin Nagle, the anthropologist-in-residence at New York City's Department of Sanitation, calls "invisible laborers" to handle and dispose of the newly invisible, former commodity that is municipal solid waste (2013: 19). Together, the waste and its handlers are deemed "unmarked and purposely unseen" in a capitalist economy that prioritizes the replacement of products over their durability and in a consumer culture that values the cycle of commodity consumption and disposal (Guiltinan 2008). Like my waste-handling contemporaries, I help to keep a consumption-driven culture thriving; not by stimulating the market, but by effectively removing the leftover remains of our consumptive patterns from the vision and memory of the consumer.

² I will talk more about why being a sanitation worker feels "condemning" later in my essay.

³ I make this distinction because high and middle income countries are more likely to have a fully-structured waste collection service in place for the general public than low income countries. Even middle income countries have only a 50-80% rate of collection, but it does reach most residential zones and is not considered "sporadic and inefficient" as is the collection services of low income countries (Hoorneeg and Bhada-Tata 2012). While I do not contend that municipally-centered collection services are the most-efficient way to manage waste, it is necessary for the purposes of this essay to only consider the system of waste management as it operates under the collection services of the United States.

It is here that the Wesleyan residential composting program and the wider concept of composting throw a wrench into the game of the United States's social construction of waste. Residential composting asks students to interact with their own waste past the usual point of what we would define as our consumer responsibility. Transgressing the system of social codes that we have come to understand as conventional waste management in the United States by connecting the paradigm of municipal recycling to that of the Zero Waste Movement, we ask our fellow students to retain their consumed material until they themselves have time to dump it into a communal compost receptacle. This practice contravenes the way in which our consumer culture has come to view waste and its role in our society, and asks students to reconsider firmly-established cultural ideals by enforcing prolonged exposure of the student consumer to their own waste. In considering why this request can seem both straightforward, and yet deeply-perturbing to the student, we may begin to reflect on the role that our cultural values have come to play in shaping larger, more established ideals and systems of waste management in the United States.⁴ While it may seem that waste management is a system guided by environmental science research and various engineering technologies, it also relies heavily on social notions constructed by ideals and principles deeply embedded in our cultural structure (Engler 2004). These conceptions muddle the public practice of waste management with a mixture of responsibilities, duties, fears and desires (Engler 2004). In this

⁴Many of the social considerations and taboos I describe are not phenomena restricted to the culture of the United States; however, I rely on the framework of the United States' historical and economic developments to create a specific ontology of waste for this essay. Whereas many aspects of the history of waste in the U.S. do serve as archetypal concepts concerning waste in many other high-income, capitalist nations, I do attempt to write an overarching study that encompasses high-income or capitalist countries as a single social identity.

essay, I will engage with the work of anthropologist Mary Douglas to show how our social consciousness and cultural taboos regarding items of waste have guided and in some ways limited the citizen's understanding of waste management, and by grounding our notions of waste in social and historical contexts, will construct a holistic analysis of the United States citizen's (dis)connection to the reality of their waste today.⁵

Establishing the Social Notion of Waste

It may be difficult at first to consider trash as a substance heavily imbued with social and cultural assumptions, realities, and rituals. Our daily interaction with our trash hardly seems to be conceived as an interaction at all, but rather a passively-enacted habit (Engler 2004). Like shielding our eyes from the bright light of the sun, or re-fastening our clothing after using the restroom, throwing an item away has become a behavior of which we hardly take note (Nagle 2013; Engler 2004).

Although an individual's dealing with waste is an action "both conscious and unconscious" (Engler 2004: 14), seldom do we seem to even make a cognitive

⁵ It must be explained here that by waste I mean in large part MSW, or "Municipal Solid Waste". While industrial waste, air pollution and wastewater are all very real and serious factions of the refuse created by the United States and other countries worldwide, these topics will be referenced only briefly in my essay. This choice reflects the unfortunate reality of the priorities of most waste studies and I implore my peers to give more scholarly attention to these affairs whose research may in fact be of more urgency than the concern of United States MSW (Macbride 2012). Yet while industrial waste is generated in much larger quantities than MSW, its research runs the risk of being socially discredited as the specificities of its generation amounts and disposal techniques have been heavily obscured by corporations (Macbride 2012). Moreover, it is more difficult to attach a social movement to waste material that has been invisibilized, as we have seen by the little attention given air pollution in comparison to MSW. Lastly, while United States MSW is far from the worst element of current waste generation, it is still a pressing topic when compared to the MSW of other countries. The United States generates an average of 7.1 pounds per person per day (Humes 2012). This is in comparison to the combined average of 4.2 pounds per person per day of the OECD (Organization for Economic Co-operation and Development), and in stark comparison of the combined average of the next leading waste-producing region of East Asia and the Pacific, who creates 2.2 pounds per person per day (Hoornweg and Bhada-Tata 2012). Through an international lens, United States MSW can thus still be considered a relatively pressing issue.

distinction between having created waste and having disposed of it. In school, we rarely learn about what societies such as the Romans threw away in antiquity, nor is it common to hear co-workers discussing how many trash bags they place by the street the previous night for the garbage trucks to pick up in the morning. It would seem that it is simply not an active member of our everyday social conscious.

Yet there are certain times when trash does breach our realm of consciousness: we become flustered by our waste as we leave a fast-food restaurant and have to search for the correct waste receptacles to dispose of our hamburger wrappers. We become upset by the sight of someone carelessly tossing a cigarette butt or gum wrapper out their car window. We become disgusted by the smell of the tuna casserole decomposing beneath layers of napkins and packaging in the bottom of our kitchen trashcan. Examining the situations under which we do take note of our trash can serve as an entry point for analysis into understanding the social worth and significance given to waste by United States' society today.

Incidents such as these often stick out in our mind as our primary form of interaction with garbage because, as opposed to the more frequent action of tossing our accumulated waste into the trashcan each day, we find these incidents noteworthy. Waste seems to most often cross into our frame of consciousness when it becomes in some way noticeable; on the other hand, when it appears unexceptional, it remains an unacknowledged component of mundane life (Nagle 2013). It is here that we begin to run into one of the many contradictions that help to characterize waste—what does it mean for a substance to exist only to be most commonly recognized when it has become an anomaly within its environment? We ask “if a tree falls in an

empty forest, does it make a sound?” as a way of noting the important role of observer that one subject plays in validating and actualizing the presence of another subject. But what of the subjects who deny their role as observer or ignore the presence of another subject? Are these other subjects then invalidated and somehow unactualized? If a candy wrapper falls directly into a trashcan surrounded by people, do the people take notice? In most cases, they do not. If the candy wrapper misses the trashcan and hits the floor, then do they take notice? Almost certainly. Waste seems to make its greatest appearance when it is contesting society’s attempt to control and eliminate it.

To further complicate the social existence of waste, the application of the term “waste” is far from definitive. A specific item could be defined as waste or not waste depending on who is defining it, where it is located, whether or not it is whole, or where it is in its life stage (Engler 2004; Douglas 1984). I may find use in a bowl my housemate throws away, an apple becomes waste once I drop it on the ground (or into the composting bin), a shattered bottle is no longer usable and thus becomes trash, month-old, spoiled milk gets poured down the sink—items quickly and seamlessly change form and definition as they are passed through different spatial, temporal, or conceptual frames of perception.

These perceptions are held together by a multitude of synonyms for waste that may or may not apply to the substance in question, and the phraseology might not always be dependent on its objective value (Engler 2004). An item may be termed waste when it is seen as useless, or just when it is no longer needed (Enger 2004). Yet while an item such as an empty juice bottle is considered both useless and no longer

needed in that it no longer serves the purpose of containing juice, it is still capable of holding a liquid. It has, however, lost its attached social value and identity as a juice bottle and in possessing a newly unclear identity has the strong potential to become trash (Douglas 1984). An assemblage of other descriptive synonyms, such as damaged and rejected, can all be summarized as “negative concepts that entail uselessness, negligence, or human failure” (Engler 2004: 12). Dirt, shit, and garbage are also common names used to term materials we no longer want or care for (Douglas 1984; Engler 2004). These terms carry with them a negative connotation and conjure images of pollution or disgust in addition to exemplifying a low social value (Douglas 1984; Engler 2004). As mentioned above, waste is also ambiguous: there is no absolute rule that tells what material is waste and when it can be considered waste; in many cases it is only dirty insofar as it does not fit the image of cleanliness (Engler 2004; Douglas 1984). This ambiguity is also sometimes manifested in its visual appearance—lumps of residual food are especially hard to discern as recognizable forms. Lastly, waste is marginal (Douglas 1984; Engler 2004; Nagle 2013). It “exists along both physical and cognitive edges” of society (Nagle 2013: 23), with waste bins pushed underneath desks and trashcans clinging to the edge of the sidewalk as passersby give a thoughtless farewell toss to their leftover lunches.

While it may seem tedious to consider the nomenclature of waste, it is important to examine how these synonyms help to supplement and further inform the term waste and what we know of its social meaning (Engler 2004). For example, while we understand recyclables and donatable items to be no longer wanted, it is

difficult to think of them as “waste” because the framework of the today’s environmental movement has imbued them with positive social meaning (MacBride 2012). Nevertheless, when we contemplate how to “reduce waste,” some of our favorite solutions include recycling and donating items that might otherwise be thrown away (Ewall 2014; Nagle 2013; MacBride 2012). These and other articles seem to only be considered waste in their negation of usefulness. Some items, like countertops, become dirty but rarely become part of household-generated waste, and many materials are not wasted in the sense that they are squandered, but are disposed of because they have lost their original value or identity. Simply by considering the words we use to describe these terms, we are able to begin to infer their general social reality (Engler 2004). In comprehending waste as negligible, we treat it as we treat other negligible entities. This serves to reinforce our understanding of both waste and negligibility, and establish and reaffirm the linguistic connection between them. On the other hand, since it is our own society that chose to attach such meanings as “useless,” “polluting” and “dirty” to waste and other refuse (Engler 2004; Douglas 1984), it is necessary for us to look beyond the linguistic semantics that we ourselves have already imposed, and consider what social ideals and conventions that help to inform our language of waste.

The individual’s (non-)relationship with waste described above does not exist in a vacuum, but rather is deeply intertwined within a greater system of social structuring. In her book *Purity and Danger*, Anthropologist Mary Douglas describes the system as a process of social perceiving and patterning (1984). As society perceives certain concepts, the collective mind creates a system of classifications in

which to order these perceptions (Douglas 1984). Douglas explains that repeated exposure to certain perceptions, such as the reinforced marriage of certain terms as described above, strengthen their pattern and their connection to and value in the larger social structure (1984). The more often we describe apples as sweet, the more we both validate their sweetness and validate society's definition of what both an apple and sweetness are. Similarly, ideas that fall outside of the existing classification structure are either manipulated to be included in a classification or are not acknowledged (Douglas 1984). In the course of their rejection, Douglas illustrates, these concepts come to represent anomalies or ambiguities to the social system (1984). In discussing how to approach such irregularities, Douglas explains:

“Negatively, we can ignore, just not perceive them, or perceiving we can condemn. Positively we can deliberately confront the anomaly and try to create a new pattern of reality in which it has a place.” (1984: 38).

This formulation of new classifications and anomalies is more easily manageable and malleable on an individual level than at the cultural scale (Douglas 1984). While individuals may be able to ignore unusual concepts and entities that make them uncomfortable, society must make classifications in a way that is both firm and able to efficiently attend to their identification as an anomaly in order to create a sound and stable social conscious (Douglas 1984). While I may find it preferable to do my homework with my shoes off in the comforts of my own home, were the whole library to make this decision day after day, our campus would begin to run into issues as a result of the daily culmination of bare foot-to-floor contact. To avoid effects that we perceive to be negative, such as a smelly atmosphere and an increased potential for physical or medical danger, we make a collective decision to wear our shoes in the

library. We as individuals may reject or accept these perspectives, but as active participants in a culture, we make a choice either in adherence to or observance of the social system (Douglas 1984). This social participation helps reinforce and reshape our culture as new and old ideas and identities are presented within the social sphere (Douglas 1984). This theory of societal patterning will help us to better understand how we interact with our trash.

Douglas suggests there are several ways in which cultures deal with disputable ideas such as waste. She describes dirt as an anomaly created as the “by-product of a systematic ordering and classification of matter” (1984: 35). In being a by-product of socially-acceptable ideas and orderings, and therefore different and set apart from those materials, it becomes a social image of non-order (Douglas 1984). Moreover, dirt becomes a model of antithesis to order: it “affirms and strengthens the definitions to which [it does] not conform” (1984: 39). The candy wrapper, when sitting on the floor, defines the area around it as an ordered space free of dirt and clutter. This is why it is looked upon with concern—by sitting outside of the trashcan, it is existing in a space that it as waste does not belong, which upsets the social patterning we have created for cleanliness and trash. In this way, dirt does not have a rigid definition but becomes defined in that it is not cleanliness (Engler 2004), its meaning is that of the negative of order.

It is also ambiguous in that it does not fit the classification of matter (Douglas 1984). In its existence it is not non-matter, but in its designation as a by-product of matter, it cannot be considered the matter itself (Douglas 1984). A banana peel, for instance, is not part of the usable banana, and yet it is still undeniably connected to

the usable banana. Once it is removed from the banana and loses its only functional role as a protective cover for the banana fruit, it attains what Douglas calls a “half-identity”, and exposes itself as a problem of ambiguity: “their half-identity still clings to them and the clarity of the scene in which they obtrude is impaired by their presence” (160). Without its use value, the useless peel must be re-examined and tentatively placed into another classification. This transition of classification assumes dangerous conditions for peel within the social conscious, as during this period it is unrecognizable matter (Douglas 1984). No longer part of the banana but not itself edible, it becomes the banana’s by-product and is sent away as an anomalous material in the process of reordering our surroundings to fit our expectations of discernable conceptualities and forms (Douglas 1984; Engler 2004). The muddled and unusual characteristics that we have attributed to waste thus become testimonies for the contestation for dirt within the social system.

Confronting the questionable concept of waste is also met by mechanisms of social tempering. Anomalies and ambiguities can be somewhat extinguished by being lessened and maintained, adding a dimension of action to the measure of labelling the concept as (Douglas 1984). After discerning waste as non-order, society begins to create tasks to mitigate the effect of the undesirable matter. “Pollution beliefs” and their subsequent behavior describe this action of removing or replacing dirt and rearranging the abhorrent anomaly into recognizable patterns: house cleaning, municipal garbage pick-ups, and taking a shower are all examples of methods by which we as a culture deal with reordering the dirt we perceive (Douglas 1984: 3). The act of performing these behaviors helps us to restore confidence in the

cultural system as a working and ideal set of patterns by eliminating the anomaly, and the process of re-ordering becomes in itself a new system of positive ordering (Douglas 1984). By notating debris on the dining room floor as disorder and using a broom to sweep it away, we become not only a culture that prioritizes order, but a culture that displays its prioritizing of order through such tasks as sweeping.

Many of these reordering methods become encoded with the concept of risk prevention in order to further control the anomaly (Douglas 1984). The anomaly can become associated with danger as “one way of putting a subject above dispute” (Douglas 1984: 39-40). Waste has become a feared object over time as it has gained both real and perceived connections to different types of pollution (Douglas 1984; Engler 2004; MacBride 2012). One of the main concerns can be observed in its relation to disease (Douglas 1984; Engler 2004; MacBride 2012; Nagle 2013). While the risk of pathogenic infection via contaminated waste material was shown to be a scientifically-proven fact, miasmatic contamination via the bad air of rotting food was proven to be unfounded, and yet both have had lasting implications for the meaning of trash today as an object whose smell and general presence evokes fear and disgust (Engler 2004; MacBride 2012). These fears, whether they based on the grounds of “physical, medical, [or] moral” safety for oneself (Engler 2004: 17), are embraced in order to reaffirm dirt as a social anomaly and to provide more rationale for installing preventative actions into the social structure (Douglas 1984).

Douglas notes the duality of pollution behavior by saying that our “dirt avoidance” is shaped by ideas of both aesthetics, whose emphasis on physical or idealized appearance are informed by acts of arrangement and control, and hygiene,

whose strong tie to perceived or actual risk are informed by acts of pollution prevention (1984: 35). This concept can take on characteristics of a social taboo, by portraying the anomaly of dirt as something that exists outside of social patterning, and is kept under control surrounded by social conventions “inspired by fear” (1984: 10). Pollution taboos underscore extra-ordinary status of waste by obscuring it with danger beliefs, and these beliefs further govern the conduct of society as it pertains to its interaction with waste (Douglas 1984). Preparing food without having washed one’s hands after using the restroom is one example of a pollution taboo. The behavior is founded on scientific discovery of food-borne bacteria such as *E. coli* that may be passed from the stool to the food preparation area and thus is factually and socially justified as an acceptable preventative measure; however, the action is performed on the assumption that these pathogens are indeed present at that moment, that the subsequent risk of cross-contamination is 100% and that the washing of one’s hands erases this danger. Washing hands is considered by the individual to kill dangerous germs every time. The question of whether or not the germs are actually present on one’s hand is beside the fact that in performing the act of washing one’s hands, they eliminate the risk of spreading disease.

In this way, the behavior can be viewed as the result of social ordering: the creation of a rigid and believable rationale—based on fear—enforces the pollution behavior of always washing one’s hands after using the restroom while preparing food. As the action of prevention portrays a positive reinforcement to the social structure by acknowledging the potentially hazardous material as an anomaly, it may matter little to an individual whether the hazard is perceived or real (Douglas 1984).

With the label of “potentially dangerous”, Douglas notes, the situation gains clearer social instructions on how it is expected to be handled, thus further avoiding the anomaly and upholding the status of taboo which surrounds dirt (1984). The social treatment of anomalies provides a place in the social matrix for subjects which appear ambiguous to the system, and the collective promotion of social conventions around anomalies and taboos helps to validate the system as a working whole (Douglas 1984). Social behavior is able to remain regulated while potentially confusing or vague ideas like dirt are re-ordered to fit into the structure.

These actions of pollution prevention and environment ordering are examples of cultural ritual surrounding the waste anomaly (Douglas 1984). Just as the sweeping of the floor serves to reaffirm the reality of dirt and dirt avoidance in society, rituals help to confirm the patterns of the cultural system (Douglas 1984). The repetitive behavior of removing and re-ordering waste intensifies the system of cleaning and waste management, while simultaneously controlling the anomaly of dirt. The compounding of these ideals through ritualistic behavior develops a stronger sense of what is and what is not part of the social structure, and identifies a clear boundary between the two (Douglas 1984). Thus the practices of hygiene become both actual and symbolic social rites (Douglas 1984). In addition to creating a social reality of waste and waste management, cleaning behaviors order our environment into a physically-enacted vision of these social ideals (Douglas 1984; Engler 2004). The swept floor becomes evidence of socially-acceptable behavior, and the individual’s participation in creating this phenomenon validates her position within the culture and is therefore a positive experience (Douglas 1984). This positive experience is likely to

be repeated in the future, for the sake of retaining the social structure if not also for her desire to renew her social position within it, and it is in this way that rituals surpass mundane tasks and begin to take on a wider cultural meaning.

As we re-order our environment through these ritualistic acts, we create a space that reflects the ideals of our cultural structure (Douglas 1984). During this procedure, matter that is considered dangerous or anomalous, then, is either specifically rearranged or removed in order to decrease its potential for social hazard and confusion (Douglas 1984). Having been removed, this matter must be placed elsewhere, for it is physically impossible for it to simply disappear. With a defined social boundary in place, these ambiguous concepts and entities can then find sociological justification for being relocated beyond this boundary (Douglas 1984; Engler 2004). Whether this is manifested ideologically—such as removing an idea from the discussion table because it does not align with the politics of the table—or physically—such as relocating waste to the landfill just beyond the city limits—these actions accentuate the delineation between acceptable and unacceptable cultural principles by placing them in ordered and disordered social landscapes respectively (Douglas 1984; Engler 2004). It is noted by waste researchers that there is a linguistic significance to the phrase “to throw away (something)” in that it underscores the sentiment towards waste’s prompt removal from the living realm of society (Engler 2004; Nagle 2013). In relocating refuse to marginal spaces, we reassert the marginal nature of its existence within our social system (Engler 2004; Nagle 2013). Furthermore, by transferring it away from us, we indicate that it is of little value to us and is no longer wanted or needed (Engler 2004; Nagle 2013). Whether or not our

explicit intention is to forget about the debris, we do remove it from our immediate social sphere as a way of creating distance through a separation and boundary of time, matter and space (Engler 2004). As we place dirt on the periphery, we define it as a material that is not wanted here right now and relocate it to a space that reflects those sentiments.

It is through this active patterning, ordering and removing of objects and ideas that society fashions and maintains a system of cultural values. In classifying waste as an undefinable material, we determine its inability to fit into the structure of pre-conceived patterns, and in attempting to arrange it within the patterns, we deem it an entity not already ordered, and thus disordered. We then commence to make sense of this anomalous and ambiguous matter by physically controlling it and attaching danger to it. We remove it, replace it, and create rules and regulations around it. These behaviors are honed as they are repeated, and those behaviors that benefit the existing larger social structure are instituted as rituals of hygiene and waste management. The rituals in turn help to fortify the social system and re-order the microcosm of the immediate environment into a space of purity and order. To achieve this ideal, waste is removed from the social sphere and relocated to its outskirts to be set away from the physical boundaries of the nuclear social structure. This brief narrative serves to simplify the aesthetics and social value of waste within our cultural system and to identify the general designation of waste as ambiguous, polluting, useless, and marginal. By examining the broad terms of creation of our culture's social systems, as well as our navigation of the concept of waste within

those terms, we can begin to understand how the meaning of waste becomes imbued with a particular social meaning.

It may be noted, however, that the issue of temporality remains unaddressed within this theory of cultural systems. This is due in part because of the timelessness of the social structure. While specific details in a society's history are undoubtedly tied to a certain period in time, the act of creating and maintaining a social system is a continuous process (Douglas 1984). The social theory of waste described above are likewise not related to a certain point in time: there was not a particular day or even year in which our society claimed that trash encapsulated a distinct set of items to be treated as marginal or ambiguous. Rather, dirt gained its identity through the collective reaffirmation of its status as disordered matter, and continues to do so, under the ritualistic behaviors of cleanliness. Just as it began, dirt remains ambiguous in form and definition, and differs in appearance and consideration between generations, classes, ethnicities and regions. Individuals also play a role in defining and redefining the term "waste" as they perform and contest the social ideals of trash and waste management. Its existence, in its many forms, is recognized not only when society or an individual deems a peculiar item as waste, but when materials perform the roles of waste. Regardless of the time period, as a substance is removed from the social environment into an area designated for trash it is considered trash; as a substance is under the scrutiny of pollution beliefs it is considered waste. This application of the social system as one that is conceptualized yet unbound, identified yet undefined, allows the narrative to remain largely free of temporal, locational and

contextual constraints, while still providing a general framework with which to contemplate waste as a social reality.

A Brief History of Waste in the United States

It is with this conception of waste's social reality that we have come to create and recreate personal cleaning habits and communal waste management systems in the United States. As our cultural system has changed and developed over time with factors such as the country's population growth, geographic expansion, and economic developments, waste practices have not remained oblivious to these changes but have acted in tandem with them (Engler 2004; MacBride 2012; Nagle 2013). Choosing to locate one's trash in a specific area of the backyard in the seventeenth century became not only a way to define and order one's physical space, but a way to define and manage the waste items within that space. This behavior is also indicative of larger and more time-sensitive social trends, such as the common technological availabilities and socio-spatial arrangements of the time period. In colonial times, for example, the content and nature of the trash was very different than it is now: trash was mostly secluded to the yard or outside areas, and most trash matter did not reach a permanent stage of waste. This was due to the limited material available to European settlements of the time, which caused colonists to reuse or otherwise reclaim most of their materials (Engler 2004; MacBride 2012). Human waste was sometimes sold to local farmers, and food scraps became the meals of scavenging animals such as pigs and chickens (Engler 2004; Nagle 2013). Piles of refuse did accumulate, however, and while there was not yet a social connection of trash to the manifestations of dangerous bacteria, it was considered a nuisance to the human

senses (Engler 2004; Nagle 2013). Personal and social pollution behaviors began to develop as a result: perfumes were introduced to mask the smell of refuse and bodily odor, and communal laws were established as an attempt to control waste (enforcing them, however, was a different matter) (Engler 2004; Nagle 2013). In some places, informal systems of waste removal were installed as settlers and African slaves took on task of removing and relocating waste for little pay (Nagle 2013). Inconsistent and irregular, an inkling of the social perception of waste and its management was beginning to take cultural form.

The shaping of waste as a bothersome substance to be controlled and removed by low wage workers also forged a connection between waste and the social hierarchy. As growing communities ordered their social spaces, certain areas and occupations began to gain more value than others (Engler 2004). According to author Mira Engler, “‘Dirtiness,’ which always appeared in areas with the suspect qualities of impurity, immorality, backwardness, and ignorance, now justified social ranking of race and class” (2004: 49). Refuse removal from communal spaces ensured that areas regarded as socially-attractive cultural centers were aligned with the socially-attractive ideals of cleanliness and order, and as a result, those spaces that became disordered and full of waste were deemed socially unsavory (Engler 2004). Those areas laden with refuse, a material quickly gaining a reputation for its repulsiveness, became symbolically associated with people who were not able to afford new items, such as perfume and running water, which had gained popularity in their ability to prevent or mitigate the accumulation of human dirt (Engler 2004). The care of waste removal, then, was also left to those members of society whose social positions

reflected the perception of waste: enslaved persons and other lower class individuals, living in peripheral social and locational zones, were handed the duty of managing the undesirable matter and relocating it to the margins of everyday life (Nagle 2013). Some impoverished families took to scavenging the streets and docks for usable material such as rags, food and wire as means of maintaining their meager lifestyle (Nagle 2013). Whether these items were kept or sold for profit to material reclamation businesses (MacBride 2012; Nagle 2013), the simple sight of the poor mingling with other peoples' waste would have surely added to the negative attention the upper classes were giving to both the poorer classes and the community's trash problem.

During the mid-1800s, a scientific study was released that linked contaminated waste as the cause for certain epidemics (Nagle 2013). This was not the first disease theory proposed, but illness and waste had become rather common occurrences in some more densely populated areas such as New York City and citizens were eager to make concerted efforts toward constructing a system that would both remove dirt from the streets and stop the outbreaks of illness (Engler 2004; Nagle 2013). Connecting sickness with waste also defined it as a subject of medical, rather than aesthetic, pollution, and thus it was at this time that waste was vigorously recast as a dangerous anomaly and taboo to be controlled and contained (Engler 2004). Soap was invented, and hygiene took on a new meaning as a set of germ-killing preventative rituals (Engler 2004). Sewage systems and public street sweeping agencies began to take hold of the societal imagination for waste disposal (Engler 2004; Nagle 2013). Where there were no municipal systems in place, groups

such as the New York Conference of Ladies' Health Protective Association took it upon themselves to campaign for the removal of garbage from the City's streets (Engler 2004; Nagle 2013). Like other communities around the country, these women were forging a new political voice for waste management by intertwining the recently developed social notions of public and individual sanitation with raised communal standards of civic aesthetics (Engler 2004; Nagle 2013). With a combination of disease prevention and municipal beautification serving as impetus, structured city-wide and city-owned sanitation systems were founded and set in place (Engler 2004; Nagle 2013).

While the collective structuring around waste disposal became a sign of citizenly autonomy and social organizing of principles, the private realm was also being re-ordered to comply with societal ideals. Homes and their yards began to take on more orderly appearances as the owners assimilated their pollution behavior to fit the added requirement of personal social status—in addition to being piles of waste, trash pits acquired the symbolic dimension of representing the class status of the home owner (Engler 2004). With the appearance of municipal sewers, plumbing technology gained a popular stance in the home, helping to radically change the individual's interaction with human waste (Engler 2004). Like street sweeping, the sewers created a service provided by the city to help eliminate the waste of the citizen (Engler 2004). While not every house had a lavatory, bathtub and water closet, these items were becoming well-known to the United States public as conceivable accommodations for their homes (Engler 2004), aiding to endorse the established

perceptions of waste as useless and marginal by offering an easy and efficient mode of disposal.

Municipal waste management created enormous shifts in the paradigm of waste's social reality. Giving the public access to a more effortless form of disposal for multiple types of waste—from feces to body dirt, ashes to broken glass—also instilled in the public a strong faith in the new system of waste disposal (Engler 2004; Nagle 2013). While waste remained the topic of a social taboo, its new ability to be so easily removed from the collective mind was exhilarating to the citizen as it gave them a renewed sense of control over their trash (Engler 2004). Citizens could now watch waste, which had so recently been the source of public concern, disappear before their eyes as if by magic (Engler 2004; Nagle 2013). Sites in the home like the kitchen, which before had been separated from living spaces due to their connection with waste and filth, became more trusted as they were equipped with water pipes and a new belief that these sites were now capable of managing and controlling waste (Engler 2004).

Sanitation workers and plumbers were also held in high regards, as they now represented the face of waste management and disease control (Engler 2004; Nagle 2013). A poster issued by the plumbing appliance company American Standard during the late nineteenth century exclaims “The Plumber Protects the Health of the Nation” (cited in Engler 2004: fig. 2.1), using the authority of the newly constituted social principles of hygiene and technological advances of plumbing to assert that the plumber provided the key to defense from the now augmented dangers of dirt (Engler 2004). New York's new street sweepers were also glorified as their hard work

dramatically transformed the appearance of the streets in less than a year's time (Nagle 2013). Uniformed in bright white uniforms and helmets, street sweepers symbolized the sanitation and purity they were working to impose upon the City (Nagle 2013). Their meticulous and scheduled removal of waste was so imperative to the city's priorities that a parade was even organized in their honor, and as the sweepers marched through the clean streets of New York, they were met with a crowd full of applauding citizens (Humes 2012; Nagle 2013). Not only was rubbish being controlled and removed, but in its removal it was creating a clean space that was viewed by the public as visually-appealing, for it represented the deterrence of social, medical and physical pollution: the aesthetics of waste management had been developed, and in their implementation, they had been standardized.

It was with these ideals of waste that United States society entered the turn of the century. The booming economy of the early 1900s resulted in the mass manufacture of products, resulting in a larger amount of garbage (Engler 2004; MacBride 2012). Items characterizing the material manifestation of economic growth now filled trashcans with "excessive packaging, printed advertisements, sales catalogs, built-in obsolescence and disposable products" (Engler 2004: 62). With the new abundance of products, disposability exceeded its previous purpose as restoring order to waste pollution and became a new practice. In a time of economic prosperity, wastefulness came to represent the wealth of the nation, the power of the American capitalist market (Engler 2004). As refuse appeared at faster and faster intervals, society corresponded with faster and more efficient methods of waste disposal (Engler 2004). While the municipal garbage systems continued to handle city waste,

the household began to reflect the increased volume of waste generated (Engler 2004). Familial garbage cans became bigger in size, and the idea of burning one's trash became popular as it was deemed a quick way to eliminate waste (Child 1925). Waste and compost piles were in large part removed from the yard as the space came to represent one of leisure rather than work (Engler 2004). Spotless kitchens and yards signified a winning battle against the accumulation of garbage in spite of the increase in household consumption, and individuals sought to maintain these images through their new and more efficient home and yard maintenance practices (Engler 2004).

Up until this point in time, United States society had wrestled with the idea of waste in a diversified but ultimately straightforward manner that reflected and confirmed waste's position in the social system. As waste came to be a public nuisance, it was controlled and removed from to the outskirts of those spheres, and the symbolic attachments that society made to certain classes and locations of culture labelled them as social extensions of marginal waste while also labelling waste as a material extension of socially-undesirable anomalies. Dirt's anomalous status became a subject of taboo as scientific discoveries linked waste to health risks such as disease transmission. In response, society tightened their existing methods of waste control, and also developed new waste management rituals and services, such as municipal trash removal, sewer systems and hygiene, in order to minimize the future chances of epidemics. While these new implementations did give society a political voice for waste management and completely reorder the physical appearance of municipal space, conceptually they did little beyond regulate and institutionalize the old ideals

of wasted matter as an anomalous and ambiguous danger to be removed to marginal spaces. This notion was upheld and elaborated upon over time through new cultural standards of aesthetics, efficiency and disposability. Although developments in technologies and social concepts allowed society to interact with their waste in continually new ways, the system of waste and waste management was significantly limited by the negatively-imbued social reality that had been affixed to trash. It was not until the introduction of municipal recycling that United States culture was able to break through its enduring cultural configuration of waste and waste management to create a new addition to the social reality of waste: the recycling bin.

Recycling as a Re-ordering of the Social Reality of Waste

By the 1960s, the two-step cycle of consumption and disposal was reaching its breaking point (Engler 2004; MacBride 2012). While new disposal technologies such as the kitchen trash compacter and the “Godzilla” garbage truck continued to depict waste elimination as an easy and manageable task for the United States product-consuming individual, waste generation across the country was escalating too quickly (Engler 2004; MacBride 2012). Broken glass had become a considerable hazard for public spaces such as playgrounds and sidewalks, once again framing waste as disorder and danger (MacBride 2012). New refuse items such as plastic and yard waste were not only adding to the pre-existing trash quantities but were occupying sizable portions of the trash bins (Engler 2004; Environmental Protection Agency [EPA] 2009; MacBride 2012). Regions of the U.S. (specifically areas of dense population like New York City) were running out of marginal places to locate their garbage (MacBride 2012; Nagle 2013). Trash was no longer remaining in its

peripheral societal spaces, but was gaining a central spot in governmental and social conversation (Engler 2004; MacBride 2012). The antiquated issue of unwanted waste in the public sphere seemed to be reemerging under similar circumstances. Less than a century later, garbage was again threatening the social matrix by making its dirty appearance in the pristine realm of society; yet this time its danger took the form of environmental pollution.

With large amounts of visual evidence pointing to municipal waste generation as a worthy concern, it also became a clear target for the public's developing environmental action groups (MacBride 2012). Litter such as the broken glass would have come to be seen as a physical hazard for pedestrians, and the aggrandized trash trucks would have towered over other vehicles as they carried municipal waste through the city each day, crystallizing in the collective mind the image of waste as imposing and dangerous to the environment (Engler 2004). In 1965, Congress passed its first set of national regulations for waste, indicating to the waste industry "how to dispose safely of large volumes of municipal and industrial solid wastes" and actualizing to the public that waste had become a national issue (Engler 2004; EPA 2013). Society had again identified waste as a real danger to our environment and therefore ourselves, and began again to look for ways to moderate that danger. Encouraged by this concern, scientists proposed the solution of reclaiming wasted material for reuse (Hill 1969, cited in MacBride 2012).⁶ This method would take the place of landfills and incinerators as the new receiver of waste, and would relieve the

⁶ The scrap industry was and had already been reclaiming materials for centuries by this time (MacBride 2012). According to MacBride, while scrap industries were not really considered by the public as thriving in the waste management world, these businesses were quite developed. It was only with the rapid growth in numbers and popularity that recycling centers began to push scrap reclamation companies out of their own businesses (2012).

public of its pressing issue of too much trash (Macbride 2012). Trash as a dangerous social anomaly seemed to have once again been corrected by a new pollution prevention technique.

Yet this solution to the social problem of waste quickly began to deviate from that of the bodily pollution regime that constituted the late 1880s. Whereas hygiene and municipal waste removal provided the public with new rituals and technologies for controlling waste, recycling radically changed the way the general public perceived their trash by adding an entirely new definition of waste to the pre-existing system. Waste was no longer “matter out of place” as Douglas defines it (1984: 35), but “raw materials to be utilized” (De Bell 1970, quoted in MacBride 2012). Refuse was no longer defined by the single dimension of taboo, but gained a role within positive social patterning as well. Foremost, recycling enabled society to take the disorder that waste created and reorder it while still retaining the matter’s identity as one of waste: individuals could now take their empty Coke bottles and designate a spot for them within society rather than outside of it. No longer carrying “half-identities”, these items were “put in the recycling bin” and sent to the recycling center to be reused by society, not “thrown away” and sent to the landfill to be buried beneath the proverbial social consciousness. In this way, recycling allowed recyclable waste to be understood as “of use” to society, as material that had a clear purpose and role within the social system (Engler 2004; Macbride 2012). Unlike waste, recycling was not a pollutant but its inverse: like hygienic rituals, recycling was seen as a way of “reducing pollution” (Engler 2004; MacBride 2012). Instead of being dirty as waste was, recycling was touted as something that “helps keep the earth clean” (Keep

Earth Beautiful). Not only did recycling provide a new element for society's perception of waste, it directly addressed and quelled each aspect of waste that society deemed troublesome.

Recycling's connection to waste and waste management has been both complex and significant. Although recycling in many ways has stood in opposition to the social concept of waste, it is still considered a type of waste material. We see evidence of this manifested in multiple departments of our culture: recycling bins are often fashioned after trash bins with possible differences in color, insignia or size; recyclable material is occasionally still placed in the trash, which indicates that it still carries the societal definition of waste; and the EPA's yearly report of Municipal Solid Waste (MSW) includes recycling as a percentage of the "Total MSW Generated" (EPA 2012). Thus recycling has enabled waste to be called usable and defined for the first time, as something clean and free of pollution, but also as something still considered a wasted item. By remaining connected to the idea of waste, recycling has allowed waste to take on these definitions as a new and positive meaning: waste is no longer trash, but has the potential to also be a resource (Freid 2014). In subsuming the framework of the environmental movement, society's municipal waste management system was able to continue managing and controlling waste while simultaneously creating a second cycle of utility for it within the societal structure.

With the implementation of recycling, individuals have been able to reconsider their trash and connect with it on new social and moral levels by embracing its acquired positive aspects. Taking the broken glass off the streets and

placing it in the recycling bin makes society feel like we are reordering our waste and cleaning our planet (Engler 2004; MacBride 2012). New rituals are formed that aim toward the physical and symbolic rearrangement of waste as we work to eradicate environmental pollution. This restoration of order has aided in mystifying the affiliation of recycling to garbage: by delineating separate receptacles for recyclable material, we as societal actors have forgotten we are still handling our waste because now we have made a happy association with the positive action of recycling, rather than maintaining the neutral or unhappy association with the negative action of throwing away garbage (Engler 2004). We also create a symbolically-central location for the placement of recycling by considering the socially-positive role of the recycling center. Although these centers may still be geographically located on the periphery of town (and possibly even on the same property as the landfill, as is the case with the Delaware County Solid Waste Management Center and Facility to name one of a few example (Delaware County Department of Public Works)), their attached positive social values allow them to remain a more central topic than waste in the social conscious (Engler 2004). Thus recycling has become an outlet for individuals to actively engage with the trash with which they had so recently been disregarding.

The implementation of recycling at the municipal level was paramount for the social system of waste management. Individuals could now create positive connections with their waste and feel less threatened by dirt as a pollutant, an anomaly and an undefinable material. Their glass, metal, plastic and paper could all be placed in a separate bin that would circulate their material back into the system to

be used again by society (MacBride 2012). This social reality, however effective, did not prove to be an accurate reflection of the factual reality of garbage. While the social paradigm surrounding waste had created the façade of effective waste control, in actuality recycling did and still does very little to attain the goals it set out to achieve (Engler 2004; Humes 2012; MacBride 2012; Nagle 2013). While recycling rates have risen significantly since the 1960s, the overall amount of MSW generation has also risen, and at a steeper rate. In 1960, we recycled 6.4% of our waste and in 2012, that rate increased to 34.5%; however, we now dispose over twice as much trash as we did in the 1960s (EPA 2012). This means that even after we have accounted for the all the materials we diverted from the landfill to recycling centers in 2012, we still produced 4.1 million tons of municipal solid waste more than we did in 1960.⁷ While we must also account for the population increase over the course of half a decade, these statistics create a very different reality for the story of municipal solid waste. The social perception of recycling and the efficient removal of trash have created a semblance of a working system for waste management, while the reality remains that recycling does little to impact society's total waste generation, and the amounts of trash generated have continued to grow over time (Engler 2004; Humes 2012; MacBride 2012; Nagle 2013). Yet we allow this reality to remain mystified by socially promoting the practice of recycling and smart waste management while staying physically and spatially disconnected to the process of managing waste and maintaining recycling programs.

⁷ These calculations were made by subtracting the amount of recycling generated (in million tons) in 1960 from the amount of total Municipal Solid Waste generation (in million tons) and comparing the two numbers. The original statistics are part of the information from Figures 1 and 2 of the EPA's *Municipal Solid Waste Generation, Recycling and Disposal in the United States: Facts and Figures for 2012*.

The Invisibility of Waste (Workers)

While we did develop a social conscience that included the idea of waste as recycling, for the most part we did not integrate ourselves into the process of recycling. This mystification is materialized in part by the way we have come to consider our waste handlers. Recycling, rather than the plumber, now shines as a beacon of hope for the future of waste management. Like the white-uniformed street sweeper, recycling now represents the image of waste as a controllable and manageable material. With this shift in ideologies, trash collectors have become marginalized by society over time (Nagle 2013; *Trash Dance* 2012). The standard set in in the late 1800s for waste-free cities has been upheld since then by the continual removal of waste via sanitation workers, and thus this image has become a societal expectation. The social focus on efficient waste removal and recycling programs have combined with the historical institutionalization of municipal waste management to erase the image of waste handler from the social conscious and replace it again with the idealized, humanless image of clean streets, green spaces, and recycling bins. Like waste, sanitation workers have become marginalized as a means of upholding the new image of efficient and sufficient trash removal.

This ideology has taken on a strong meaning in the public mind. Not only are waste collectors no longer the focus of waste management, but they have become almost literally invisible to society (Nagle 2013; *Trash Dance* 2012). In the film *Trash Dance*, one worker describes how he has often had to avoid being hit by oncoming cars while working near his sanitation truck on the side of the street (*Trash Dance* 2012). New York City Sanitation workers also share this sentiment, narrating

story after story of instances where they've remained unnoticed as they work to remove curbside trash bags, or have been flatly ignored when trying to communicate information to passersby (Nagle 2013). Nagle depicts trash collectors as “mere obstacles to be skirted” while they perform their daily job in the City (Nagle 2013: 16), their consistent presences conveying not the image of a human being doing her job, but the uniformed representation of an “informal timepiece” that keeps the City clean and running (Nagle 2013: 17). This invisibilization not only makes the job incredibly dangerous, but also engrains a sense of worthlessness in the worker that is a direct reflection of a larger social conception (Nagle 2013; *Trash Dance* 2012). Trash collectors worry when—not if—their daughters will cease thinking their daddy's job is cool (*Trash Dance* 2012), and workers often resolve their frustrations with work with the phrase “it's only trash” (Nagle 2013). In my role as Compost Intern, I too have felt the frustration of knowing that my role goes largely undervalued and unnoticed. From having to remove the twisty-ties from the contents of the Earth Tubs to having to reconstruct a black composting bin that someone has decided to scatter across the lawn, it seems that students are both unaware of and unconcerned with the duties we do on their behalf. It is clear that we generally like our jobs as sanitation workers, otherwise we would not put in the hard work that we do to complete the tasks at hand; yet at the same time, it is incredibly frustrating to know that most people are not aware of what the job and society ask of the worker on a day-to-day basis (Nagle 2013; *Trash Dance* 2012).

The only time that waste workers do seem to be noticed is when their job does not get done (Nagle 2013). During the snowy season, New York citizens may take

note as the trash begins to pile up amongst the snow by the curbside, but they do not seem to notice this happens because the sanitation workers are all working full time to plow the snow from the busy streets (Nagle 2013). Similarly, one of the most popular forms of emails the compost interns receive is one that conveys compost as an issue. We are often notified of black bins that are overflowing with food and personal blue buckets that have begun to stink. Nagle explains this negative attention by labelling the job as “preventative, not reactive” (2013: 23). When sanitation workers do not uphold the standard of clean that society has set for itself, members of society take notice. Our system of waste management has institutionalized control of the anomaly of waste for over a century now, and society expects this trend to continue (Nagle 2013). We do not rely on this notion through a strong sense of the history of waste, but rather through the enduring fear of pollution that has been historically attached to trash as a social taboo. The sanitation worker mediates this fear by continuing to protect our nation from the perceived and actual dangers of our own waste, but unlike in the late nineteenth century, we seem to no longer appreciate it.

The Business of Wasting

Another important aspect of the mystification of waste generation comes from heavily influential business strategies made by corporations as a result of market competition. Since the Industrial Revolution, our expanding market has worked hard to keep citizens satisfied with a wide variety of new products (Engler 2004; MacBride 2012). Starting in the early twentieth century, we have been situated in the midst of an economy that thrives on consumption to the point of prioritizing product upgrade over product durability on the end of both the consumer and the producer (Guiltinan

2008; Post-Landfill Action Network (PLAN) 2014). With the development of “planned obsolescence”, companies have replaced production of one-time, long-term items with products specifically purposed to “stimulate *replacement* buying by consumers” (Guiltinan 2008: 19). This strategy combines functional obsolescence techniques, such as “death dating” a product to confine the terms of its lifespan to an allotted amount of time, and perceived obsolescence techniques, such as creating a fashion trend that accompanies the functional value of a product and gives it a social death date that aligns with the larger progression of style for that product (Guiltinan 2008; PLAN 2014). Social pressures for new styles and updated products thus combine with corporate competitiveness and technological advances on the production line, working to create an ever-escalating cycle of product replacement (Guiltinan 2008; PLAN). Commodity advertising features the ease of one-time use (disposable silverware), must-have upgrades (Iphones), and seasonal trends (clothing items) as ways by which companies not only stay in competition with other companies for consumer loyalty, but also ways in which they retain overall levels of mass consumption. Even as we strive to optimize our personal recycling rates, we are encouraged to discard our Iphones at the end of their two-year contract and purchase an updated version, contributing to the generation of waste material.

While this specific market strategy may not have been what gained the public’s attention in the 1960s, United States society had begun to show concern for our consumption levels by making careful consideration of our massive disposal rates (MacBride 2012). Documents such as the Solid Waste Disposal Act of 1965 and Resource Conservation Recovery Act (RCRA) showed that citizens and

governmental offices were serious about confronting our waste disposal levels by analyzing, classifying and reducing waste generation (EPA 2013; MacBride 2012). This undertaking revealed itself as a potential problem to businesses in a few ways. The outcomes of waste studies were presenting certain materials, such as glass bottles, plastic, and industrial waste, as problematic for the public (MacBride 2012). One method of dealing with these predicaments was to ask corporations to take responsibility for their products (MacBride 2012). Individual states proposed “bottle bills” which would ban or tax containers that were not returnable and make businesses take ownership of the bottle litter their products were rapidly producing (MacBride 2012). The RCRA illuminated corporate responsibility by conducting surveys of manufacturer’s methods and statistics for industrial waste disposal (EPA 2013), and communities have proposed plastic bag bans as a way of reducing the amount of non-recyclable plastic entering the consumer market (Macbride 2012). Each of these policies attempted to recognize waste management as a duality of responsible reduction of waste generation as well as responsible waste disposal at the corporate level.

Although businesses are aware that the public now requires them to practice some form of corporate responsibility in order to gain support and credibility from a wide range of clients, they are also aware of the possible business revenue outcomes that different market strategies entail (Guiltinan 2008). This encourages them to pick and choose which public priorities to focus on (i.e. environmental, socio-economic, or social justice paradigms) and which to neglect in order to satisfy both the desires of their customers and the longevity of their business (Guiltinan 2008). Guiltinan

illustrates the decision-making hierarchies of corporations clearly by saying that “to corporate strategists, asking firms for voluntary reductions in the rate at which new product improvements are brought to the market would be akin to a request for unilateral competitive disarmament” (2008: 25). So, when given the option to make their product last longer or source their product more sustainably, businesses will choose to create an “eco-friendly” product in order to sustain their product turnover rate on the market. Corporations have approached other such production decisions in ways that also ranked business revenue above social or environmental welfare. Rather than accept the obligation of handling their empty product containers, bottle companies have fought since the 1970s to keep bottle bills out of as many states as possible (MacBride 2012). Similarly, industries have refused to allow any further governmental research on the details of their industrial waste disposal techniques (MacBride 2012), and plastics companies have fought to deflect responsibility for their difficult-to-recycle or unrecyclable products (MacBride 2012). Such examples are useful for illuminating the ways in which businesses have reacted to society’s request for corporate responsibility.

These actions curtail the economic risk of businesses losing revenue or spending money in ways that seem unnecessary to their business, and have been matched with tactics that have cleverly redirected society’s gaze to another faction of the waste management conversation. As a means of refuting the bottle bill in the early 1970s, bottle companies heavily promoted recycling programs in New York City that included the reclaiming of glass and plastic (MacBride 2012). This was seen as beneficial because recycling centers would relieve bottle companies of their duty to

their product's waste and redirect the burden of waste responsibility to consumers (MacBride 2012). As a result, many bottle companies began to campaign for municipal curbside recycling (MacBride 2012). The rise of recycling programs nationwide in turn helped to divert attention from another issue of waste with which Congress was dealing: industrial waste (MacBride 2012). Congress was struggling to enforce regulations on the extremely high industrial waste generation levels⁸ that had been discovered as part of the research done for the RCRA while businesses fought back in order to keep their autonomy for by-product and manufacturing waste disposal (MacBride 2012). Five years later, Congress was still unable to pass the bills, and the EPA was left only with the jurisdiction to monitor Municipal Solid Waste, which it has done annually since (EPA 2014; Macbride 2012). These yearly reports do well to monitor our citizenal relationship with our trash, but are obscured by their limited reach in waste type (MacBride 2012). The threat of governmental intervention has also prompted plastics companies to rigorously research comparative non-plastic products to promote plastic consumption as well as place product responsibility on the shoulders of consumers and municipalities by offering programs such as plastic bag drop-off centers (MacBride 2012). Plastic companies found that offering take-back programs and marketing pro-plastic agendas were preferable to risking a product ban or other public policy (MacBride 2012). In all three of these situations, manufacturers diverted attention from their product's contribution to waste generation by promoting other popular environmental waste management programs and creating new avenues for the practice of reducing waste generation.

⁸ I mentioned this earlier, but Industrial Waste generation was found in a study conducted by the EPA to be an estimated 7.6 billion tons in a single year; however, this study was done in 1987 and has not been allowed to be conducted since then ("Industrial Waste" 2012; MacBride 2012).

It would be incorrect to say that the actions of these companies did not aid to produce positive social awareness and socially-effective programs for the nation's system for waste management; however, in each case, corporations avoided the instatement of governmental policies that would have had a significant and lasting effect for reducing waste generation levels in exchange for lesser programs that they found more economically viable (MacBride 2012). Although communal programs such as recycling do help to influence waste generation in small ways by diverting some of our disposals to be reused, these efforts do little in the face of the total—municipal and industrial—amount of solid waste we produce (MacBride 2012). We as social individuals may be doing “better than we were” as far as managing our waste at the point of disposal by utilizing limited recycling practices, but this perception of “making a difference” does little beyond promoting a positive social consciousness (MacBride 2012: 122). By helping direct society's attention toward recycling, municipal solid waste, and municipal take-back programs, companies have been protecting their own interests and subsequently undermine the potential of the waste management system. Happily relieved of the old negative associations with waste and enjoying the new capabilities of wasted materials to be reclaimed and reused by society, consumers allow recycling to act as a savior for the failing waste management structure while remaining largely unaware of both the methods and the effects of the day-to-day operations and corporate and governmental negotiations that help to shape it.

Moving Toward Zero Waste

To a certain extent, this is still the social attitude toward waste in the United States today. While recycling rates have increased since the 1960s, they have done so slowly and consistently for around two decades (EPA 2012). Moreover, private recycling and waste management centers have appeared, and as they operate under the auspices of a business rather than a municipally-funded program, they create new conditions for recycling practices that result from a competitive market for recyclables and recycling customers (Engler 2004; MacBride 2012). This limits how recycling programs can operate and creates a demand hierarchy for recyclable materials (MacBride 2012).

As citizens have begun to become aware of the statistical and corporate reality of recycling and waste management, a new wave of environmental activism, called the “Zero Waste Movement”, has sprung up (MacBride 2012). This movement “includes ‘recycling’ but goes beyond recycling by taking a ‘whole system’ approach to the vast flow of resources and waste through human society. Zero Waste maximizes recycling, minimizes waste, reduces consumption and ensures that products are made to be reused, repaired or recycled back into nature or the marketplace” (Grassroots Recycling Network 2008). Members of the Zero Waste Movement look for opportunities to expand upon the existing program of recycling by providing new niche markets for the reclamation of materials that fall outside of the common paper/metal/glass/plastic format (Macbride 2012; Freid 2014). These endeavors include the reclamation of harmful or less-commonly-considered waste materials, such as old appliances, food waste and mattresses, and usually rely on community participation rather than big corporative operations in efforts to maintain

a local, close-loop system (MacBride 2012). Small, local companies have appeared in the markets whose business paradigms maintained a strong commitment to environmental consciousness as a way to announce their affiliation to the new branch of environmental activism (MacBride 2012). Unlike the recycling movement, the Zero Waste movement aims to address the problem of product consumption as a contributing factor of waste generation, proposing a “refuse” stage before the more common phrase of “reduce, reuse, recycle” (Robles 2014; Zero Waste Home). Citizens are asked to consider whether they really need what they buy, and to use their buying power as a political voice to promote or protest specific companies and their products (Humes 2012; MacBride 2012). Characterized by an increased awareness within the environmental community of statistical knowledge about waste, each of these locally-based initiatives works to empower the consumer individual as a political participant in their municipal and national community.

This more informed and multi-contextual approach to society’s waste systems creates an interesting effect for waste management practices. The renewed passion to reduce municipal waste has created programs that unite the community and imbue the individual’s connection to their waste with positive sentiments, much like the recycling program has done (MacBride 2012). Although no real changes in the reduction of waste generation have occurred, nor does the answer to environmentally-framed waste questions even lie in the realm of municipal recycling, it does bring about the feeling of “responsible civic activity” and elucidate us to the fact that we do affect larger social structures with our consumption patterns (MacBride 2012: 215). Yet as we begin to situate ourselves within a mindset of environmental consciousness

and consumption ethics, this begs the question, what is actually inhibiting recycling rates? If recycling has been so central to environmental activism and waste management practices for almost half a century now, why are we still only recycling one-third of our potentially-recyclable material?

This leads me back to my original frustrations: despite the Compost Interns' efforts to direct attention to the social and environmental benefits of composting, most students do not actively compost their food waste and out of those who do, there are still discrepancies between our protocol and student adherence with regards to what is composted, how the campus composting program functions, and how to appropriately handle compost buckets and bins. While part of the problem may lie with the particularly high level of privilege that students both experience and display here at Wesleyan, I argue that their interactions with composting are a reflection of our current perception of waste as a vague sense of social duty to the environment mixed with lingering fears, disinterest and disrespect for our waste and our waste handlers.

The Face of Waste Today: What Has Changed?

The system of recycling and the new ideals of the Zero Waste movement empower environmentally-conscious individuals to take on the limitations of our waste management system by directing their personal waste to whatever communal outlets for waste disposal they deem appropriate. As someone who self-identifies as environmentally-aware of my own production, I can save the banana peel, plastic juice bottle, and plastic sandwich wrapper from my lunch and place them in their

respective receptacles on campus. While it takes more effort on my part to separate them than it would to throw them all in the trash, I choose to make that effort because my personal beliefs are in accordance with the ideals of the Zero Waste movement and I subscribe to this belief system. Adversely, it is not impossible for me to throw away all three items if I so desired. Although some municipalities do require citizens and businesses to recycle and/or compost by law (Seattle Composting 2014; CalRecycle 2014), there is no federal regulation that binds the citizen to the conscious reordering of their trash. Nor is there a social norm that implores that we consider waste as a set of materials to be treated as different entities: despite the heavy public promotion of the factual and functional realities of waste suggesting that we must separate our trash in order to reduce the amount of refuse we produce, society remains rather divided on the issue, as is evident by the national recycling rates.

This observation reveals that the social cohesion surrounding recycling is not very strong, a condition that may seem surprising compared to society's bond to other waste-related rituals, such as acts of hygiene and waste removal. Although recycling does reflect a fear of environmental pollution, this fear is shared by only a small fraction of the population. Comparatively, the fear of bodily pollution still manifests itself in a multitude of ways within the realm of waste: hand-washing remains a common practice, as does municipally-regulated trash removal. MacBride offers that "citizens worry greatly about the toxicity of wastes around them and look to themselves for the restorative action" when considering how the recycling regime has gained public status among United States society (2012: 104), but this idea also extends to the medical toxicity of waste, and the latter or at least the adherence to the

rituals it has prompted seems to be taken more seriously by the public. Both of these perceived dangers are built into and continually cultivated within our perception of waste through the construction and performance of hygienic and “eco-friendly” rituals that are regarded as preventative measures against both sets of pollutions. In this way, practices such as recycling and—to a certain extent composting—become integrated into the social structure as appropriate behaviors to be used in the treatment of waste.

These residual perceptions of waste also spill over into our considerations of waste handlers. As I mentioned above, although for a short time sanitation workers were publicly glorified, they are largely invisibilized within the social system today. The implications for this phenomena are two-fold: marginalizing waste workers and the role they play in managing our trash allows society to maintain their distance from their own refuse even as they attempt to embrace the recycling and reuse of materials, and as we suppress these integral aspects that we have socially defined as the gritty and unsavory aspects of waste management, we create a social imagination in which only we as individuals have the capacity to affect waste disposal rates, and will do so by reducing our own waste consumption (Humes 2012; MacBride 2012). We are told and tell ourselves that we are “making a difference” (MacBride 2012: 122) by recycling instead of throwing away our plastic containers and cardboard boxes and expect our peers to do the same, asserting that waste reduction is something that will happen “in the achievable realms of home and shopping trip” (116).⁹ This centers the

⁹ Here, MacBride is contending that individual acts to reduce waste should not be considered viable as the primary option within a system where industries produce far more waste than consumers as well as influence consumption trends by dictating the terms of their own market insofar as controlling

process of waste disposal on the individual and decenters the role of the sanitation worker, who is also “making a difference” in the ongoing routine of waste management but whose duties are not upheld to the same standard of social trailblazing. The recycling individual is regarded as having chosen to engage positively with the waste management system, while the waste handler is simply seen as doing their job. This fractured attention gives way to a hierarchy of values that works to reinforce our perceptions of trash as dirty, useless and marginal. As we place worth on our own personal actions and displace the social worth of waste collectors, we support a system that mystifies the complete reality of waste and waste disposal behind a set of socially-imposed perceptions. While we do choose to see waste now, we do so under the circumstances that we ourselves define, and this affects when we do not choose to see waste as well.

To Embrace Waste: Reconstructing Trash’s Social Reality

Although it is not unusual that the societal perspective of the waste system has come to reflect the way in which we interact with it in our daily lives due to the values, rituals, realities and perceptions we have affixed to waste, this does prove to be limiting if we aim to change or improve the system. The way in which we as individuals interact with waste management allows us to feel confident in our narrow practical, functional and factual take on trash without having to address the ickiness

packaging choices, producer responsibility and demand reduction (2012). While I do not choose to fully examine and explain the myriad of ways in which corporative competitiveness and business economics critically affect and limit the abilities and possibilities for waste management, it is certainly worth mentioning. Although the political and economical is unquestionably part of the social forces within a society, it is my scope here is limited in that my intentions are to focus on the nuclear aspects of the social system of waste management while only briefly acknowledging external societal factors that also play a significant role in influencing waste management practices.

of waste and the full system of waste management itself. In addition to sorting our trash into appropriate receptacles, we allow food businesses to make the decision to apportion our food before it hits the market rather than attempt to change our cultural perception of toward wasting food (Food Waste Reduction Alliance [FWRA]), we create community programs to take uncommon waste items such as old batteries and CDs without wondering where these items will actually go (MacBride 2012) and we ritually dump our compost into black compost bins without considering who will empty the bins later. These actions enable us to say that we are taking care of the problem we have with our waste generation levels without having to collectively consider where our trash actually goes, who picks up our trash, or whether or not what we are generating is all wasted material (MacBride 2012). Questions such as these remain safely ambiguous and marginal as they are ritually and conceptually segregated from our social conscious. What we focus on is ourselves as individuals making small, socially-defined steps as consumers and citizens that make us feel as though we are doing our part for the waste reduction effort as we simultaneously continue to preserve the boundaries and practice we have constructed for our trash (MacBride 2012).

If our intentions for waste are seen as a reflection of our collective actions, then it would seem we intend to manage only the waste with which we as consumers directly interact within our current system of waste management. We prioritize making our spaces spotless, odorless and absent of waste in a way that can follow the paradigm of environmental waste reduction—if that seems to be convenient and safe for us—or not, and letting the invisible Other handle all the material we throw at them

in this process. If it is truly our goal as a culture to “make the difference” that we have in mind when do perform such acts as recycling and reducing waste, it is necessary for us to reexamine our intentions for and conceptions of the waste we generate. Waste and sanitation workers cannot persist to be seen as marginal, for they are an integral part of the waste management system. While I do maintain that there are many other factions to the social structure, such as corporate cooperation, governmental policy implementation and infrastructural paradigm shifts, that I have only briefly acknowledged here, these aspects would also need to be addressed during the process of envisioning the whole of the waste management system. A sincere attempt at the restructuring of the waste management system would need to encompass the complete system and the social actors within it. Individuals as consumers, citizens, businesses and laborers, and communities as municipalities, social movements, and governments must consider their role within the waste system as a structure comprised by the entirety of society, and decide what old and new regulations and behaviors would be most suitable for achieving society’s goal for waste management.

Conclusion

Just as our interaction with waste reflects our social notions of waste, my role as Composting Intern is indicative of larger trends in the waste management system. While I know I am interested in maintaining and expanding the composting program on campus, I am also aware that many of the other students at Wesleyan, like many individuals in our society, do not share this interest. Additionally, students do not seem to respect the composting program protocol, the composting interns, or

university property in a way that lends itself to be representative of the disconnect between society, its waste handlers and its waste. Although the program does seem to be doing well, like U.S. recycling rates, its success is predicated on the social perception of the structure rather than the statistical facts it presents of itself. In its factual reality, the composting program relies primarily on the institutionalized work done by Wesleyan staff and student interns, rather than the students themselves, and even as this structure allows the program to function properly, it sets the bulk of the work disproportionately on the laborers and gives individuals an inflated sense of self-empowerment and belief in the waste system as a working structure. For Wesleyan composting, this system will not be able to operate if the existing number of workers continues to be given more daily or weekly duties to perform. While this analogy cannot be directly transferred to United States society at large, the composting program can serve as a partial microcosm of the ways in which the waste management system is currently unable to effectively obtain its goal of reducing waste. Like Wesleyan, our society needs to reexamine our relationship to our conception of waste management and reconsider the social dynamics between different types of individuals and communities if we aim to reduce waste and create a more socially sustainable waste management system.

Clearly, expecting a shift in the societal framework of waste and waste management to occur simultaneously at all levels political, economic, demographic, and regional is exceedingly naïve. It would also be a gross understatement to say that these types of changes are not already happening in several areas of society.

Anthropologists, sociologists and artists have created ethnographies, publications and

artwork that strive to illuminate parts of the waste management system and to critique our current social and political interaction.¹⁰ Communities at various levels are also banding together to create small operations that help to reduce waste and re-envision the waste system (MacBride 2012; Freid 2014). These initiatives demonstrate that individuals and groups within the United States do consider the waste management structure to be less than perfect and are making active efforts to change it. While the efforts of these few may not be able to greatly impact the overall system, they should not be discredited, because they do promote positive engagement and indicate to the larger community that it is possible to reconceptualize our current structure. Like MacBride, however, I contend that there are some methods, such as political pressure on corporative action and governmental policy initiatives, which will prove to be more effective than others in bringing about this change (2012). For the social perception of waste and the system of waste and waste management to undergo significant transformations, multiple strategies will have to be implemented at levels that will affect and reconstruct the social conscious as a whole.

Society's relationship with waste has by no means stayed constant over the course of United States history. As new spatial arrangements and changing population density have merged with contemporary social conceptions including hygienic rituals and the idea of recycling, the public has developed what has come to be seen as the

¹⁰ The examples I am thinking of here include Anthropologist Robin Nagle, who conducted an ethnography with the sanitation workers of New York City and published her experience in her book *Picking Up*, Sociologist Samantha MacBride who has written a social critique on recycling and corporate responsibility in *Recycling Reconsidered*, and Allison Orr, who studied under the sanitation workers of Austin, TX and created a dance performance with them. Not included in my essay but important to the reshaping of social perceptions of waste and waste management is Mierle Laderman Ukeles, who has created performance art pieces with the NYC sanitation workers and the NYC landfill, Fresh Kills, and Gregg Segal, who created a photography series that depicted his peers and strangers lying in "7 Days of Garbage."

waste system today. And as we have created new programs and practices to confront societal conflicts with the waste system and its management, we have both continued to uphold our ideas of waste as marginal and contaminating while also altering how we interact with these meanings. Amid our limited interaction with waste as object rather than waste as concept and waste management as a functioning system with countless moving components, rather than waste management as social structure, we have come to feel more connected to our waste through the conventions of recycling and individual waste reduction. We allow these behaviors to remain socially peripheral, however, and in their application they are found to be less than subversive to the customary social conception of waste management. In order to attain the goal of better-managing our waste, it is necessary to deconstruct the meaning of waste and reconsider the roles that our social conceptions of trash play in influencing our societal behavior. It is only after we are able to fully understand how we consider our refuse as a statistical, material, and social reality that we will be able to enhance and revise the system to form a more contextualized structure of perceptions, practices, relationships and policies for the management of our waste.

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