

Modern Waste as Strategy

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Modern waste is fundamentally different from its predecessors. From the turn of the twentieth century and into the 1950s, first in the United States, then elsewhere, waste began to increase in tonnage, gain in toxicity, and become more heterogeneous (MacBride 2012: 174). It also started to play a pivotal role as an industrial strategy for growth and profit. About 97% of waste produced in the US today is industrial solid waste (ISW) produced during processes such as mining and mass agriculture. The remaining 3% is what we usually think of when we think of garbage: municipal solid waste (MSW) (EPA 1999; MacBride 2012: 87–88). While this split is crucial for shifting attention to the scalar dynamics of waste, I want to argue that when MSW – that which you and I throw away – is considered within its material, economic and historical context, it too can be categorized as ISW.

About 1/3 of MSW – food scraps, and to a debatable extent, yard trimmings – are present in pre-modern waste. The rest of modern MSW are disposables: paper, plastics, aluminum, textiles, and packaging¹. In 1956, Lloyd Stouffer, editor of *Modern Packaging Inc.*, famously (and controversially at the time) declared: “The future of plastics is in the trash can” (Stouffer 1963: 1). Stouffer’s idea addressed an emerging problem for industry. Products tended to be durable, easy to fix, and limited in variation (such as color or style). With this mode of design, markets were quickly saturating (Packard 1960; Cohen 2003). Opportunities for growth, and thus profit, were rapidly diminishing, particularly after America’s Great Depression and the two World Wars, where an ethos of preservation, reuse, and frugality was cultivated. In response, industry intervened on a material level and developed disposability through planned obsolescence, single-use items, cheap materials, throw-away packaging, fashion, and conspicuous consumption. These changes were supported by a regimen of advertising that telegraphed industrial principals of valuation into the social realm, suggesting what was durable *versus* disposable, esteemed *versus* taboo. American industry designed a shift in values that circulated goods through, rather than into, the consumer realm. The truism that humans are inherently wasteful came into being at a particular time and place, by design.

Initially, Americans bucked against disposability. Historian Susan Strasser recounts riots by soldiers in train stations in 1917 when the communal tin cup for water was replaced with disposable paper cups (Strasser 1999: 177). Such waste was seen as abhorrent. Even users of the most disposable of disposables – feminine sanitary napkins – had to be taught how to

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¹ The argument for leaving out the small percentage of the modern waste stream made up of durables in these numbers is that in pre-modern waste, such durables would not enter what we could call the waste stream.

throw away their Kotex (Strasser 1999: 165–168). By 1960, Vance Packard wrote vehemently against disposability and overconsumption as strategies for profit. In *The Waste Makers* (Packard 1960: 4) he imagines Cornucopia City

located on the edge of a cliff, [where] the ends of assembly lines can be swung to the front or rear doors . . . When demand is slack, the end of the assembly line will be swung to the rear door and the output of refrigerators or other products will drop out of sight and go directly to their graveyard without first overwhelming the consumer market.

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While Packard critiques the emerging design of materials as always-already destined for the trash heap, he is more concerned with changing social relations.

Mass consumption, driven by disposability and planned obsolescence, made the “consumer far from sovereign,” he writes, and was “bringing such traits as pleasure-mindedness, self-indulgence, materialism, and passivity as conspicuous elements of the American character” (*ibid.* 233). He was aware that the new waste regime was not simply about reaching into new processes and spaces in search of profit, but involved macro processes of world making, of shifting cultural and social values to meet those demands for profit (Gille 2009).

Seven years after Lloyd Stouffer’s controversial statement, he addressed plastics industry representatives at a conference in Chicago:

It is a measure of your progress in packaging in the last seven years that [my 1956] remark will no longer raise any eye-brows. You are filling the trash cans, the rubbish dumps and the incinerators with literally billions of plastics bottles, plastics jugs, plastics tubes, blisters and skin packs, plastics bags and films and sheet packages--and now, even plastics cans. The happy day has arrived when nobody any longer considers the plastics package too good to throw away. (Stouffer 1963: 1)

The social shift had been successful, and disposables had been naturalized. Markets had overcome their saturation: “For the package that is used once and thrown away, like a tin can or a paper carton, represents not a one-shot market for a few thousand units, but an every-day recurring market measured by the *billions* of units. Your future in packaging, I said, does indeed lie in the trash can” (*ibid.*). MSW was now an extension of industrial practices, and an entire social and material infrastructure was implicated in this shift to modern waste.

Beyond disposability, present day waste practices like recycling continue the extension of profit through trash. The Container Corporation of America sponsored the creation of the recycling symbol for the first Earth Day in 1970 (Rogers 2006: 171). The American Chemistry Council, the world’s largest plastics lobby, enthusiastically testified in favor of expanding New York City’s curbside recycling program to accept rigid plastics (ACC 2010). Recycling is a far greater benefit to industry than to the environment. Recycling is an industrial process that produces waste, uses energy, requires virgin (non-recyclable) materials, and often results in down-cycling, where created products are less robust than their predecessors (McDonough and Braungart 2002: 56–60). Moreover, of the 15% to 30% of recyclables that are retrieved from the US waste stream, nearly half are buried or burned due to contamination or market fluctuations that devalue recyclables over virgin materials (Rogers 2006: 176–179). Industry champions recycling because if a company has reusable bottles, for example, it has to pay

for those bottles to return, but if it makes cheap disposables, municipalities pick up the bill for running them to the landfill or recycling station. The money industry saves can translate into profit because waste costs are “externalized” into the public realm (Robertson 2011). Externalization is integral to profit. Accordingly, industry spends a great deal of money, energy, and creativity making recyclables into beacons of environmentalism so they continue to circulate as “green” externalities, thereby shifting responsibility to consumers and local government (Liboiron 2010). Recyclables are just disposables by another name.

Even the choice to bring a reusable bag to the grocery store extends profit via green consumerism. The value-driven demand for reusable bags opens a new market while the production of disposable bags, whether paper or plastic, continues to grow exponentially (Dauvergne 2008). Even with a reusable bag, the choice to avoid disposables altogether eludes us as consumers. Those few who make it their mission to avoid disposables, such as *Plastic-Free* author Beth Terry, are extraordinary; the time and knowledge invested to avoid waste extend far beyond the everyday (Terry 2013). Every semester, my students and I try to eschew all disposables for a week. None of us have been successful. Most people in industrial countries are part of a total infrastructure of waste characterized by disposability. Zsuzsa Gille warns that “[t]he problem with splitting waste into the categories of producer waste and consumer waste . . . is that this reinforces the false assumption that consumers in Western capitalist societies *make* garbage, when in fact neither do they make trash materially nor do they have much choice in what materials they buy and thus turn into surplus stuff” (Gille 2010: 1050). When MSW is ISW, consumer choice is not a way out.

Instead, change has to happen on a commiserate scale to profit and the systematization of externalities. There are other economies that have different relationships to profit, and thus have different relationships to waste — and *visa versa*. Steady state economies, as one example among many, are of relatively stable size that develop but do not grow (Daly 1991; Jackson 2011; Schor 2010). Usually the term refers to a national economy, but it can also refer to a city economy, and environmental economists are now referring to it as a potential planet-wide economy. A steady state economy is an entirely physical concept in which physical components, like supplies of natural resources, human populations, and human built objects (including trash), are constrained to local carrying capacities. Things that aren't material like knowledge or spirituality can grow.

Certain things about waste would have to change for a steady state economy, or any other economy not premised on externalizing costs in pursuit of profit. Toxics would have to be reduced or eliminated *because* they forestall a local or cyclical economy — toxics are currently made possible because they are externalized as pollution, left to the environment, government, or local residents to contend with. Even now, toxics in compost are challenging one of the closest things we have to a cyclical material life cycle (Ryan 1994). Thus, shifting to a steady state, toxic-free economy would involve green chemistry, which designs toxics out of products before they are put on the market (Anastas 1998). Like disposability, the wide implementation of green chemistry can create systemic change through value-based design. This means whole education systems would change to incorporate green chemistry (not to mention alternative economics and business education).

The material process of recycling would also have to change from the current industrial process to something closer to the *Cradle-to-Cradle* vision where things are designed for complete recycling or composting (McDonough and Braungart 2002). The materiality of many disposables limits their reuse, recyclability and safe disposal. Besides being made of

cheap and flimsy materials, many are so heterogeneous – even a plastic water bottle has different material for the body, cap, and label, each with a different melting temperature and list of supporting chemicals within them – that sorting and processing for full, cyclical (that is, ideal) recycling bereft of downcycling is materially impossible. Finally, a steady state would include a reuse infrastructure that scales. Reuse is a better type of interaction with waste, so long as toxicity is absent, because it avoids industrial processes that require energy and virgin materials, and produce pollution. Yet, our current reuse infrastructure, such as second-hand shops and used building material stores, does not scale (MacBride 2012). They are not economic in the sense of being able to have significant amounts of things flow through them. The above changes are not only what might happen in a steady state economy, but potential first steps towards one.

Any system that deals with the four aspects of modern waste – tonnage, toxicity, heterogeneity, and externalization – on a large scale will change waste infrastructure and what counts as trash. Technological, individual, behavioral and other small-scale fixes do not address the larger processes that define and create modern waste. Solutions that deal with the profit imperative and material economy of waste have a real chance of making change in how trash is currently defined, designed, created, circulated and finally externalized.

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