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## Talking Trash and Getting Wasted:

A Political Ecology of Consumption and Waste Management in

the Saint Paul

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#### Introduction

The idiom of "throwing things away" is quite indicative of how Americans think about their garbage: it simply goes away. The image of disappearing wastes, along with other social, economic and political factors, has led to a culture in which Americans consume much more than they need, producing almost a ton of waste annually on average per person. In this paper, I set out to investigate why Americans consume so much, and what the consequences of this consumption are, specifically, the garbage produced by this consumption. To situate this discussion on the ground, I looked at the waste management practices in Saint Paul, MN. This allowed me to notice the relationships between broadly changing consumption trends and the waste production and management in Saint Paul. This paper focuses on the post World War II era, as this is the time period which has led to over consumption and over production of wastes.

#### Methodology

To investigate my research question, I began with familiarizing myself with the literature written about municipal waste. Most of the literature was written for an academic audience, focusing on the history and composition of waste and waste management. This literature was helpful in explaining national trends in waste management throughout time and providing a body of work in which I could find the foundations for my discussion of garbage. I also engaged with a broader literature about consumption to situate my paper within a framework of consumption and its consequences.

I focused on Saint Paul as a study area for my discussion of garbage. City documents were fortunately available from Minnesota libraries, so I was able to use official city reports to research how Saint Paul has dealt with the garbage produced in the city, as well as how Saint Paul has planned to move forward with their waste management. The city reports I used dated from the years 1913, 1946, 1966, 1975, and 1981; recent information on Saint Paul's waste management was available from Ramsey County Environmental Services.

#### Personal biases

This paper springs from many of my biases. I think garbage is a problem, not the "by-products of an active economy" (Adams, 1993). I believe that well designed systems should have minimal waste products, or waste products that can be reused, and that the wastes created by the current patterns of consumption reflect flaws in our economy. I do not, as many others have, accept waste as a necessary component of a functioning economy. As our economy and ecology continue to change into the future, I think it will become necessary to develop systems that do not produce the magnitude of wastes over-consumption currently creates; this paper acts as a starting point for this conversation on how to reduce municipal wastes.

I also acknowledge my strong bias against non-necessary consumption. I think the economy's current set up is a bit ridiculous, with 70% of spending coming from consumer goods, most of which eventually, or quickly, ends up as trash. 99% of purchased goods are thrown away in less than 6 months (Leonard, 2007). This system seems preposterously illogical to me. There is no way the economy can be sustainable if the extraction methods destroy natural resources, production methods pollute and contaminate, consumptions methods are fueled by identity angst, and disposal methods are overwhelmed in volume and toxicity. This system just doesn't work, and talking about waste management alone, as has historically been the case, as a solution to problems with trash makes little sense without analyzing the larger system.

#### The Political Ecology Framework

In analyzing widespread and multi-scalar issues like consumption and waste production, political ecology becomes a useful framework for understanding the connections between seemingly unconnected issues. One helpful framework is that outlined by Blaikie and Brookfield in respect to land degradation; their approach highlights the chain of explanation approach, which "starts with the land managers and their direct relations with the land...Then the next link concerns [the land managers'] relations with each other, other land users, and groups in the wider society who affect them in any way, which in turn determines land management. The state and the world economy constitute the last links in the chain" (Blaikie & Brookfield, 1987). When applied to waste production, this approach in useful in highlighting the relationships between small-scale waste managers, households, city and state regulators, and a broadly defined economy. Though this approach is generally used in the global south, this analysis is fitting in the context of garbage in the global north because it results in a similar state of degraded land, and can be traced back to similar broad economic and political forces.

Deconstructing the dominant discourses around garbage production and disposal is also helpful for understanding over-consumption and the abundance of garbage. This branch of political ecology posits that the language used to talk about events and situations influences the way we think about them, which in turn has material consequences. This is helpful in a conversation about garbage because the goal of mainstream garbage industries is to make us believe our garbage disappears; the words used to convey this impression heavily influence the ways in which we think (or don't think) about landfills and incinerators, which in turn have a very noticeable ecological effect on the environment. This branch of political ecology, then, helps show ways in which we need to alter the ways we both think and talk about waste and waste management as we work towards a garbage free future.

While the scales of explanation approach and discourse analysis are useful for deconstructing garbage as a problem, a critical analysis of the dominant paradigms of waste and waste management is useful in working towards solutions for these problems. J.K. Gibson-Graham discusses these alternative paradigms in her 1996 publishing *The End of Capitalism (as we know it).* In this book, the author discusses the need to break from

the mindset of "capitalist hegemony" and move towards appreciating the diversity of capitalisms and non-capitalisms in society in order to break down this hegemony (Gibson-Graham, 1996). This approach is helpful in the discussion of garbage, because there is a plethora of consumptive activities noticeable in the Twin Cities and elsewhere that demonstrate the ways in which people can consume in sustainable manners. In looking for diversity of consumption practices, we can identify those already present and use them as a jumping off point for transitioning towards a more sustainable future.

#### **Consumption and Garbage Production**

The post-WWII rise in consumerism radically changed the ways in which people interacted with goods. This changing relationship to goods can be linked to a variety of sources, including rising consumer affluence, cheaper consumer goods, planned obsolescence of products and shorter product lives, increased packaging, changing tastes, and convenience products, to name a few dominant examples (Tammemagi, 1999). In general, people were buying more things and using them for a shorter period of time, which in turn led to much more garbage. This changes are responsible for changes in the ways individuals consume and the increase in the production of municipal waste.

The immediate post-war era saw the introduction of obsolescence into the marketplace as a means of increasing consumption. Producers recognized the potential volume of goods consumers might buy if these goods were seen as disposable. To get consumers to purchase more, producers intentionally eroded cultural values, such as permanence, that lead to thrifty behavior (Ewen, 1988). Producers moved towards including "rapid, planned stylistic change" in their products to manipulate consumers into seeing their own possessions as old-fashioned and out of date (Ewen, 1988). This obsolescence would drive the market, as consumers would constantly see themselves as inferior to their more consumptive counterparts. Thomas Princen describes this phenomenon as the "advertiser's trap of 'perpetual dissatisfaction,'" which manipulates consumers into continuously buying products that provide quickly fleeting satisfaction (Princen, 2002). This integration of obsolescence worked wonders for businesses, as the "profit margins of business would neatly mesh with a nurtured condition of consumer dissatisfaction, perpetual feelings of disorientation and self-doubt" (Ewen, 1988). Indeed, it seems the goal of planned obsolescence is to damage the confidence of the consumer when he or she does not participate in consistent consumption.

The favored method of instilling dissatisfaction in consumers was and continues to be advertising. Producers spend billions of dollars annually advertising their products. This spending on advertising has steadily increased as consumerism has taken hold in the American psyche: in 1950, producers spend \$6.5 billion on advertising, which has grown to \$170 billion today (Bordwell, 2002). One technique of advertising with material as well of psychological consequences is brand recognition techniques. These efforts work to provide consumers with associations for products in the form of images and brand logos. These logos must then be replicated on the packaging of goods to remind consumers of their associations. The increase in packaging this requires has been definitively recorded: in 1960, the average American produced .73 lb/day in packaging;

a decade later, this consumer produced 1.05 lb/day of packaging (Blumberg, 1989). By the mid-80s, packaging made up over a third of the waste stream, and plastics were the largest growing section of the waste stream (Blumberg, 1989).

Producers also moved towards "convenience" goods in the post-war era. In 1947, glass bottles were almost universally refillable; as disposability came to dominate the market, refillable and reusable bottles quickly lost out to plastic bottles and one-way glass products, all marketed as disposable (Blumberg, 1989). This disposability tied in well with other trends gaining popularity.

#### **Consequences of Garbage Production**

Waste production inevitably has broader consequences. Landfills and incinerators act as areas of concentrated toxins. One component of the toxicity in municipal waste is waste that is hazardous to begin with. These products include, but are not limited to nail polish remover, batteries, oven cleaner, motor oil, paints, stains, turpentines, and lawn chemicals (Tammemagi, 1999). Hazardous wastes together make up 1% of municipal solid waste. The Twin Cities metro area depends on individuals to act responsibility with their household hazardous wastes. The counties provide year round drop off sites for hazardous wastes where residents can drive in and have their hazardous wastes collected (Ramsey County, 2010). Unfortunately, programs like this recover only 4% of hazardous waste (Tammemagi, 1999). This leaves a substantial amount of hazardous wastes in landfills.

In landfills, toxins accumulate as waste is added to the site. Toxins can get into neighboring areas through a variety of means. Toxins can leach through landfills barriers into the groundwater, contaminating plants grown in the surrounding areas and wells pulling water from the groundwater. Landfill runoff also contains many of the toxins present on the site, so storms over landfills can lead to the spread of these contaminants. Lastly, the emissions from landfills can be extremely harmful for those living or working near the site. These emissions can contaminate the soil, plants, and the inhaled air in the immediate area surround the landfill (Blumberg, 1989; Tammemagi, 1999).

Incinerators pose similar problems as landfills. Incinerators, instead of letting waste sit in a big whole in the ground, burn the waste to reduce the volume. This reduces the area needed for disposal by up to 90% (Blumberg, 1989). Unfortunately, this process also concentrates all the toxins in the resulting ash. This ash, additionally, often flies away from the incinerators as the wastes are burned, which leads to numerous air quality and land quality issues (Blumberg, 1989). The ash that needs to be disposed after incineration is then extremely toxic, which can be extremely harmful for workers and environments involved. This ultimately results in a land location being contaminated with toxins. RDF facilities are slightly less harmful because of the sorting that happens before the wastes are processed, but these processes do not remove all recyclables or toxins from the wastes that are burned, resulting in toxic ash.

The siting of these facilities makes them additionally problematic. Siting landfills and incinerators are notoriously difficult. Public opposition makes these sites difficult to get community approval, which means that these heavily polluting industries are

usually sited in communities that are already marginalized, usually poor communities and communities of color. This siting, identified in the 1980s as environmental racism, focuses on the geography of hazardous industries and has spawned a breadth of literature and activism of its own (Di Chiro, 2003).

#### Historical St. Paul Waste Management

#### Early Waste Management

In 1913, with a population of about 250,000 people, St. Paul began debating having a citywide waste management plan. At that point, 40,000 households in St. Paul were paying private companies to dispose of their household waste and ashes. These companies, for the most part, simply dumped the collected waste on a vacant property. Simultaneously, other cities had begun to explore large scale waste management practices; Buffalo, NY had a large plant in which employees sorted the valuables out of the garbage they received, and both Buffalo and Columbus, OH drained and pressed their garbage into fertilizer.

Based on the needs of the city and the technology available, the city of St. Paul wanted to develop a comprehensive city-run program. The St. Paul department of public works suggested mandating household separation of wastes into four categories: paper, cans and bottles, burnable refuse and garbage, and non-burnable refuse and garbage. The city would then collect these wastes, and the saleable items would be sold,

generating an estimated profit of \$14,000 per year. The non-saleable items would be incinerated (Committee on the Disposal of Garbage and Other Refuse, 1913). This conversation ties into a debate that has often cropped up in the discussion of waste management: How much separation is reasonable to require at the household level? Waste management becomes much simpler when garbage and refuse are separated at a household level, yet required separation is unpopular because it adds complexity to household management. At this point in time, no city had yet mandated the separation of wastes at the household level.

The debate in Saint Paul at this time over waste management is consistent with national trends in waste management. As cities around America grew, it became increasingly obvious that household wastes would need a management plan. In the 1910s through the 1930s, incineration was a very popular method of waste disposal. Incineration was seen as a technologically appropriate method of making wastes more manageable for municipalities, and was adopted rapidly throughout the country.

#### Wartime Waste Management

Through WWII, wastes in Saint Paul were collected by a few different entities. 48 farmers collected raw garbage to use on their farms. These farmers each had a designated district over 22 miles of the city; their haul was approximately 27,500 tons a year, and was collected at no expense to the homeowner. These pickups, however, tended to be "infrequent and unsatisfactory." Collection crews picked up the rest of the

city's garbage; this waste, totaling about 5847 tons a year, was brought to the City Workhouse Farm as feed for the hogs. The collection of garbage for the hogs was much more expensive because the collectors had to travel over a large distance to get a small volume of garbage. Refuse (non-food waste) was collected at a household level and paid for by the householder. This waste was taken dumps operated by the city.

Because of the unsanitary conditions of this system, the city wanted to switch over to an entirely city managed system. This would eliminate the farmer and hog farm garbage disposal system and replace them with sanitary landfills. Incinerators were also available as options, though they tended to be much more expensive to operate, generally 4 – 7 times the cost of landfills. Landfills can be easily managed with a good site and the addition of at least six inches of earth after new waste is added to the landfill. In 1946, St. Paul residents were expected to produce a total of 160,000 to 190,000 tons of rubbish and garbage a year, which would require between 750,000 and 900,000 cubic yards of fill space per year (City Planning Board, 1946 ).

This waste management regime is contrasts against the practices that immediately followed it. During WWII, the scarcity of available resources encouraged households and municipalities to be as enterprising as possible with the resources they did have. With municipal wastes, the city saw the potential increase in food production possible by feeding wastes to hogs. This trend of hog production was prevalent nationwide; during the war, about of quarter of cities fed their wastes to pigs (Blumberg, 1989). Once the war ended, however, municipalities quickly stopped feeding their wastes to hogs. By 1975, only 4% of cities still included hogs in their waste management practices

(Blumberg, 1989). This trend also coincided with the emphasis in modernity throughout American culture. Hogs were seen as low technology and in conflict with modernity, and were quickly excluded from waste management regimes. With the erasure of pigs from the municipality, the city lost its nutrient recycling system, which had previously allowed food wastes to be reused. These potential nutrient sources were then sent to landfills, where their potential was wasted.

#### The Waste Crisis

By 1966, the city had begun to recognize the "sleeping giant" of waste disposal. City residents were together producing 1,300,000 tons of waste a year, and this tonnage was growing with every coming year. Landfills were beginning to seem impossible as a long-term option. In addition to worrying about space for landfills, the city was worrying about the effects of their landfills. The landfills used by St. Paul were also becoming problematic. City landfills were previously open dumps, which reeked havoc on the natural environment and surround communities. The city at this time saw the importance of modernizing to "sanitary landfills" in which waste we managed more closely, and layers of dirt were placed over the trash at the end of each day to minimize odors and pests (Citizens League, 1966).

Though the 60s saw a small panic over landfill space, Saint Paul continued using landfills as its primary method of waste disposal. In 1975, over 90% of the city's wastes

were sent to landfills. Though landfilling had not lost popularity, the city continued to recognize the problems with the landfilling of wastes. At the rate Saint Paul was consuming space, the city would have been out of foreseeable landfill space by the mid-80s. This solidified the city's position that landfills could not be considered a long-term waste management strategy.

This "waste crisis" in Saint Paul encouraged the city to look towards resource recovery. From the city's perspective, resource recovery was very logical: citizens vocally opposed the siting of new landfills, and, moreover, landfills contained valuable items that would be better managed from a resource recovery facility. Saint Paul decided to address this problem by moving towards refuse-derived fuel. At this time, the time proposed opening a new facility that could accommodate the wastes created within the city. Though siting resistance was expected, the city believed it would be able to meet its waste management needs with the operation of a RDF facility (Citizens League, 1975). Saint Paul was successful in constructing this facility in 1987, when it opened its refused derived fuel facility in Newport, Minnesota. When the facility was constructed, both Ramsey and Washington Counties established an agreement with the facility that effectively subsidized the costs enough to allow the facility to compete in the market.

This period of worrying about municipal waste management was not unique throughout America. Municipalities over the country were troubleshooting how they might dispose of their increasing municipal wastes. The largest catalyst of this crisis was in large increase in waste generated by each individual. This increase can be tied in to factors described earlier in this paper. Municipalities were uncertain of how to handle

this huge increase in the volume of waste produced within their cities. This crisis was compounded by the U.S. Air Quality Act of 1967, which limiting the legal emissions incinerators could produce and ended up raising the cost of incinerators to make them uneconomic (Tammemagi, 1999).

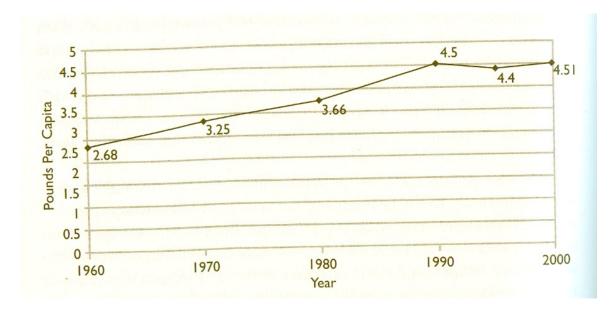


Figure 1: Generation of Municipal Solid Wastes, National Total Per Year. Melosi, 2005

#### Waste Management Today

As of 2000, Saint Paul had transformed its waste management system from the earlier landfill dominance. Saint Paul now disposes of 25% of its waste on land; much of this waste is the by-product of the RDF process. 60% of these facilities are out of state; the remaining land disposed waste is kept in state, much of it in Dakota County. Saint Paul has a high recycling rate of 41%, which reduces the amount of waste that must be sent to any disposal site. The remaining waste is sent to a refuse derived fuel facility in Newport, Minnesota. The facility processes and shreds the waste, then sends it to an Excel Energy facility where it is burned to produce energy. Excel produces the energy equivalent of approximately 28,000 homes annually (Ramsey County, 2010).

The county also has a "County Environmental Charge" that it requires of all waste producers within the county. Trash haulers are required to charge an additional 28% to households producing trash; this money is then transferred to the county, which uses it to maintain its relationship with the RDF facility in Newport. This arrangement effectively subsidizes the arrangement Washington and Ramsey Counties have the RDF facility. In 2007, the 20-year agreement between the counties and the RDF facility expired, and the counties began the process of transitioning to a market based approach in which the facility contracts directly with haulers and government involvement in the process is minimized (Ramsey County, 2010).

#### **Dominant Paradigms**

The literature on municipal waste is surprisingly absent of discussions of waste reduction and the sources of waste. Even during the "waste crisis" of the 1970s and 1980s, the Saint Paul discussion centered on what to do with the present wastes, not on how to reduce the overall volume of waste (Citizens League, 1975). By largely ignoring

waste reduction, these texts imply that waste must be taken as given, that the prevention of waste is a futile quest. Especially within their framework of economic growth, the authors accept waste generation as a consequence of economic activity. These discourses effectively erase garbage from the public consciousness, allowing us to maintain our consumption habits without consideration of the wastes.

Household trash has found itself in a puzzling discursive web. On the one hand, trash becomes invisible as soon as we bring our bins out to the curb. The Garbage Man, the "green" trash collection company operating in Saint Paul, advertises "small, quiet, fuel efficient trucks" (http://www.garbagemanco.com). Understandably, trash producers would rather not be bothered by large and noisy collections, and these trash haulers are willing to market themselves to meet that customer desire; however, this quote also illustrates the consumer mindset about our waste: the trash should disappear, without the customer seeing or hearing it. This desired alienation from household waste seems to be the first obstacle that must be overcome to make meaningful progress on waste production.

On the other hand, trash is a framed as a commodity within the market. As is noted earlier in this paper, Ramsey County decided in 2007 to *lessen* its involvement in countywide waste management; when the 20 year arrangement with the RDF facility was complete, the county "saw an opportunity to further explore a shift from heavy government involvement to a more market-based approach for the delivery of waste to the Newport facility" (Ramsey County, 2010). This arrangement implies that garbage is seen as a commodity, and government feels it is not within its responsibilities to be

managing the movement of this commodity. This marks a definite switch from earlier discourse on municipal waste management, where cities felt it was their responsibility to provide city residents with well-managed and efficient waste management.

The commoditization of waste has gained legal recognition as well. In the early 1990s, Clarkstown, MA negotiated a deal with a solid waste transfer station in the town. The arrangement stipulated that wastes from the town would go to this station, even the wastes that had already been sorted by other recycling companies. The other recycling companies in the area took objection to this ordinance, and filed a lawsuit against the town. After levels of litigation, the US Supreme Court decided that the town was violating the "commerce clause" of the constitution and could not require their wastes to be sorted through a particular facility

(http://www.law.cornell.edu/supct/html/historics/USSC CR 0511 0383 ZS.html).

This case clarified the emerging trend in waste management: trash, along with its processing and disposal, is a commodity to be regulated by the laws of the market, not the ordinances of cities. This completed the transition for trash away from a municipal responsibility and into a marketable good and service.

The commoditization of trash has in turn led to an increase in individual responsibility over waste management. When considering household waste production, the first decision a household must make is which trash hauler to choose. This decision, however, is not as simple as it might sound; residents of Ramsey County are warned on the county website that "[s]ending your waste to the cheapest facility can create financial risk, or liability, for you [the householder]. It can also undermine locally sponsored

waste management programs, harm the environment and waste resources" (Ramsey County, 2010). This framework pins responsibility on the household, not the company, and not the municipality for their lack of regulation. In this arrangement, households must seek out the information themselves to find out where each company hauls its wastes, and from there evaluate what option will lead to the most economically, environmentally, and socially responsible waste management. This further puts responsibility on the consumer, because they are not only charged with acting responsibly, but also of researching and evaluating their options.

In addition to relegating action to consumptive actions, the individualization of responsibility also has dangerous health and environmental effects. On top of their responsibility for their everyday wastes, households are also responsible for their hazardous waste. This means that household are responsible for both identifying which household wastes are hazardous and bringing these wastes to the appropriate disposal facility (Ramsey County, 2010). Many of these wastes, however, many seem innocuous to the everyday householder; up to 1% of household wastes are hazardous, and much of this waste is not disposed of at designated hazardous waste disposal facilities (Tammemagi, 1999). This increases the already pervasive problem of waste toxicity. Moreover, this system blames individuals for the resulting toxicity – not the companies producing the toxins, and not the government for lacking legislation. The individualization of responsibility in this circumstance maintains consumers as the primary causes and solutions of environmental problems, and absolves industry and government of responsibility.

The individualization of responsibility is also pervasive in resources about changing these flawed systems. For example, at the end of his book *Rubbish!*, William Rathje and Cullen Murphy outline the Ten Commandments for developing a more reasonable waste management system; within the first of these commandments, the authors posit that

"A more rational garbage policy would consist of muddling along, making improvements on the margin all the time, applying the fruits of advancing technology and of new knowledge about human behavior, thinking through second-, third-, and fourth-order consequences of proposed initiatives – and then turning our minds to other things. There is, after all, a country to run" (Rathje, 1992).

These authors, after explaining many problems with waste management and toxicity of waste management practice, basically tell consumers to continue with the system in place, making marginal improvements, without rethinking the reasons and consequences of excessive consumption and trash. This seems like the opposite of the advice that needs to be given. Consumers should think through the consequences of their actions and waste management system, and *keep* these consequences on their mind. Thinking through the problems with waste management and then promptly throwing these ideas out of one's mind does nothing to create long-term solutions.

#### Where should we go from here?

This discussion of garbage shows how garbage must be seen as being created and maintained by larger social, political, economic, and cultural factors. A growth-oriented

economy demands that goods be quickly discarded for more goods to be purchased. This economy is maintained through advertising, which conditions individuals to view themselves as consumers that will continuously be improved by new purchases. Political institutions on multiple scales support this system with their business-oriented approach to development. All of these processes result in substantial garbage production, which contaminates land, water and air in its disposal. In general, the arrangements are all quite problematic.

Now that I have answered the question of "why is there so much garbage?," the question becomes "how do we change this?" Many aspects of the political ecology lens become useful in working towards a meaningful solution to consumption and disposal problems. Though the multitude of scales on which these forces are acting may seem daunting, it is in many ways an asset, for it allows for intervention at many geographical scales and scales of idealism.

Just as J.K. Gibson-Graham found it useful to look for the heterogeneity of capitalist and non-capitalist activities to deconstruct "capitalist hegemony," I find it useful to look for the heterogeneity of consumptive activities to deconstruct "consumerist hegemony" (Gibson-Graham, 1996). Within the Twin Cities, there are numerous free, barter, and re-sale markets available for those looking to re-use or recirculate useful items in the economy. These options have many benefits for individuals: they allow consumers to find goods for a lower price; they re-circulate a functional item into the hands of someone that will still find that item useful, instead of sending a useful item to the landfill; they prevent a new item from being purchased, thus saving the

wastes created through extraction and production practices it would take to produce that item; and they prevent the packaging waste from a new item from ending up in a landfill or incinerator. All of these factors limit the amount of waste that is ultimately put into the municipal waste stream.

Another variety of consumptive practices that is useful to focus on for waste reduction is household and community level bulk buying. Buying larger quantities of goods can bring down the costs of these goods, which has obvious benefits for consumers. Additionally, bulk buying largely reduces the packaging consumers buy with each purchase; buying one 50-pound bag of oats, for example, will last much longer than smaller bags, leading to fewer consumptive trips to the store, and will come in one large package, instead of a plethora of smaller packages. This reduces the overall amount of waste a household produces with their necessary consumption. Another intriguing idea along similar lines is that of the "carrotmob" organization: this group, instead of emphasizing the "stick" of penalties for environmentally destructive behaviors, encourages the "carrot" of consumer buying power to incentivize environmentally friendly behaviors from industry. The premise is that a group of people will ask businesses to make changes that they support, and whichever business is willing to make the most impactful change wins the patronage of those in the carrotmob (<u>www.carrotmob.org</u>). This idea could highly encourage waste reducing by guaranteeing to businesses that they will have a market for goods they carry with less packaging and waste.

Moving up the series of geographical scales, communities and municipalities can also get involved in the battle against waste. Neighborhoods can organize to contract with a single trash hauler that brings wastes to the most regionally appropriate site. These organizations have the benefit of both bringing the local community together in discussion towards sustainability and minimizing the noise and air pollution caused by multiple garbage pickups. This allows the community to bring together their individual actions into a collective action that has more political and economic force behind it. This additionally sets the stage for other community actions – like buying in bulk, petitioning local stores for waste free options, and growing and composting food within the community. These options can make large changes on a community scale.

These options, while meaningful, do not work against the "individualization of responsibility" described earlier in this paper (Maniates, 2001). Though individual actions can make a difference in issues of wastes, collective actions are necessary to combat the structural forces at work. These actions can begin with local governments by encouraging municipalities to license only those trash haulers and waste managers whose practices align with the values of the community. The county can also structure its health codes to allow for the sale of un-packaged or less packaged goods. Cities and counties can also provide the infrastructure for local markets, such as farmers markets, which support the purchase of goods with much less packaging, processing, and waste.

In an idealistic vision of the future, these changes can involve widespread cultural changes that value non-consumptive activities. If individuals limited themselves to the consumption that is physically and psychologically necessary, background

consumption, there would be little need for over-packaged, useless goods (Princen, 2001). This shift would also lead to a society with less advertising, and less constant conditioning of individuals into consumption. This would in turn reduce the psychological stress on individuals to consume, which could lead to a society that is overall happier and more productive.

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