

Dirty Progressives: The Battle over Municipal Trash Removal in Chicago: 1890-1910

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Abstract:

Proto-Progressive in Chicago began to fight over municipal garbage removal, linking together city-beautiful era arguments with progressive-esque moralism. Furthermore, key movers in Chicago Progressivism such as Jane Addams and Mary McDowell got their start as garbage reformers. The Garbage Wars that occurred between 1890 and roughly 1910 form a link between classical municipal improvements/urban boosterism types and progressives.

Introduction

Scope

Chicago begins, as is part of local lore, with a swamp. Built on the portage between the Mississippi river network and the Great Lakes, it sits at the intersection of the two of the great ‘natural highways’ of North America. In the 1800’s, it was the fastest growing city in the United States. Chicago embraced the role as a ‘shock city’, becoming a pioneer in many areas of managing urban growth. Yet, the consequences of these decisions would be broad and affect the development of the nation at large. Chicago, the shock city of the United States, provided a blueprint and template for industrial urbanisation.

The latter rapid growth and expansion of Chicago from 1890-1910 frames this paper, as that serves as a 20 years span when Chicago grew from a city of roughly 1 million to roughly 3 million.¹ This growth would be essentially unprecedented at this particular urban scale, and would give Chicago as whole host of new problems to contend with. Along with the massive growth of the city came the creation of a consumer society—and thus a large increase in the production of waste. Juxtaposing these two events gives insight into the evolution of what is know as the ‘Garbage Problem’². This scope is worthwhile because it covers most facets of the transition from a pre-modern Garbage removal system and sanitation procedures to one that is recognizable today. Framing this paper in the narrative of transition in one of the shock cities of America is worthwhile, as this paper becomes a question of how to build livable cities- at some level, sustainable ones.

¹ Some of this is caused by the annexation of Hyde Park and Lakeview. However, those areas gained a whole bunch of city services once they weren’t part of the plans when the cities were independent, which makes a strong case for using these numbers.

² The Garbage Problem is the term that was used at the time to describe all manner of problems with waste creation and disposal. This is used as a catch-all to describe what elite society at the time was concerned about fixing.

Thus, one can use Chicago as interesting case study for the evolution of the modern municipal government. The garbage problem created a need for a solution, and the City of Chicago Department of Public Works/Streets and Sanitation oversaw a municipalization of waste disposal which came under the purview of the political machines that controlled Chicago. During this time period, the political machines used the jobs that waste disposal provided as a key influence on the process. However, the idea of local government responsibility for a variety of social ills beings at some part with the idea of trash collection.

Trash collection improvements can be considered to be part of a legacy of increasing city beautification and efficiency improvements that would govern city management practices. It was all about improving the city's competitiveness, enhancing its natural position as a center of commerce. Think of the boosters of Chicago over Saint Louis described in William Cronon's *Nature's Metropolis*, or to turn further back, discussions of Philadelphia versus New York. The mentality would drive half the conversation about improving city services. They focused on the unsightly nature of the trash piles, the harm to city commerce, and above all, the fact that in order to Chicago to thrive as a business and industrial metropolis, it must be clean. The arguments were roughly similar regardless of whether they were being made about local disposal or why the river flow should be switched.

The other case was a moral one. Elites decried the conditions of the streets, first in their own neighborhoods, then later, they made the same case about poorer neighborhoods.³ This change represents the missing link between the civic competitiveness and turn of the century type argument to civic progressivism. The birth of city services lies in garbage collection. This

³ It should be noted that a non-trivial amount of this rhetoric was motivated by racial/ethnic prejudice.

paper examines the link between the two, previously divergent schools, making the case that they are in fact, related.

I have made the distinct choice here to focus on the histories of elite members of society and their opinions, rather than those in less advantaged communities. One reason for this choice is simply source access, as there is much more material available that is usable to construct the idea of an elite consensus.⁴ Elites were the driving force around attempted solutions to the garbage problem in the 1890's. This was how policy around garbage was shaped in the 1890's, only in the the 1900's would the turn for the concern of the working man become an issues. Elite driven concern over the "horrible"⁵ conditions of the slums would actually form much of the pressure to alleviate some of the conditions. Often, the danger of spillover (that is, characteristic to elite of poor neighborhoods and residents "spilling-over" into their nicely manicured homes) is what motivated this rhetoric. However, the focus on elites and their public imagination of garbage is justified because of their influence on the politics and industrial power.

This paper studies of transition on several fronts, changing the physical geography of Chicago. There is the study of how municipal garbage collection was turned into a professional practice. The transition away from a public commons to city services is well documented in this process. The creation of a sanitation science is part of this process. Furthermore, it is the story of a city in transition, part of the broader process of the creation of a modern Chicago. Modern Chicago is creation of these works.

⁴ Considering who read newspapers (notably the Chicago Tribune), which records have survived into the 21st century, the elites are, at some level, easier to study. Constructing the idea of elite consensus is important, because they controlled the greatest amount of power, especially in the time period.

⁵ Quotation marks here because not that the conditions were horrible, but rather, the paternalistic attitude taken towards the conditions in the tenement slums.

Historiography

Given that this paper concerns two juxtaposed topics—garbage disposal and the City of Chicago—the secondary source neatly maps into two separate categories, the trash literature and urban-Chicago related literature. These are not perfect categories, as a couple sources⁶ make it discordant, but overall, the taxonomy works well to describe the types of works this paper is in discussion with.

The major work in trash literature, at least in terms of the social history, is Susan Strasser's *Waste and Want*⁷ which is the main 'trash-related' piece of work that is paper will concern itself with. Strasser titles her introduction Towards a History of Trash Making, which shows a key distinction between this paper and Strasser's—the work is concerned with the idea of how and why the output of trash and recycling in the 19th and 20th centuries increased by several orders of magnitude.

However, the work is mostly a social history - the work approaches trash from a different angle than this paper, as the main actors are citizens, rather than governments trying to deal with the citizens. Strasser deals with the other side of the coin in which trash was municipalized - the actual reason why the amount of waste was growing⁸, that is, the want of newly rich middle classes produced a consumer society that makes trash.

⁶There are two problematic sources to discuss that lack this taxonomy. The first is Craig Colten's paper "Chicago's Waste Lands: Refuse Disposal and Urban Growth, 1840-1990." found in the *Journal of Historical Geography* 20, no. 2 (April 1994) on page 124. The second is literature that relates to how cities handled the growing trash problem, specific, Chicago is referenced quite a bit in *Waste and Want*, and there are brief mentions of it in the Chicago historical literature.

⁷Strasser, Susan. *Waste and Want: A Social History of Trash*. 1st ed. New York: Metropolitan Books, 1999.

⁸ It does tend to exceed the rate of urban growth, that is, the per capita amount of garbage is growing.

Though the scope and focus of *Waste and Want* is different, it does provide some key context though in how cities dealt with trash, including Chicago. In this sense, *Waste and Want* provides some bit of complementary source material for this thesis. There is a large section on how the consumer culture that was built partially in Chicago⁹ changed how the nation thought about waste management. More importantly, it talks about some of the civic efforts to control the garbage problem. This paper will extend some of the social implication of Strassers work into the realm of the political and environmental history present.

When turning to the political history of trash, it would be worthwhile to observe *Garbage in the Cities*¹⁰, however, the book doesn't deal with many more sources that have since come to light. Furthermore, it doesn't touch on public perception as much as it should, which is where this paper extends the conversation. Finally, Pellow's the *Garbage Wars* takes a competing view, that the political machinations of the elite class were used to suppress disadvantaged classes when it came to Garbage. These represent the political histories of garbage.

The first piece of the historiography on Chicago that is notable are the Colten pieces¹¹, as it is an interesting transition point from literature about trash to literature about Chicago. The first piece, *Chicago's Waste Lands*, is a worthwhile look into how the physical disposal of waste created key geographies that formed the Chicago area.¹² The process of disposing waste in Chicago formed a certain geography, that is, that is a large portion of today's modern Chicago is

⁹ Namely, Sears Roebuck, Montgomery Ward were prophets of a growing consumerist sentiment.

¹⁰ Melosi, Martin V. *Garbage in the Cities: Refuse, Reform, and the Environment*. Rev. ed. History of the Urban Environment. Pittsburgh, Pa: University of Pittsburgh Press, 2005.

¹¹ Colten, Craig E. "Chicago's Waste Lands: Refuse Disposal and Urban Growth, 1840-1990." *Journal of Historical Geography* 20, no. 2 (April 1994): 124.

———. "Industrial Wastes in Southeast Chicago: Production and Disposal, 1870-1970." *Environmental Review* 10, no. 2 (1986): 93.

¹² Notably, much of the area that is now Grant Park and was the Illinois Central terminus was built on detritus, as are several key areas in the Calumet River basin.

formed on “made land”, which a significant section of it was trash. The other paper is useful for the sources it provides, as Colten has a non-trivial section on methods and processing of trash during the time period discussed in this paper. However, the key takeaway, as Colten states, is that zones of waste disposal become an urban frontier of growth near key areas.

The other main part of the conversation that this paper engages in is with *Nature's Metropolis* by William Cronon. Cronon talks about the infrastructure and natural advantages that put Chicago on the map, both figuratively and literally. Cronon sites the metropolis of Chicago as the gateway between the ‘Great West’, that is, an amalgamation of the old northwest and the great plains, or roughly the modern middle west.¹³ Chicago’s industrial preeminence, and function as the center of the railroads, drove the growth of the city at one of the quickest rates in human history ever, and certainly the quickest at the time. During this period, Chicago was a center for a vast hinterland and consciously attempted to alter its infrastructure to impact how it was perceived. As the collecting point for many of the product of the west, Chicago would have to deal with the packaging and disposal. This creates the notion of the inputs to Chicago being subsumed into Chicago hinterland. This paper proposes that the output (ie, trash) also create their own hinterlands for Chicago.

This paper begins with a discussion of the Garbage Wars of the 1890’s, as a lens to the transition to municipal garbage disposal. Next, it turns to the nature of the Garbage Problem in Chicago, that is, how did both a new city bureaucracy along with industry attempt to solve the problems presented by waste. Finally, it uses the question of how to solve the issues related to bubbly creek as a contrast to the waste issues city-wide. This is then tied into the larger changes

¹³ Obviously, these regional distinctions are quite complex, but Cronon has the rough “Chicago is the center”, and answers the Chicago vs St. Louis question quite well. Rather, the takeaway, of Chicago as a center of a vast regional network that was concurrently growing, is quite important. In some ways, Chicago is an entrepot city.

happening to waste disposal systems, and essentially, a brief 'history of the dustheap' as it relates to Chicago.

The Garbage Wars

Is it at all surprising that the Chicago of the 1890's produced a municipal crisis so deeply discomfoting that it was called the Garbage Wars? The Garbage Wars was the full extent of the municipal crisis around refuse disposal and storage. During the process, waste disposal moved from the private sphere to the public. This process of municipalization of trash pickup will create a new image of the view of the city government in public space. Throughout this particular historical moment, citizens, elites, companies and politicians are redefined the view of what the term 'city services'¹⁴ means.

Before starting on talking about what exactly the Garbage Wars were, it is useful to construction an image of what home/business waste disposal looked like, especially in cities such as Chicago, New York and Philadelphia. Remember, the idea of a public commons for the city was quite common well until the 1880's and that idea influenced city development. The rapid development of Chicago from the Civil War until 1910 upended this paradigm. One of the wonders of the 1893 Columbian exposition was a furnace that destroyed all garbage thrown at it.

¹⁵ However, the attempts to build furnaces in Chicago would prove to be mostly fruitless, as the amount of garbage produced would quickly exceed the capacity of whatever new facilities had come on line.¹⁶ Rather, the city would have to continually expand its garbage hinterland, moving trash from local waterways to small inner-city dumps to larger, suburban dumps. After this period, the garbage hinterland will gradually grows to encompass large ex-urban dumps, such as the Indiana quarries that are used today.

¹⁴ That term comes into use far later, but is used here to demonstrate the idea that the city was taking over a role that historically had not been the role of the municipal government.

¹⁵ Strasser, Susan. *Waste and Want : A Social History of Trash*. 1st ed. New York: Metropolitan Books, 1999. 132.

¹⁶ Not to mention the habit of incinerators themselves burning down, as this had happened several times in Chicago's history.

The main academic study we have of the garbage wars, is, fittingly, *The Garbage Wars: The Fight for Environmental Justice in Chicago* by David Pellow¹⁷. Pellow frames the garbage wars as a much larger process of the environmental justice movement in Chicago¹⁸, rather than on the incidents of the 1890's garbage wars. His commentary on the marginalization of ethnic peddlers however, provides an interesting subtext for the entire conversation, which is the competition between various interests for employment in the trash field. Namely, patronage politics in the garbage wars will be a major subtext for all the conflicts that follows.

In 1891, Chicago Superintendent of Police McClaughry ordered that the police must enforce city ordinances 1,952, 2,011, and 2012.¹⁹ This prerogative reflected the crisis that was occurring on the streets of Chicago in that time, that, in the words of its citizenry²⁰, Chicago was unclean, covered in filth. As an aside, the idea the the Police Chief needed to order the police to enforce the ordinance suggests that it was not being followed prior to the order to enforce it. General Order 16 (Enforce trash regulations) suggests that waste ordinances were not being followed. Given the state of the Chicago Police Department at the time, it is not hard to imagine possible corruption in the following of the ordinance, but the more likely answer is apathy, given that the idea of a civic commons²¹ still ruled. It was up to citizens to pay for their own Garbage collection, and those who did not follow the norm were at some level, tolerated. This was more

¹⁷ Pellow, David N. *Garbage Wars the Struggle for Environmental Justice in Chicago*. Urban and Industrial Environments. Cambridge, Mass: MIT Press, 2002.

¹⁸ Pellow makes a long, substantiated case that environmental rights in Chicago is something that would place ethnic workers in jeopardy, but it runs in parallel to the case being made about political change in this paper. Pellow wishes to know about the impact of waste in marginalized communities, this paper is looking into mostly elite reactions to waste that would inform political ideas about marginalized communities.

¹⁹McCLAUGHRY, R. W. "MUST ENFORCE THE GARBAGE LAWS.: Chief McClaughry Issues Strict Instructions to Officers and Men." *Chicago Daily Tribune (1872-1922)*. June 4, 1891.

²⁰ At least, the elite citizenry.

²¹ The civic commons suggested that it was normalized to have garbage heaps, and frequently, pigs and scavengers would go around collecting material from them. The elimination of this practice, which is associated with marginalized groups at the time, is one subtexts that underlies the municipalization of garbage disposal.

common in less affluent communities, as evidenced by the rates of conversions into small parks of the garbage heaps.

The 1893 World's Fair serves as an interesting place to start the story of municipal garbage collection, as the fair did serve as a moment when the cultural civic imagination²² grew immensely. 1893 also marked when the City had established large garbage heaps throughout the city. These garbage heaps were supplanting the municipal commons which no longer had enough capacity in the form of waste-disposal animals (most often pigs) and incineration plants. There, the Superintendent of Street Cleaning said that "the building of crematories of sufficient capacity to destroy the refuse is yet in the future."²³ There was large-scale indignation about the state of refuse disposal in the city, it was viewed as an embarrassment. There was, to some degree, as tragedy of the commons problem, as people would accuse their neighbor of not disposing of their refuse, while of course, they did theirs perfectly.²⁴

Although Garbage Heaps are quite unsightly, they also turned deadly. In 1892, the *Tribune* reported of "Public Death Pits" of southeastern Lakeview, which was recently incorporated into the city.²⁵ The process that produced these pits was that brick manufacturers would have empty clay pits, which were then filled by with garbage by scavengers, who often had the role of city contractor. These trash/clay pits proved dangerous, with small children sinking into them. The editorial suggests that the scavengers had aldermanic authority in exchange for their votes in the form of being the ward's garbage collector. This aldermanic

²² That is, what the city could be capable of charged.

²³ "Defending the Garbage Heaps." *Chicago Daily Tribune* (1872-1922). July 23, 1893

²⁴ This is somewhat sarcastic here, as people routinely through accusations of dubious claims around. The *Tribune* makes a joke of this, saying 'If the convicts at Joliet [the notorious State Prison] were asked if they were guilty there would be a nearly unanimous reply in the negative'. ["Defending the Garbage Heaps." *Chicago Daily Tribune* (1872-1922). July 23, 1893]

²⁵ "Public Death-Pits." *Chicago Daily Tribune* (1872-1922). June 18, 1892.

authority also meant that the health department (part of Public Works at this time) was unable to intervene without “a public nuisance”. They further suggested that the lack of crematories in the city at the time could be solved by firing of the contractors who were “hired for work that is never performed” in exchange for votes “come election time”. The article suggest that it was possible for children to die inside the pits, which did happen from time to time. This was one of the added stakes of the “Garbage Wars”, as the garbage heaps, were, quite literally, deadly.

Another problem that was also present in 1893 was the need to separate ashes from refuse. Much like Chicago currently²⁶, it was behind the separation of trash. The need to separate the ashes from heating/cooking from standard refuses is due to the fact that charcoal could be made from ashes, while refuse will decompose. It is also easier to burn refuse without ashes, rather than with. The current situation of semi-private or fully private contracted disposal did not have the capacity to handle the needs of the new metropolis. The rapid growth presses the problem into the forefront of public consciousness.

Either way, one can see the manifestation of a major problem at the time. One of the first solutions proposed for this issue was to cremate all the garbage in incinerators along with the usage of reduction plants²⁷. In 1891, Mayor Roach ordered that the garbage piles be burned. A *Tribune* Editorial commends, the effort, but suggests that even though the burn-pits disposed of the garbage, they did not remove the odor.²⁸ They suggested that an incinerator would be the ideal solution. Specifically, that particular type of late 19th century inventor was ready at hand to face down this public scourge, this enemy of the people. For example, a certain ‘Mr. Harvey’²⁹

²⁶ With regards to Recycling, as Chicago is far behind its peer cities in recycling rate.

²⁷ Techniques that were used frequently in London and other European cities.

²⁸ “Cremate the Garbage.” *Chicago Daily Tribune (1872-1922)*. May 22, 1891.

²⁹ There is no reference elsewhere to him, or any combination of searching on ‘Mr. Harvey’ plus ‘Incinerators’ led to results that were promising.

had proposed using an incinerator³⁰ of his own invention to aid in the disposal of the garbage. The *Chicago Tribune* got aboard the incinerator plan, writing how it was the only method to solve the refuse disposal problem.

Notably, there were several alternatives that could have been pursued to deal with the long term disposal of refuse. The first, which Chicago had traditionally employed, was dumping into the large bodies of water, but that fouls the water supply that is key to the city's growth and health. As the city grew, refuse was not be dumped in the river/lake, but rather, it would be mostly industrial solids/illegal dumping. The next solution Chicago attempt was to carry the garbage out of the city to a landfill, but as the *Tribune* wrote "to carry it into the country is seek vainly for an emptying ground."³¹ Basically, as with many other cities, there was an impasse with what do with large piles of collected trash. This impasse, to some level, continues today, with Chicago's garbage hinterland being comprised of old limestone quarries in Indiana, recycling in centralized plants around America and world.

Incinerators would held up as the solution not only in Chicago, but in New York, Boston, Cleveland and farther afield. This history is documented in Martin Melosi's classic: *Garbage in the Cities*³². He writes of how incinerator technology was mostly imported from European capitals such as London and Paris. The first garbage furnace was built in 1885 by Lieutenant H.J Reilly on Governor's Island in New York.³³ Melosi writes how the 1895 appointment of a Street

³⁰ Incinerators differ from just burning trash heaps by preventing some of the more noxious odors from occurring by doing it a higher temperature inside of a blast-furnace.

³¹ "Cremate the Garbage." *Chicago Daily Tribune (1872-1922)*. May 22, 1891.

³² However, Melosi's book is troubled by the fact that he doesn't deal with the discovery of 100 years of municipal waste records in the NYC archive that was found in 2002 as part of work by Daniel C. Walsh of the Earth Institute at Columbia University.

³³ Melosi, Martin V. *Garbage in the Cities: Refuse, Reform, and the Environment*. Rev. ed. History of the Urban Environment. Pittsburgh, Pa: University of Pittsburgh Press, 2005.

Cleaning commissioner in New York marks the beginning of the practice of a field of ‘Waste Management’. The professionalization of the field that was occurring during this time is something to be aware of when studying the specific instance of the garbage wars in Chicago, and it was clear that there was nationwide pressure to adopt incineration. This is mostly covered in the section dealing with the public works department.

However, there were more creative solutions that were being invented as part of dealing with the garbage problem. One such plan was that of the Nation Garbage Fuel Company, which was a new company dedicated to trash into a coal-substitute.³⁴ Although they made a heady set of claims about the effectiveness of their city-garbage based fuel, the plan never got off the ground. This case does, however, illustrate how there was a growing economy of garbage around reuse. This argument is made most clear in *Waste and Want*³⁵, the nuancing that occurred here was the growing professionalization of the trade. Earlier, trash was considered a dirty industry that frequently was not professionalized, ie, mostly controlled by those who society, at the time, considered unseemly. Again, the canonical example of this is Jewish and Italian rag peddlers in 1850-70’s New York, but what was happening at Chicago at this time is the professionalization of the trade. Rather, it is mostly recycling that is being put up to a higher standard, as there is a market for the used metals, et cetera. The idea of a trash economy that lives in the shadow of the consumption economy is an important concept, that is, trash is not entirely waste, at least some of it is valuable. In Chicago, this logic is employed in several arenas, but the fuel->trash angle remains interesting as an illustrative example. A 1897 *Tribune* piece suggests that Garbage to

³⁴ *Fuel Made from City Garbage and Refuse Is Cheaper and Better than Coal: It Is Smokeless and Odorless and Will Burn Any Place Where Coal Is Used*. Chicago: National Garbage Fuel Co., 1905.
<http://pi.lib.uchicago.edu/1001/cat/bib/1277023>.

³⁵ Strasser, Susan. *Waste and Want : A Social History of Trash*. 1st ed. New York: Metropolitan Books, 1999.

fuel/coal substitute technology must be used to “kill two birds with one stone”.³⁶ At the time, the city was paying a non-trivial sum to dump garbage in far off landfills.³⁷ People were becoming comfortable with the idea that there is value to be had in garbage itself.

One can easily doubt this professionalization of the waste industry, though, considering that the services provided in the industry, were, to say the least, lackluster. City contracts for garbage pickups were frequently ignored or didn’t meet expectations, this led to the continual civic crisis that was, the “garbage problem”.³⁸ An 1894-5 report to the city and the Civic Federation³⁹ by A. Emmagene Paul suggested that only few of the Ward contractors⁴⁰ met standard of disposal, as few wards were, in fact, clean. The report suggested that, in many cases, the blame was not only on the contractor, but also on the inspector. This suggested that there may have been some element of bribery or corruption influencing the garbage inspectors. In fact, there is evidence of this in the form of accusations levied by the *Chicago Tribune*. The inspectors were a position that was appointed by the city, and occupied a role in machine politics, namely, one could make a lot of money as an inspector because your approval was needed in each of the ward level contracts for garbage. As the 1894 contracts expired, this gave Mayor Hopkins the chance to cancel several contracts that were finished to be terminated in a nod to the civic agitators, and he refused the renewal of at least 10% of the contracts. This was a moment in which the

³⁶ “Most Important Recent Discovery.” *Chicago Daily Tribune (1872-1922)*. August 16, 1897.

³⁷ Info on this can be found in Craig E Colten. “Chicago’s Waste Lands: Refuse Disposal and Urban Growth, 1840-1990.” *Journal of Historical Geography* 20, no. 2 (April 1994): 124.

³⁸“FEW WARDS ARE GOOD: SCAVENGER SERVICE GENERALLY POOR THROUGHOUT THE CITY. Reports Submitted to Mayor Hopkins and the Civic Federation as to How the Garbage Contractors Have Done Their Work--Few Are Making the Proper Efforts to Comply with the Terms of Their Contracts--Negligent Inspectors Are Responsible for Some of It. This Ward Is Never Clean. Contract Never Carried Out. No System in His Work. Report Is Impartial.” *Chicago Daily Tribune (1872-1922)*. January 7, 1895.

³⁹ A good governance boosterism group, mostly industrial/business leadership at the time.

⁴⁰ Each Ward had a different contractor to handle “scavenger” or garbage pickup services.

proto-progressives who made sanitation the hallmark of their campaign for betterment were beginning to show their power.

Notably, Jane Addams, who had repeatedly protested about the conditions of sanitation, was finally appointed sanitation inspector for the ward containing Hull House. After the start of her betterment movement, she turned to trash and attempted to run for garbage collector, but only was able to become the collector for her ward.

Protestation for the municipalization of trash pickup began in the early 1890's. An 1894 piece on the status of garbage in New York City⁴¹ in the *Tribune* suggested that that the city needed to take the mandate in the disposal of garbage⁴². The problem of active sites⁴³ of trash should be compared with the gleaming 'white city' that was being presented at the time, as this problem becomes the underbelly of the cities concern. Citizens were up in arms over various neighbors living near active dumps. There was a huge manifestation of the 'garbage problem'. This is compounded with the massive growth that Chicago was going through at the time, as the population continues to rise a rapid clip. The Heimann lawsuit suggests that there was a need to create a legal framework for dealing with the trash problems, as that time (1892) this was considered a private issue. The scale of the residential and commercial wastes⁴⁴ gradually begins induced the need for an actor to step in a solve the problem. The legal framework of decentralized garbage disposal had failed.

⁴¹ "Garbage in New York City." *Chicago Daily Tribune (1872-1922)*. September 15, 1894.

⁴² This article also includes a whole host of crazy late 19th century solutions for the problem, like running a massive electric current through the Chicago harbor.

⁴³ For example, there was a protest and lawsuit about Ferdinand Heimann dumping his garbage at Ashland and Nelson. Source: "ASK FOR PROTECTION.: CITIZENS ASK THE COURT TO STOP A GARBAGE NUISANCE. Property-Owners Near Ashland Avenue and Nelson Street File a Bill to Restrain Ferdinand Heimann from Using His Property in That Neighborhood as a Dumping Ground for Refuse--Esherites and Dumpsites Again at War--Fuller's Advertising Agency Wants Damages." *Chicago Daily Tribune (1872-1922)*. July 9, 1892.

⁴⁴ This uses in the zoning sense of the word, as in small commercial business, taverns, restaurants, et cetera rather than large industrial or quasi-industrial firms.

The question of who that actor was going to be became the central argument of the Garbage Wars. Before moving on to what exactly happen with the garbage disposal question, it is important to unpack the arguments that were made in favor of garbage disposal. Namely, there is the extension of the argument that was made by the folks who had a pushed for a variety of municipal improvements. Think street paving, sewers, and other urban efficiency type improvements. These are the types of arguments and people who were pushing to an end of the ‘Era of Urban Chaos’ as it is dubbed by Dominic Pacyga. This era is framed, as mentioned before, with annual arrival of at least 50,000 people to the city from 1880-1895.⁴⁵ There was the creation, in the media away from Chicago, the idea of the savage Chicago. For example, Rudyard Kipling wrote “Having seen it, I urgently desire never to see it again, it is inhabited by savages”.⁴⁶ Some of the desire to clean up the city stemmed from the cloud of smoke that hung over it, as it was a city fueled by coal. Chicago’s air was probably more polluted than the cities of Northern China are today. Cronon, adds “Chicago was the shock city of America. And some reacted to that vision of the future with horror: "This is not the place we want to go. This is not what we want to be." And others with great excitement: This is what the world was becoming. It was a world of endless opportunity.”⁴⁷ These two opinions come together to sponsor a whole host of municipal improvements, as, regardless of interpretation, the result was the same. Now, with the garbage problems, there enters in a new angle, which is the moral one. The moral argument is sanitation was needed for a healthy character , a sound, safe city⁴⁸, and without it, Chicago is nothing but a city of savages. It would be the overlap between engineering and

⁴⁵ Pacyga, Dominic A. *Chicago : A Biography*. Chicago: University of Chicago Press, 2009. 101.

⁴⁶ Pacyga, 103.

⁴⁷ William Cronon. “American Experience, Transcript,” n.d. <http://www.pbs.org/wgbh/amex/chicago/filmmore/pt.html>.

⁴⁸ This should read as very much coded to the ‘dirty’ nature of immigrants as perceived by elites.

technical specialists who were creating a new build environment for cities to thrive in and reformers who would gradually begin to make the case for social safety nets. This overlap in physical personale is explained at length throughout the paper, but here, it will just be a brief outline of the argument. The moral argument stems from the unclean nature of garbage, as that it is constructed as ‘waste’ and ‘disgusting’. An example was the 1896 plea to clean the alleys, as they are a nuisance to ‘public health’.⁴⁹ The creation of ideas of public health are also reflected in the writings of the time. This change should be noted as it will serve as the beginnings of the welfare state. There is a link between Henry Clay’s internal improvements and the attempts to build a social safety net, build in the land of garbage sanitation.

But first, the Garbage Wars must end. On the disposal front, the first step that was taken by the city was that it began to contract out waste disposal for residential blocks. This was what was put in the hands of the garbage inspectors and become the hotbed of corruption that Addams, who was eventually became an inspector, protested about. Aside from the piece on alley clean, where there was public health protesting on the quality of the alleys, there was also a moment where women’s groups in the Fourth Ward⁵⁰ that complained about the quality of sanitation services there. What followed is perhaps a perfect example of Chicago politics.

“Women of the Fourth Ward and Garbage Contractor R.T. Hanrahan met yesterday... to Discuss the garbage questions. Mr. Hanrahan’s presence at the meeting is best explained in his own word. “Some of the men have been saying to me, ‘Aha, Hanrahan, you’ll soon lose your head now that the women are after you’ ‘And Will I?’ says I. Well and sure I’ll just not, for I’m going to clean the Fourth Ward as clean as it ever it can be clean, and I’m going to ask the women to

⁴⁹ “MUST CLEAN THE ALLEYS.: JUST NOW THEY ARE A MENACE TO PUBLIC HEALTH. Little Work Done Since Beginning of Year Because of Lack of Money--Nearly 22,000 Loads of Garbage Accumulated--Contractors Will Be Urged to Carry These Away as Soon as Possible--Officials Say They Will Brook No Delay. Worst Wards. No Money on Hand.” *Chicago Daily Tribune (1872-1922)*. February 6, 1896.

⁵⁰ Hyde Park.

let me come over to their next meeting". And he came. Mr. Hanrahan arrived late."⁵¹

This type of conflict was typified between local groups and their contractors. As mentioned before, the inspection system for each Ward's contract was frequently an easy mechanism for corruption, which became a proxy for lackluster service. The first attempts at solving the problem of pickup, that is, the city was unable to provide a mechanism for sanitation. However, people like R.T Hanrahan remained involved in these types of issues, becoming a contractor for the Good Roads movement in 1911.⁵² Yet, the contractor issues would remain a problem. However, the ward based garbage disposal system would remain in place in Chicago for nearly 120 years after its implementation here.⁵³

The contracts again, became an issue. 1897 would mark the setup of a 5-year contract, which was approved by the mayor.⁵⁴ The commissioners of Public Works had added a large set of penalties for the contractors who did not dispose of garbage.⁵⁵ This was a reaction to the various sets of public pressures that had begun to appear in the city. This was the moral case and the public works case, combined into one. This was supposed to solve the garbage problem, at least the disposal side of it, once and for all. It is important to note that these contracts were signed under Republican Mayor George Bell Swift, who was voted out in 1897. The Council and

⁵¹"WOMEN ON THE WAR PATH: GET AFTER THE GARBAGE CONTRACTOR OF THE FOURTH WARD. R. T. Hanrahan Attends a Meeting of Feminine Householders at the Residence of Miss Harriet Shinn, No. 53 University Place--Concert Measures to Secure Cleaner Alleys in That District--Those Who Litter the Streets to Be Prosecuted. Believes in the Women. Don't Like to See the Wagons. Barrel for Papers. Send Out a Warning. BURN YOUR PAPERS. MUNICIPAL COMMITTEE. All Want to Inspect. Those Present." *Chicago Daily Tribune (1872-1922)*. March 3, 1896.

⁵² League of American Wheelmen. *Good Roads; Devoted to the Construction and Maintenance of Roads and Streets*. [Chicago, etc: Burton Pub. Co., etc.], n.d. 41.

⁵³ Ward based disposal ended in 2012, with the implementation of a grid system.

⁵⁴"TEN BID ON GARBAGE." *Chicago Daily Tribune (1872-1922)*. September 4, 1897. 175471138. ProQuest Historical Newspapers: Chicago Tribune (1849-1990).

⁵⁵"TO CLEAN THE CITY.: Ironclad Five-Year Garbage Contracts Are Now Ready. INSPECTED BY BIDDERS. Heavy Penalties for Failure to Perform or Neglect. HOW WORK IS DISTRICTED. Some of the Penalties. As to the Specifications. Districts and Subdivisions. Boundaries of Districts. Mrs. Paul's Brigade at Work." *Chicago Daily Tribune (1872-1922)*. September 29, 1897.

new Mayor Carter Harrison Jr (Democratic) were opposed to the businesses that received the prior mayors contracts, and by putting it in city control, they would dictate hiring.

However, In 1898, the City Council stripped the mayor of the power to appoint contractors.⁵⁶ They began an as reaction to the 1894-5 report that suggest that garbage disposal was a problem in the city.⁵⁷ It however, should not be interpreted as an anti-corruption move to strip this power away from the mayor, rather, it was an attempt to gain access to a large set of city jobs by the council. This then led to the creation of public works administration of the contracts, as a set of commissioners was appointed. This would lead to the gradual publicization of the garbage disposal, as they allow the Public Works department to begin owning public pickup.⁵⁸ This was done in conjunction with lawsuits against the holders of the contracts, as it was ruled illegal by the courts.⁵⁹ This would allow the City and Commissioner McGann of the Public Works Department to begin picking up the Garbage using City employees. For now, the disposal side of the Garbage Wars was settled.

However, it should be said that this was the birth of the sanitation department as a mass-labor pool, rather than an overseer, is quite fraught. There a variety of consequence that will happen after this, but it is the moment where the city government has begun to provide a permanent service (ie, pickup is never done, the way, say river reversal or street paving was), it

⁵⁶“DEPRIVING THE MAYOR OF POWER: Finance Committee Takes the Garbage Contract Out of His Hands. COUNCIL IS TO LET IT. Move Regarded as a Declaration of War by the Aldermanic Majority. GIST OF SPECIFICATIONS.” *Chicago Daily Tribune (1872-1922)*. December 16, 1898.

⁵⁷“FEW WARDS ARE GOOD: SCAVENGER SERVICE GENERALLY POOR THROUGHOUT THE CITY. Reports Submitted to Mayor Hopkins and the Civic Federation as to How the Garbage Contractors Have Done Their Work--Few Are Making the Proper Efforts to Comply with the Terms of Their Contracts--Negligent Inspectors Are Responsible for Some of It. This Ward Is Never Clean. Contract Never Carried Out. No System in His Work. Report Is Impartial.” *Chicago Daily Tribune (1872-1922)*. January 7, 1895.

⁵⁸ Reflected in the budget documents of the department.

⁵⁹ “GARBAGE WAR IS ON.” *Chicago Daily Tribune (1872-1922)*. March 12, 1898. 172814364. ProQuest Historical Newspapers: Chicago Tribune (1849-1990).

is a daily (or weekly) injection into it's citizen lives. As always, it is best to remember the Chicago political axiom, 'Pick up the mother****ing garbage and clean the mother****ing streets'.

The other element of the Garbage Wars was what to do with the question of disposal. This issue has been dealt with quite extensively in Colten article on Chicago waste-lands.⁶⁰ What is worth observing that is not covered in the Colten piece is the push for incinerators and the public reaction. There was a massive search for the technological solutions to the problem of garbage storage and disposal⁶¹. This consisted most of questions that the city was obligated to burn the garbage, but it was easy to see the problems with this. Crematories are expensive to build and maintain, which caused outrage with certain politicians.⁶² They also sparked proto-NIMBY⁶³ responses due to their pollution and smoke caused.⁶⁴

Anyways, the late 1880's and early 1890's response that a technological solution⁶⁵ to the long term problem of garbage disposal gradually gave way to Colten's waste hinterland. As long as garbage is outta mind, outta sight, it doesn't cause a problem. Combined with the cities new modus of actually collecting the garbage, the inner city heaps⁶⁶ give way to the central method of disposal that remains with Chicago today. The Garbage Wars served as the incision moment

⁶⁰ Colten, Craig E. "Chicago's Waste Lands: Refuse Disposal and Urban Growth, 1840-1990." *Journal of Historical Geography* 20, no. 2 (April 1994): 124.

⁶¹ Of note, the amusing electrify the river and turn it into fuel schemes that have been discussed earlier.

⁶² "TILT ABOUT GARBAGE: FINANCE COMMITTEE CRITICISED AT THE COUNCIL MEETING. After Ald. Swift and Others Have Charged It with Lack of Thoroughness a Petition from the Municipal Order League That the City Erect and Maintain Crematories Is Referred to the Protesting Body--Recommendations Along the Same Line--Other Business. McGillen Asks How. Building Commissioner's Annual Report. To Regulate Corporations." *Chicago Daily Tribune (1872-1922)*. January 31, 1893.

⁶³ Not in my backyard.

⁶⁴ "WAGE WAR ON GARBAGE CREMATORY.: Residents of the Thirtieth Ward at an Indignation Meeting Give Vent to Their Pent Up Feelings." *Chicago Daily Tribune (1872-1922)*. July 13, 1896.

⁶⁵ This *Tribune* Editorial is suggestive of the genre. "Cremate the Garbage." *Chicago Daily Tribune (1872-1922)*. May 22, 1891.

⁶⁶ "Defending the Garbage Heaps." *Chicago Daily Tribune (1872-1922)*. July 23, 1893.

when the city took control of the system and began to exercise a certain form of influence and power in it's citizens lives.

The Garbage Problem and the Creation of Waste Management

Academic Professionalization: The creation of a garbage science.

The 1902 thesis of Fred Goodrich Frink, entitled, *The Garbage Problem in Chicago*, for a Master's of Science degree at the University of Chicago begins with that "All Material Life is accompanied by the production of waste matter."⁶⁷ This question was used to frame his analysis of Garbage in Chicago and how to solve the issue that was plaguing the city at the time, which was, the "Garbage Problem". The document is worthwhile because it lays out the legal, technical and policy cases for a comprehensive solution to this problem. This, when accompanied with the Annual Reports of the Department of Public Works, provides a clear picture of what methods were being deployed to deal with the issue.

Frink describes eight main categories of garbage, which, should be of note, is double the standard four that is used in the technical literature that since evolved about the nature of Waste Management.⁶⁸ His categories are Excrement, Dead Animals, Garbage, Stable Refuse, Street Sweepings, Combustible Waste, Incombustible Waste, and Ashes. A particular claim is reserved for Excrement, as Frink suggests (correctly) that it is the source of filth and disease, an early exemplar of the public health case against the garbage problem. This becomes an a case for how to avoid the dumping of excrement into drinking supplies, as there is now a clear link between that and disease. Dead Animals⁶⁹ are already the purview of contractors paid the by pound, essentially, providing a mechanism for their disposal. However, their role as part of an

⁶⁷ Frink, Fred Goodrich. *The Garbage Problem in Chicago*. [Chicago: s.n.], 1902, n.d.

⁶⁸ D'Amato, Alessio, Massimiliano Mazzanti, and Anna Montini, eds. *Waste Management in Spatial Environments*. Routledge Studies in Ecological Economics 30. Milton Park, Abingdon, Oxon, UK: Routledge, 2013. 14

⁶⁹ Think horses, dogs, et cetera. In 1900, these animals died on the street frequently.

ecosystem should be noted. Otherwise, these categories deal with similar mechanisms in the prior literature which has been discussed before.

Reduction processes (a process of collecting Grease, Ammonia, Phosphoric Acid and Potash among others) from garbage was a part of discussion at the time on how to deal with the Garbage problem. The table below suggests that there is both a technical value capture along with what can be capture by scavengers.

Table II: Value of Collected Refuse through Reclamation processes

Collected Good ⁷⁰	Amount (lbs)	Price (\$)
Grease	40	1.20
Ammonia	13	1.04
Phosphoric Acid	13	.13
Potash	3	.10

This creates a value of 2.47 per ton of garbage, which is too low to keep the reduction plants in operation (Frink counts 10 closed plants and only 6 running, along with 2 experimental plants). However, these plants don't cause a significant reduction of the actual volume of trash (extracting 69 pounds of goods from a literal ton of waste). Now, scavengers, those who would pick through trash as a process did create a significant scrap market, and it is important to note that this was considered unsanitary work that was best reserved for 'immigrants'. Strasser expands on this in *Waste and Want*, but Frink's solution to the Garbage Problem is explicit: "Picking should not be allowed".⁷¹ Without it however, reduction becomes an impossible task, it is not a viable solution. Reduction, the great hope of many technical reformers of the era, is an abject failure.

⁷⁰ Table is a reproduction from Frink, Fred Goodrich. *The Garbage Problem in Chicago*. [Chicago: s.n.], 1902, n.d. 23

⁷¹ Frink, 54.

As is the case during the garbage wars, cremation, which was extensively practiced in England, is suggested as a method for disposing of waste. However, this advances the notion that is a cost-benefit analysis in the creation of this particular bureaucracy. Frink suggests that disposal in sites that are simply dumps has no long term sustainability, as both decomposition is inhibited and has a negative effect on land values. Essentially, there is a NIMBY reaction to building crematoriums that is higher than the reaction to dumping sites.⁷²

City Professionalization: The Creation of a Garbage Bureaucracy

So far, this paper has been focused on the public battles over refuse. However, it would not accurately represent the actual experience that the bureaucracy that was intended to serve and hopefully, solve the garbage problem. The Department of Public Works was founded in 1873 in an attempt to civilize the wild, crazy fast growing city of Chicago. In 1890, when the observed time period begins, it contains both what would become the Department of Streets and Sanitation along with the Department of Public Health. This is indicative of the argumentation that was taking place over the garbage problem, that is, there was both a moral/public health component and an engineering/sanitation component.

The primary sources that are used in this section is the Annual Reports of the Department of Public Works⁷³ and the Proceedings of the Board of Directors of the Chicago Sanitary District Proceedings^{74, 75} This paper takes the view that these records are, in the way, the refuse of a

⁷² This is not to suggest that there isn't a reaction to have dumps in the neighborhood, but rather, it was less intense in the 1890's than the reaction to crematoriums. The extra cost of the later didn't help construction plans move along any faster, either.

⁷³ Chicago (Ill.). *Annual Report of the Board of Public Works to the Common Council*. Chicago.

⁷⁴ Chicago Sanitary District (Ill.). *Proceedings of the Board of Trustees of the Sanitary District of Chicago*. Chicago, Ill: The Board, n.d.

⁷⁵ Both of these works are available in the Crerar Library at the University of Chicago. Certain years of each report have been digitized through HathiTrust/Google Books as well. For referencing, I have used the report name, the year of the report, and its page for certain information.

growing bureaucracy. The formalization of city services that we take advantage of today had not yet occurred, so there is a certain false impressiveness (a false assumption of authority. The reports propped the department up.) to the language in some of these reports. The people who worked for the city at the time were working on the ground level of establishing the municipal state. In terms of divisions of responsibility however (and a bit of municipal department history), the Public Works Department contained the Streets bureau, which then eventually (in the 1930's) was upgraded to the full Department of Streets and Sanitation. The Chicago Sanitary District, however, is predecessor of the Metropolitan Water Reclamation District, and therefore, is primarily concerned with water and delivery of it. The streets bureau was organized in 1892.⁷⁶ They also helped construct the Illinois Sanitary and Ship canal.⁷⁷ This is not to say that the two department did not collaborate, in fact, they were basically joined at the hip. For example, the Lake Michigan Water Inlet Tunnels, the source of clean water for the city, was designed and built under the guise of the Chief Engineer of the Department of Public Works, Ellis Sylvester Chesbrough.⁷⁸

One interesting aspect this that, despite the annual nature of the reports, only certain records made it into the city council.⁷⁹ That is, the City Council only read or received the reports during certain years. This reflects the rapidly changing nature of the bureaucracy at the time.

The first regulation of sanitation that was passed by the City of Chicago was on November 7, 1833, when the trustees of the town “declared it unlawful to throw or put into the

⁷⁶ Chicago (Ill.). *Annual Report of the Board of Public Works to the Common Council*. Chicago. 1892.

⁷⁷ Louis P. Cain. “Sanitation.” *Encyclopedia of Chicago*, n.d.
<http://www.encyclopedia.chicagohistory.org/pages/300017.html>.

⁷⁸ *Ibid.*

⁷⁹ 7/0001/01 Chicago: City Council Proceedings Files Index 1833-1998 Boxes 3-7/27

Chicago river, within the limits of the town, the carcass of any dead animal.”⁸⁰ The fine for the crime was 3\$ per offense. The first garbage disposal ordinances came down a year later, in 1834, when the council passed a law that no straw, shavings or other substance was to be thrown in any “sewer, drain or ditch”.⁸¹ The regulations would continue to increase with various tweaks and such for till today, frankly. This just draws home the point that the regulation of garbage is in fact, one of the first concerns of any rapidly growing urban area along with urban areas in general.

In the story of the Garbage Wars, one of the key turning points was the invalidation of contracts for garbage disposal in 1897. That year, the city would have cleaned, under contract, 13,225.9 miles of streets. Using city workers, it only cleaned 4,446.8 miles of streets and alleys.⁸² The question for the next year, with the Bureau of Streets taking responsibility for much more of the garbage pickups. It is worth noting, that of a 350 page annual report, the Bureau of Street and Alley Cleaning only submitted 2 pages of material to the entire annual report. This would indicate how much of an unseen world the world of Garbage Disposal was. It does suggest that the city lost \$28,125 in dumping fees when the Chicago Parks District opened a public dumping ground that prior, the City was able to charge for a nearby one. The pre-garbage wars budget, though, however, looks something like the below table.

Table I: The Annual Budget of the Bureau of Street Cleaning, 1897.

Garbage Account	\$295,502
Street Cleaning	\$279,663
Office Salaries	\$9,080

⁸⁰ Chicago (Ill.). *Annual Report of the Board of Public Works to the Common Council*. Chicago, 1890. 429.

⁸¹ At the time, the city did have open sewers

⁸² Chicago (Ill.). *Annual Report of the Board of Public Works to the Common Council*. Chicago, 1897. 49.

Ward Foreman	\$33,704
Removal of Dead Animals	\$9,375

⁸³ This chart indicates that the disposal of garbage, with the exception of Street Cleaning, was left outside of city purview. It also suggests that Garbage and Street cleaning was the largest public sanitation expense occurring at the time. The cost per mile of a street clean, under contract, was 8.00\$ per mile. Ward foreman and office salaries were 33,704\$ dollars, suggesting that the foreman post was fairly minimal.

Prior budgets in 1895 and 1896 are basically similar⁸⁴, it suggests there was minimal change in the quality of the streets at the time, which is by 1897 serves as key turning point, for then, the city takes over the budgeting process for streets and sanitation. In 1901, the city spend \$1,046,880 on removal of garbage, which was 75% of the \$1,373,496 budget of the Department of Streets.⁸⁵ This clearly shows how quickly the priorities inside the department had shifted, as now, it was spending most of the budget on garbage removal. During 1901, the city removed 1,334,920 cubic yards of garbage, which was 269,825 loads. The cost was nearly half a million dollars in 1901 dollars, which, inclusive of inflation, is well over 10 million a year just on the removal of garbage.

Much of this was the passage of the Clear Streets Ordinance⁸⁶, which replaced streetside wooden boxes with metal ones, and obligated the city to remove the garbage. This increased the number of complaints about garbage that the city received over 1900 by 2,086. This suggests that

⁸³ The below chart is a reproduction from Chicago (Ill.). *Annual Report of the Board of Public Works to the Common Council*. Chicago, 1897. 255.

⁸⁴ As a note, it is important to consider that our lack of records is a suggestion of corruption, or at least, an attempt to hide the records of these sources.

⁸⁵ Note from F.W. Blocki, Commissioner of Public Works to the Mayor. Chicago (Ill.). *Annual Report of the Board of Public Works to the Common Council*. Chicago, 1902. 199.

⁸⁶ Passed February 1901.

the populace of the city had begun to expect the city to remove street side trash.⁸⁷ This suggests the formation of the current arrangement with garbage disposal that we use today. Finally, a modern garbage disposal system was beginning to take place. The main city crematory at this time was processing some of the garbage, while the rest went out to suburban and exurban hinterlands.

Now, as a slight historical aside, what happened to the dumping pits around the city. They were turned into small parks, often after the death of children at the sites (see garbage wars section). For example, in 1901, the City had 24 small parks under the control of the Department of Streets, rather than the non-city controlled Chicago Parks District. One example park is the tiny Washington Square Park, now located next to the Newberry Library.⁸⁸ These parks, are, at most, one square Chicago block big, but several are just the size of several plats. This conversion suggests that the city was beginning to eliminate the public commons.

Finally, we come down to the modernity of 1901. M.J. Doherty, the superintendent of streets, suggests, that, for the third consecutive year, “considering the way the department was hampered by an adequate appropriation, I am well satisfied with the work of the past year.”⁸⁹ This would be the constant question for the next hundred years at some level, how does one fund the growing trash infrastructure corps.

⁸⁷ Note from F.W. Blocki, Commissioner of Public Works to the Mayor. Chicago (Ill.). *Annual Report of the Board of Public Works to the Common Council*. Chicago, 1902. 204.

⁸⁸ This park seems like a relevant example for paper that has a non-insignificant amount of research material from the Newberry Library. Also, given the audience, seems like a fair one that people can visualize.

⁸⁹ Department of Streets, Commissioner of Public Works to the Mayor. Chicago (Ill.). *Annual Report of the Board of Public Works to the Common Council*. Chicago, 1900-2. 198, 201, 231.

The dumping space question would continue to be a problem, day in day out, for many years. The 1902 report⁹⁰ suggests that a roughly similar amount of the garbage was collected, but the switch from bituminous coal from anthracite coal (due to a mining strike) produced more ashes, and the report warned of running out of dumping space within the next few months. Yet, the city always manages to find further and farther flung trash hinterlands. Even when the “department is hindered for dumping space”⁹¹ it manages to find more. Crematoriums, which, at the time, were viewed as a long term solution at the time, did not take hold as quickly as the dumping hinterlands solution. However, the small in-city dumping grounds continued to expand, with 8 more small park conversions, including Ellis Park in A theorem can be stated here, that growing city will expand its trash hinterlands.

⁹⁰ Department of Streets, Commissioner of Public Works to the Mayor. Chicago (Ill.). *Annual Report of the Board of Public Works to the Common Council*. Chicago, 1902. 233

⁹¹ *Ibid.* 233.

Bubbly Creek - The Progressive Moment

The reputation of Chicago industrial pollution is frequently tied to a single site, that is Bubbly Creek, otherwise known as the South Branch of the Chicago River and part of the Chicago Sanitary and Ship Canal. As mentioned before, dumping into waterways was the most frequent method of disposal of industrial solids⁹². ‘Bubbly Creek’ enjoyed a particularly (in)famous reputation, with Upton Sinclair wrote in *The Jungle* of it- “Here and there the grease and filth have caked solid, and the creek looks like a bed of lava; chickens walk about on it, feeding, and many times an unwary stranger has started to stroll across, and vanished temporarily.”⁹³ Bubbly Creek, has, since its origins in the Hardscrabble neighborhood, been a site of constant importance in the public imagination of Chicago. This sub-section will attempt to demonstrate how public views of industry and its by-products changed in the context of the garbage problem by using the canonical example of Bubbly Creek.

Chicago has always neglected its river, preferring the lakefront as the ideal expression⁹⁴ of *Urbs in Horto*, rather, it is river that provided Chicago with the space for industry to grow and dispose of its waste. Notably, Bubbly Creek is where the wastes from the meatpacking industry go, as the Stockyards were centered mere blocks away. The reversal of the flow of the Chicago river⁹⁵ shows that any early ecological preference that was manifest in the city leadership and civic voices at the time was present in the priority for the lakefront. This is made ever more clear in Pacyga, as he outlines how the elite neighborhoods were lake-front proximate, while

⁹² Technical Sense usage here. Industrial Solids are the waste that was generated in the process

⁹³ Upton Sinclair, *The Jungle*, New ed. (Pasadena, 1920).

⁹⁴ Think here of the Burnham plan orientation.

⁹⁵ Brett Hansen, “The Reversal of The Chicago River: Flushing the System.,” *Civil Engineering (08857024)* 79, no. 12 (December 2009): 40–43.

neighborhoods on the river are often thought of as particularly working class and industrial.⁹⁶

This dichotomy is present throughout the larger narrative of the garbage wars, that is, despite that richer groups produced more garbage⁹⁷, various ethnic groups were thought of as dirty by civic leadership and elites.

The reversal of the river helped ease pollution that prior to the moment would collect in the estuary around the Downtown area, which, although in early areas may have been interpreted as a sign of industrial might, was now clearly an eyesore on the city. The reversal meant that industrial solids, which previously had been collecting around Lake Michigan and the loop area, now flushed into the Des Plaines river, and from there, the Mississippi basin. However, the amount of industrial solids that were being produced by the meatpacking industry meant that the south branch, which was a slower moving section of river, was squalid. The condition became an important concern of Women's organizations, who often took the lead on such sanitary issue.

The late 1900's and early 1910's marked a period that would serve as a 'war on bubbly creek', which in some consideration can be considered an extension of the 1890's war on street-side garbage and the ashes issues. Bubbly Creek is frequently referenced (although under different names⁹⁸) in the various reports of the Department of Public Works. It was considered a public nuisance, but its existence was one great concern in the 1900's to Women's Groups and

⁹⁶ Bridgeport/Hardscrabble, Goose Island, Packingtown, among others

⁹⁷ Strasser, Susan. *Waste and Want : A Social History of Trash*. 1st ed. New York: Metropolitan Books, 1999.

⁹⁸ The area served as a channel between the Illinois and Michigan Canal and the lake, with ships passing through to docks. However, what was often referred to as Bubbly Creek was a tributary and marsh that ran into Hardscrabble and Packingtown (from the current path to Pershing Rd) that was more brackish, and therefore, combined with 'output' of the various Swift/Armour/et cetra, was certainly most foul. In fact, it was considered that it was possible, but ill-advised, to draw lard from the river itself. This was, in fact, a popular piece of Chicago mythology referenced in Sinclair's *The Jungle*.

urban elites. This conflict was set up between certain types of elites - Women's Groups and Chicago Gentry versus the Business interests of the Meatpacking owners.

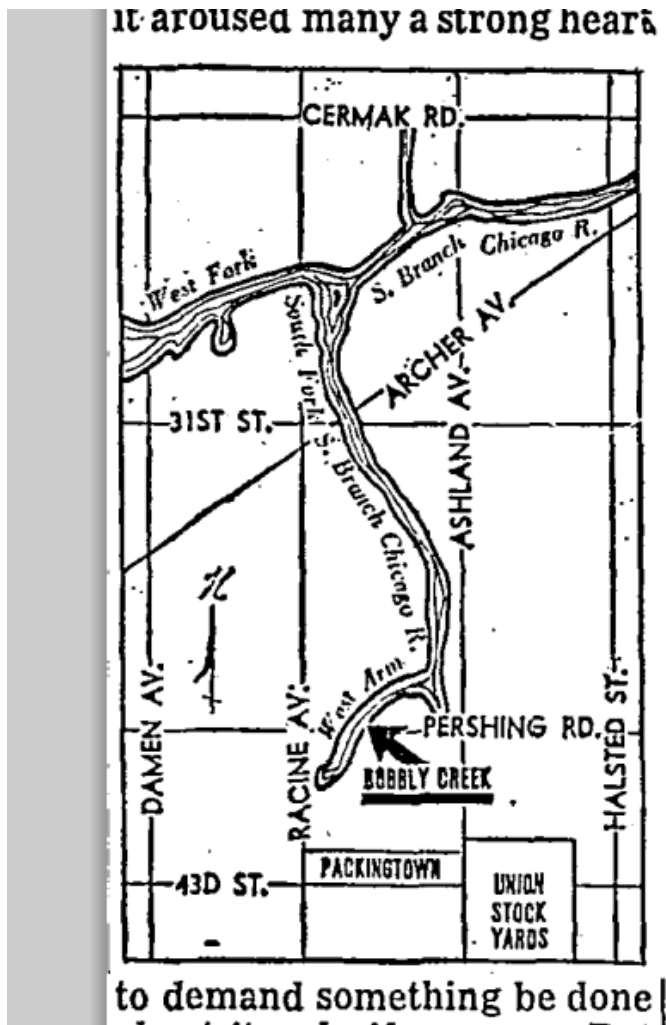


Image: Bubbly Creek Map⁹⁹

However, the 1900's War on Bubbly Creek was not the first attempt to control the stench and otherwise modify the flow of the river, in fact, the 1900 reversal of the Chicago River flow, aside from having commerce implications, also had some element of a need to clean up the entire

⁹⁹ "BUBBLY CREEK, A LI'L STINKER, FACES THE END." *Chicago Daily Tribune* (1923-1963). July 16, 1959. 182350449. ProQuest Historical Newspapers: Chicago Tribune (1849-1990).

Chicago River, inclusive of the South Branch.¹⁰⁰ However, the Illinois and Michigan Canal and the low-flow nature of the canal meant that the reversal only really helped the main section. This was advantageous to certain interests in the city - basically, this made the river better for trade. The South Branch Docks were a massive commercial interest that required the river as a navigable waterway, and pretty much every business and manufacturing concern of the early periods of Chicago growth was entirely based on methods of water based transport.

For example, the McCormick Reaper Works were on the river, and lobbied hard for the reversal of the flow.¹⁰¹ The Reaper Works, which were the first large piece of industry in the city (in 1859, they consisted of 5 buildings, each 5 stories tall, lining the main section of the Chicago river). They did, as nearly all long distance commerce did at the time, rely on water transport. However, the rise of manufacturing brought about early concern in Chicago about the 'smoke problem'¹⁰². This was one of the first environmental crises that occurred in Chicago, and shows how tied the concerns of the environment were to the growth of city, along with how early they entered the minds of the Chicago civic elite.

To really understand the bubbly creek problem, it is best to treat the growth of Chicago as two separate phases of key transportation methods. Early Chicago relied on Water Transport, while that was supplanted by the railroads.¹⁰³ Each of these sponsored a particular type of growth - commodity industry. For the water transport era, the creation of commodity shipping of sacks of

¹⁰⁰ Brett Hansen, "The Reversal of The Chicago River: Flushing the System.," *Civil Engineering* (08857024) 79, no. 12 (December 2009): 40–43.

¹⁰¹ Dominic A. Pacyga, *Chicago : A Biography* (Chicago: University of Chicago Press, 2009). 39

¹⁰² Chicago Tribune, via Dominic A. Pacyga, *Chicago : A Biography* (Chicago: University of Chicago Press, 2009). 42

¹⁰³ This is basically a section of Cronon's argument in *Nature's Metropolis*, and is a relatively uncontested part of the Chicago specific historiography.

grain created the Chicago Grain futures market.¹⁰⁴ Once the railroads became dominant, it was the stockyards and refrigerated shipping that would make Chicago the Hog Butcher to the world. Extrapolating from that, we can see two layers of usages for the Chicago river. In the early, water transport era, it was important to keep the river flowing, and clean enough for commerce, as it was the primary commercial artery for the city.

However, things changed in the Railroad era. The creation of the Union Stock Yards in 1865 on the banks of the South Branch would create a massive explosion in the amount of industrial solids that were being put into the Chicago River.¹⁰⁵ By 1900, the original site had grown from 320 acres¹⁰⁶ to 475 acres, and had capacity for 75,000 cattle, 50,000 sheep and 300,000 hogs. Consider the outputs, or fecal matter, produced by that amount of animals moving through the city. All of this was dumped into the river. This whole area had a stench that was probably unrivaled outside of maybe some of the seedier sections of *le halles*.

So, with the reversal of the river in 1900, there is time for crisis to develop. That is, the main river is now far cleaner, but the south branch is as dirty as ever, and the tributaries are basically solid full of dead animal by-products. Thus, it became a priority for the various Women's groups to start campaigning to cleanup Bubbly Creek, and the term enters the popular lexicon. A 1908 *Chicago Tribune* editorial¹⁰⁷ talks about the need to 'renew the fight on bubbly creek'. This article mentions about a set of Gage Park¹⁰⁸ residents who had banded together to try and deal with the need for a Western Avenue sewer that would help reduce the stench of one of

¹⁰⁴William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W.W. Norton, 1991). 97. (Pricing the Future, Grain Chapter)

¹⁰⁵ Dominic A. Pacyga, *Chicago : A Biography* (Chicago: University of Chicago Press, 2009). 61

¹⁰⁶ Purchased both outside of formal city boundaries and from John Wentworth incidentally.

¹⁰⁷ "RENEW THE FIGHT ON BUBBLY CREEK," *Chicago Daily Tribune (1872-1922)*, February 8, 1908, 173414326, ProQuest Historical Newspapers: Chicago Tribune (1849-1990).

¹⁰⁸ This is the neighborhood between the River, Kedzie, 63rd and Western.

the tributaries that ran through the neighborhood. It was an early example of neighborhood organizing.

1915 represented a new push against the ills of bubbly creek, as that was when the elite Women's societies and other civic organizations really truly gotten involved. On May 20th, 1905, representatives of 5 wards and 20 organizations gathered to bury Bubbly Creek¹⁰⁹, with the *Tribune* headline reading 'Bubbly Creek Dead, But Lives'¹¹⁰. Mary McDowell¹¹¹, at the time, of the University of Chicago, delivered a sermon proclaiming the 'death of bubbly creek' while well others who were there buried the stream under sand. Organizers promised a second funeral for Bubbly Creek.

At the time, the Public Works department was governed by a trustee system¹¹², and the next day (May 21st), the Trustee promised that the creek would be buried, with each addressing the groups with ever more vitriolic descriptions of the Creek's odor.¹¹³ However, Bubbly Creek is a stubborn bit of Chicago lore. In 1919, a full four years after the promised funeral of the Creek, the Public Works Department proposed a fill of the Creek below Pershing Rd (prior 39th St.) - the Trustee votes required a Sludge Processing Plant for 'Trade Wastes'. The meatpackers, at this time, offered to pay half the cost, while the Trustees asked for 2/3rds.¹¹⁴ There was a fair

¹⁰⁹ The tributary in this case.

¹¹⁰ "BUBBLY CREEK DEAD, BUT LIVES," *Chicago Daily Tribune (1872-1922)*, May 20, 1915, 173843750, ProQuest Historical Newspapers: Chicago Tribune (1849-1990).

¹¹¹ McDowell was a graduate student at the UofC, actively involved in the Settlement House movement. She would later be on several Garbage related commissions in the city. She was most active in the Back of the Yards neighborhood. After the 1919 race riots, became heavily active in various 'inter-racial' groups, including being the co-founder of the Inter-Racial Women's Club. See June Skinner Sawyers, *Chicago Portraits: Biographies of 250 Famous Chicagoans* (Chicago: Loyola University Press, 1991) for more information on McDowell.

¹¹² See the second on the history of the Department of Public Works for info on the Trustees.

¹¹³ "BUBBLY CREEK WILL DIE AGAIN," *Chicago Daily Tribune (1872-1922)*, May 21, 1915, 173842156, ProQuest Historical Newspapers: Chicago Tribune (1849-1990).

¹¹⁴ Oscar E Hewitt, "SANITARY BOARD VOTES DOOM OF BUBBLY CREEK," *Chicago Daily Tribune (1872-1922)*, September 4, 1919, 174518868, ProQuest Historical Newspapers: Chicago Tribune (1849-1990).

amount of back-door political trading going on, with a trustee being accused of owning land that the city would be set to purchase. Even still, this plan did not work, as the creek did not clear. The legend of Bubbly Creek is still a part of Chicago, and in fact, it will outlast its parent (that is, the packing houses, which were already in decline by the 1910's.¹¹⁵). A Metropolitan Reclamation Water District plant kept the creek bubbling, and it would take until 1959, when the Federal Government authorized burial and cleanup of the Creek.¹¹⁶

Bubbly Creek represents some of the municipal attempts to deal with the environmental consequences of refuse in Chicago. It cross-cuts across many political movements and issues, dealing with Patronage machines, Settlement House activism, Big-Business Trusts and more. Ideally, the story of Bubbly Creek demonstrates a few things. The first is the scale of the industrial waste problem, especially in the boom years of Chicago. The railroad brought in 300,000 pigs to live in America's second largest city; this scenario is hardly imaginable today. Ideally, one sees how the ad-hoc nature of problem solving in the earlier years has been replaced by a professional class who attempts to solve the various 'Garbage Problems' presented by the Creek.

'Histories of the Dustheap'

So far, this paper has primarily concerned itself with the history of the garbage life-cycle in Chicago, without the context of the greater literature or history of trash in the late 19th and early 20th Century. There is extensive literature on the social and political history of trash. As

¹¹⁵ Louise Carroll Wade, "Meatpacking," *Encyclopedia of Chicago*, n.d., <http://www.encyclopedia.chicagohistory.org/pages/804.html>.

¹¹⁶ "BUBBLY CREEK, A LI'L STINKER, FACES THE END," *Chicago Daily Tribune (1923-1963)*, July 16, 1959, 182350449, ProQuest Historical Newspapers: Chicago Tribune (1849-1990).

mentioned in the literature review section, Susan Strasser's *Waste and Want* stands out as the work that is extensive on the social history. However, unlike the literature review, this section will define Chicago's role in Strasser's History of Trashmaking.

Trashmaking is a unique concept, but essentially, the question of what is trash is not a stable constant, for both temporal axis's and socio-economic ones. As noted in the book, "Daily experience suggests that that trash is a dynamic category"¹¹⁷. Trash represents, ironically, enough, as a form of semi-structured data, as the creation of it is fundamentally a process of sorting. Trash, semi-intuitively, represents the "other side of consumption". The first trash revolution of City Scavengers/Rag-pickers¹¹⁸ and Bone-Black¹¹⁹ is discussed mostly in the New York City context, but is in fact, a urban phenomena.

Strasser's description of the Bone-Trade¹²⁰ is a useful way to advance the idea that Chicago, as with the rest of the nation, had a market in trash. The Bone trade, which thrived in the mid-19th century. The 1880's would bring about the fall of this trade due to the increasing cost of labor. The bone-trade is a fairly unique economy that appears inside of trash and refuse. First, on the supply side, you need a large supply of very cheap workers to do the collection of the bones and processing. On the demand side, you need people rich enough to purchase the end products, which is mostly sugar and other refined goods.

To digress here in the purposes of demonstrating the rise and fall of an integrated trash economy, New York is home to one of the first integrated trash economies- that is, the sugar

¹¹⁷ Strasser, Susan. *Waste and Want : A Social History of Trash*. 1st ed. New York: Metropolitan Books, 1999. 1.

¹¹⁸ The stereotypical description here is is often Jewish Rag-peddlers in the mid-to late 19th century, but advancing an idea of `pushcart entrepreneurs` is not terrible.

¹¹⁹ A charcoal made from burned and discarded animal bones. Usages in water filtration and sugar refining.

¹²⁰ Peddlers would go around purchasing discarded bones, selling them to large wholesalers.

industry. Refining sugar in New York got started in 1730¹²¹, but this was small-scale, with many other peer cities. New York's port allowed it easy access to sugar cane, and after the Civil War devastated the Gulf States sugar refinery, New York becomes the capital of sugar refining in this country, with the refining industry being the city's most profitable from after the Civil War until World War I. Refineries still dot the Brooklyn waterfront¹²², with the famous Domino Refinery¹²³ sign still watching over Manhattan. These factories required bone-black to do the refining, and the cheap labor force of peddlers/bone-pickers¹²⁴ turned New York City homes into a catchment area for their needed supplies. This is the first generation of the bone-black industry and seeing as the bones represented a form of waste, it was a key example of an early recycling economy.

After the Civil War¹²⁵, the consolidation of sugar in New York City meant that the peddlers and other bone collector expanded the bone-collection and bone-black production process to Boston, Philadelphia, Chicago, and other urban areas as catchment zones, relying on cheap labor and the low cost of railroad transport, especially back to the east. Consider this parallel, bones were shipped at low rates in box-cars headed from the West to New York City because the most demand for box-cars was to ship from the industrial heartland to the east, making the reverse quite cheap, is that not the same as shipping bulk trash to China or Malaysia at 1/4 the cost of shipping to from there to the United States.¹²⁶ However, rising labor costs doom

¹²¹New-York Historical Society. "Sugar." Edited by Kenneth T. Jackson. *The Encyclopedia of New York City*. New Haven, Conn. : New York: Yale University Press ; New-York Historical Society, 1995.

¹²² Although now repurposed as condos.

¹²³ The Chief brand of the "Sugar Trust". That however, is a story for another day.

¹²⁴ Who literally sorted through trash-piles.

¹²⁵ Also, this is when Chicago begins to become a city, so one sees peddlers being to appear here, as well. However, the pushcart peddler has a much smaller influence on Chicago culture compared to New York.

¹²⁶ Adam Minter. *Junkyard Planet*, n.d. 22.

the bone-black industry, and Strasser tells the story or how Morillo Noyes' boneblack business is liquidated by 1883, as there is nobody to pick through the garbage anymore. They were destroyed by growing wholesalers who could package much more than small stores. The 1880's represent the end of the bone-black economy, as the cost of collecting bones from trash piles becomes too expensive. This also parallels the rise of slaughter houses, which became a key supplier for the creation of bone-black.

Consider this: Adam Minter's *Junkyard Planet: Travels in the Billion-Dollar Trash Trade*, Minter document that major metropolises in China, ie, Shanghai or Beijing, have a much higher rate of recycling than the American leader, which is San Francisco. Minter writes "no culture encourages a *high* recycling rate quite like the culture of poverty."¹²⁷ This statement does need to be nuanced quite a bit, but essentially, Beijing has a large economy distribution, which allows that the upper end purchase quite a bit of new-material. Then, it trickles down the reuse train to the point where illegal migrants¹²⁸ sort through the trash to recycle it, therefore driving these cities exceptionally high rates of recycling.¹²⁹

Advancing the notion that there is a stage economic development in early industrialization/urbanization¹³⁰ where picking through garbage is a key component of various integrated trash economies. This stage, when applied to Chicago, is somewhat obfuscated, by the fact that the Chicago growth years were particularly rapid, and transport revolution obfuscated

¹²⁷ Adam Minter. *Junkyard Planet*, n.d. 15-16.

¹²⁸ This term has a very particular Chinese context. Due to wage disparities between the inland areas and the populated, urban cost, people often migrate. However, the *Hukou* system of residency permits deems them illegal and therefore they do not have access to government services.

¹²⁹ In fact, rising wages/costs in Shanghai and Beijing compared to the officially designated 'second/third tier' cities has recently driven down the recycling rate in them.

¹³⁰ Fundamentally, these will be linked concepts throughout the paper.

it a degree. The opening of Marshall Fields¹³¹ heralds a revolution wherein the old-forms of recycling and reuse would fade away. This development of a consumer culture would have profound economic and social impacts on Americans and Chicagoans perceived trash.

Remember, piles of garbage, pigs in the streets were commonly accepted throughout the 1870's, but the 1890's and 90's would bring about the idea of dirty trash. "Ever increasing amounts of trash demanded complex systems and huge investments in in sophisticated equipment, promoting the notion among citizens that refuse was a technical concern, the province of experts who would take care of what problems trash presented."¹³² The consumer society induced the creation of exported led and abstracted trash economies.

Subsection: Garbage and the Built Environment

Chicago's Garbage Problem proved to be a key part of city development. Rather, as Craig Colten¹³³ argues, Chicago, like many American cities, had an ever expanding 'waste frontier' that preceded the development of the city. This section will argue that the consequences of the waste frontier where part of the professionalization of garbage. In the 1890-1910 time period, without a clear way to have trash be 'outta mind, outta sight', this drove concern among political elites to deal with the garbage problem. However, the question of a trash-frontier, that is, something that exists below the problem, shows how the geography and built-environment of the city would create the garbage problem.

Fundamentally, the geography of Chicago was not historically well suited for urban development, that is, both being a portage in area, and a full out-swap in others. This was, in fact,

¹³¹ 1873.

¹³² *Waste and Want*, 113.

¹³³ Colten, Craig E. "Chicago's Waste Lands: Refuse Disposal and Urban Growth, 1840-1990." *Journal of Historical Geography* 20, no. 2 (April 1994): 124.

a frequent insult that backers of other midwestern cities would use to suggest that their city¹³⁴ was better than Chicago. The first phase of waste-disposal and the built environment in Chicago was from the city's founding until 1900 or so, where the waste matter that the city produced was used to revamp the shoreline to make it more accessible for both commerce and beautification purposes. Furthermore, waste was also used to built up a large downtown part and train depot.¹³⁵ Thus, the first phase of waste disposal shows how intrinsically linked the urban core and fabric of Chicago are with the problems and questions of waste disposal.

It is the second phase, however, that defines Chicago's relationship for the Garbage Problem for the purposes of this paper. It is then, when waste is used for the raising of streets and infill of land/leveling of it, that the city finds a semi-sustainable relationship between the garbage it produces and the expansion of the urban area. Colton demonstrates how the majority of the Calumet and South Chicago areas are built on reclaimed marshland near the Calumet river, making it a viable industrial area. This area would house a variety of key industries that formed the backbone of industrial growth in Chicago, notably, the US Steel South Works Plant and the Pullman factories are both built on areas that are partially reclaimed land.

The second phase of waste disposal created a positive feedback loop. The growing city produced waste, that was used to make more land available for the development, which made the city grow more. This feedback loop is a key driver of how Chicago became a major metropolis. It links together the waste of the city with the growth, and shows how garbage/wastes are in fact, not useless, but an incredibly important part of the Urban Ecosystem. Again, this paper aims to

¹³⁴ This ranged from places as near as Joliet or Milwaukee to as far away as St. Louis.

¹³⁵ That would would be Grant Park and the Illinois Central Depot.

challenge the notion that refuse and trash were simply problematic by-products of the city, but rather, they were integrated into an entire ecosystem.

However, there is a point that needs to be made about how exactly the waste-lands¹³⁶ are built, which is where are these wastes coming from. An examination of records reveals that most dumping in the waste lands was done from mostly industrial producers,¹³⁷ as household and commercial waste had less mass in this term. Famously, the south branch of the Chicago river served as key dumping zone, but silt degrading was key industry in the creation of the south branch.

¹³⁶ Colten's term, here.

¹³⁷ Andrew Hurley. "Industrial Pollution." *Encyclopedia of Chicago*, n.d.
<http://www.encyclopedia.chicagohistory.org/pages/638.html>.

Conclusion

The garbage problem was a momentous task, and solving required the creation of a new bureaucracy. Moving forward, trash disposal would become the purview of the city government, rather than a private service.¹³⁸ Furthermore, the area provides a link between progressives and engineers, where the goals overlapped and helps lend a connecting between two divergent trends. The creation of city services has some of the origins in this process of transition. However, this story is understudied, specifically the link between progressives and city government.

Solving the garbage problem is one of the main challenged that was facing city governments in the late 1800's and early 1900's.¹³⁹ The nature of this problem will change municipal authorities for literally every day after this. It suggests that the scale of urban growth led to a collapse of the municipal commons system. Moving forward, this how question becomes the processing of waste can be made more efficient. However, it is clear, that in reading the political discourse, there is now an assumption of responsibility of municipal governments to handle waste disposal, at least in the residential sense. This transfer of responsibility is paralleled in aims with the progressive movement.

This paper has discussed how Jane Addams, leader of Hull House, and a whole host of other causes, began working on garbage issues.¹⁴⁰ At various points in the transitions related to the garbage problem did led them to issue. Namely, there was an interaction between the municipal boosters and infrastructure crowd of the 19th century and the progressive moment.

¹³⁸ It is interesting to note that in the suburban areas, or in the sunbelt, privatization of trash is a trend.

¹³⁹ The problem doesn't actually go away, it just gets exported. Minter's book, *Junkyard Planet*, shows how far this exporting process goes.

¹⁴⁰ Specifically, that the sanitation issues caused by the garbage problem were bad for the moral character of immigrants. Read into that what you will of the racism of the movement.

Regardless of the view of the problem, there are clearly shared personnel between those who decried the garbage problem and would eventually form the backbone of the

The questions of urban development and urbanization are ones that bring together a lot of competing forces. The gar

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