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Triumph Against the Growth Machine: Examining the Case of the Northeast Minneapolis HHW Facility

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Truax: Triumph against the machine

Triumph Against the Growth Machine

Examining the Case of the Northeast Minneapolis HHW Facility

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Geography 488-02

Capstone Paper

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Macalester College

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Introduction – The Case of the Industrial City:

Northeast Minneapolis in the winter time is as bleak a scene as any that Dickens ever penned. Standing on the street there, in the cold and the gray half-light, one sees boarded up warehouses and gutted buildings. Above, a dim sodium lamp burns yellow, not so much illuminating the street as differentiating between dark shadows and darker shadows. In the distance is the smokestack of a smelter, billowing out a toxic black. The snow falls like ash and one wonders how and why the city wound up in this grim state. This is a city of the 20th century with which the 21st does not know what to do.

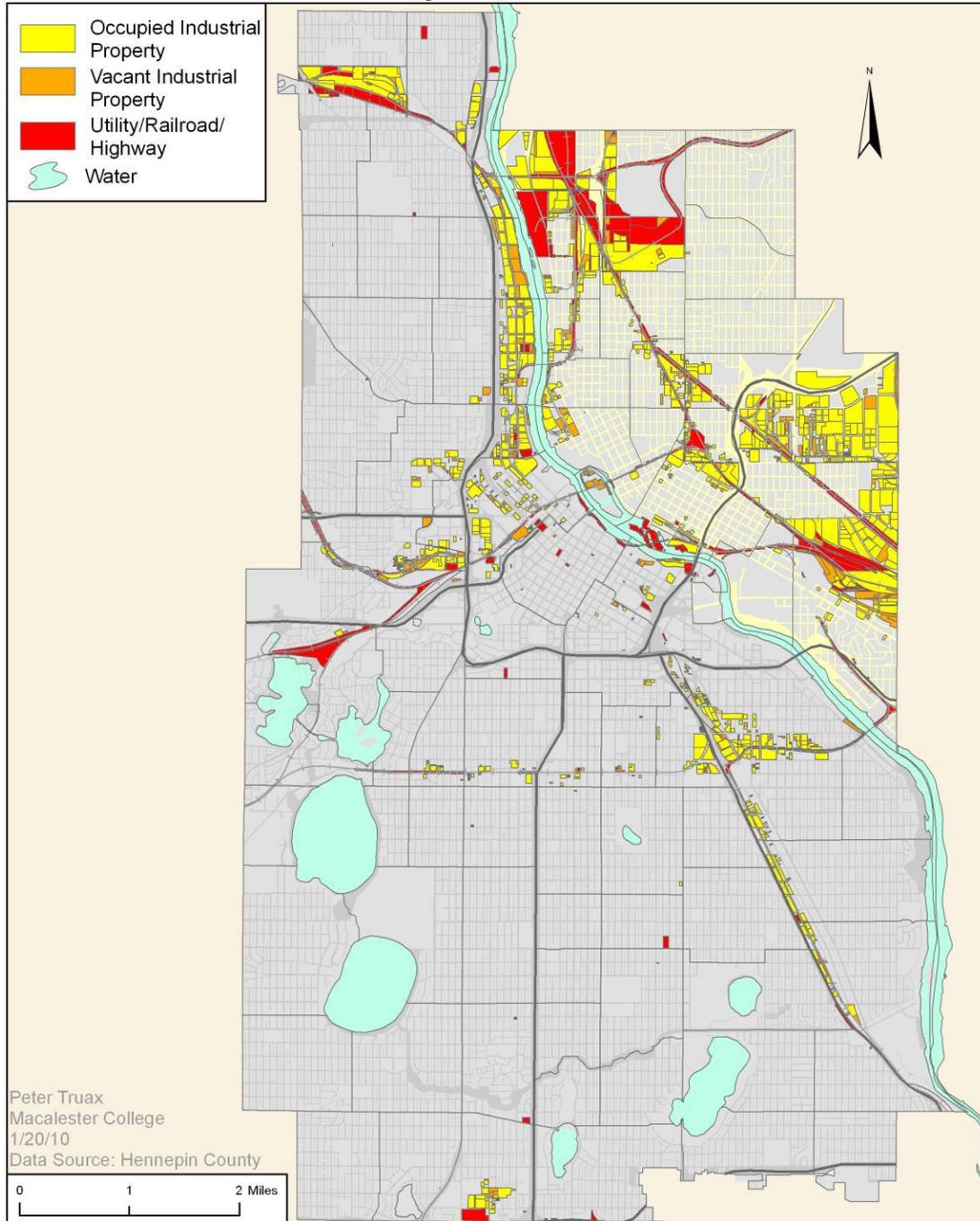
Hyperbole aside, I began with a Dickensian introduction because industry is so often negatively connoted. Common descriptors associated with industry are ‘polluting’, ‘blighting’, ‘toxic’, and ‘hazardous’. Industrial disasters - tragedies around the world from Love Canal to Bhopal - have rightly caught public attention. No one ever wants an industrial disaster to occur in the place they call home, but assessing and preventing that risk is neither simple nor straightforward. For one group, preventing disaster might seem like inviting it from the perspective of another group. Conflicts arise, therefore, in the building of cities that pit the ideologies and arguments of these groups against one another. This paper examines the case of one such conflict in Northeast Minneapolis, Minneapolis, Minnesota and establishes a motive and a mode for the actions of each group. This is the case of the Household Hazardous Waste Facility. To understand the case though, it is first necessary to understand the background of the case.

Land use in Northeast Minneapolis is characterized by dense industrial development in close proximity to residential properties. Northeast Minneapolis contains the majority of industrial land usage in the city of Minneapolis, and as the rest of the city has experienced

deindustrialization and the relocation of industries towards the periphery of the metropolitan area, the concentration of industrial land use in Northeast Minneapolis relative to the rest of the city has become more acute. (Truax, 2009) Compounding this acuteness is the obligation of the city to provide certain basic services, such as waste management, that must be fulfilled at a municipal level and cannot be redistributed outside of the city. Consequently, the available places where such activities can be located diminish due to rezoning, and Northeast Minneapolis has become the most prominent site for this intra-urban redistribution of industry. The maps on the following pages illustrate this geographic trend. Map 1 illustrates the distribution of industrial properties in the city of Minneapolis; Map 2 focuses in on the industrial properties of Northeast Minneapolis in particular; Map 3 illustrates the proximity of residents throughout Minneapolis to industrial property; and Map 4 highlights the close proximity of Northeast Minneapolis residents to industrial land use. These last two maps in particular demonstrate the geographical disparity of industrial distribution, and how Northeast Minneapolis residents live in relative proximity to industrial land use compared to residents elsewhere in the city. Residents in Northeast Minneapolis have begun to notice a growing, intangible sense that their livelihoods are being impacted by industrialization more so than residents in other parts of the city. Trepidatious, residents have begun to oppose efforts of further industrialization, beginning with their objection against the household hazardous waste facility – the subject of this case study. (WPCIA, 2009)

Industrial Properties & Utilities

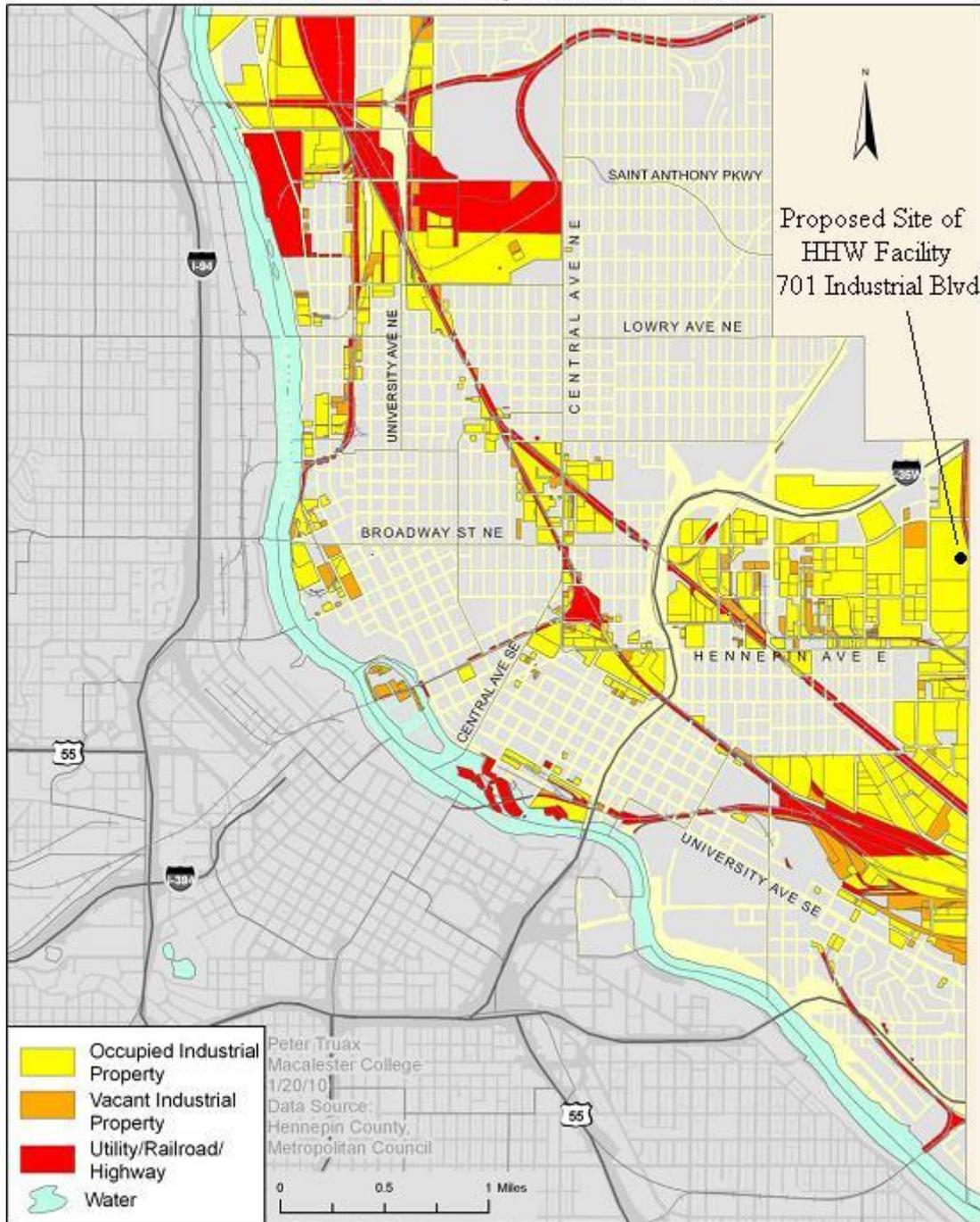
Minneapolis, MN - 2009



Map 1 – Industrial Properties in Minneapolis, Minnesota

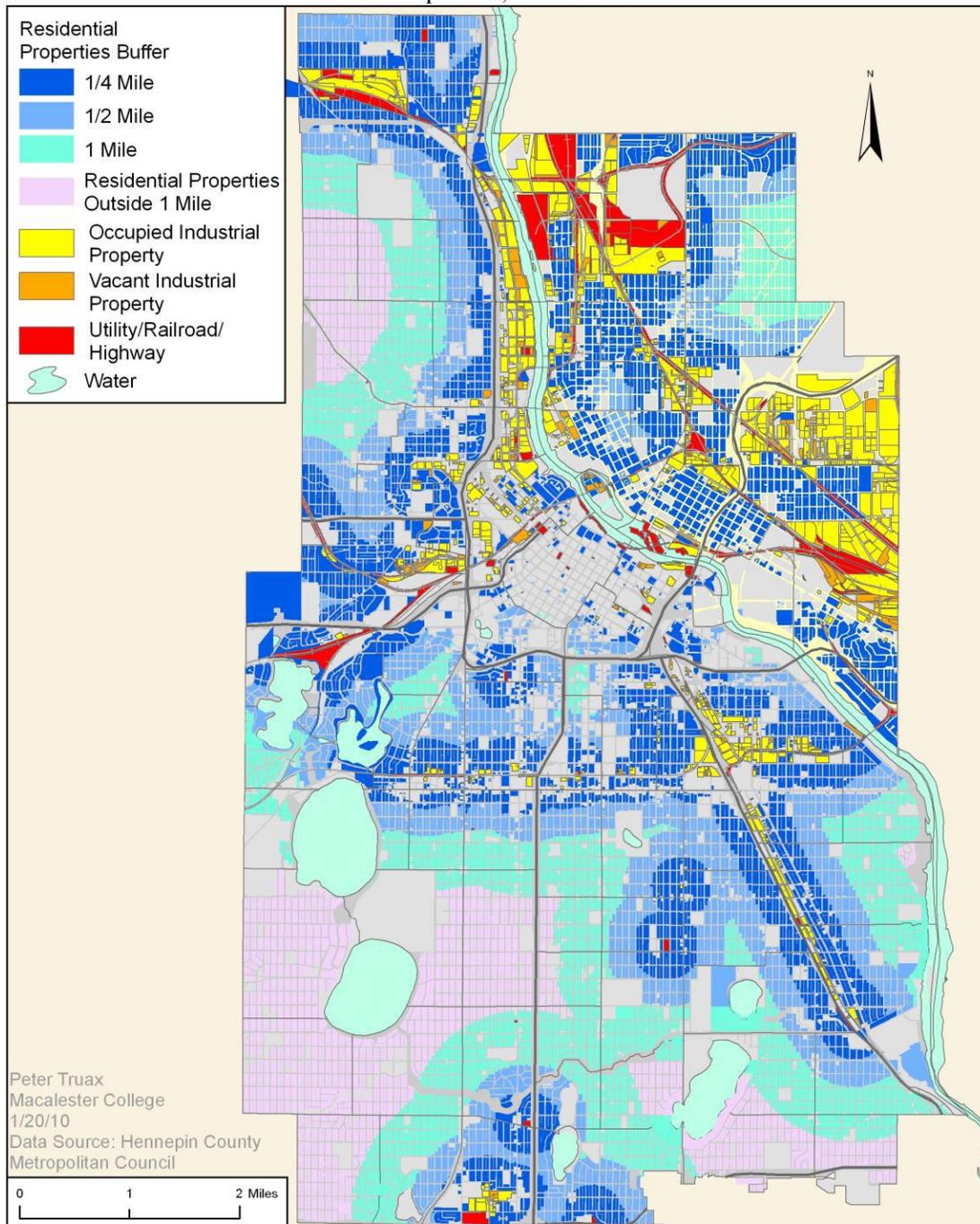
Industrial Properties & Utilities

East Side, Minneapolis, MN - 2009



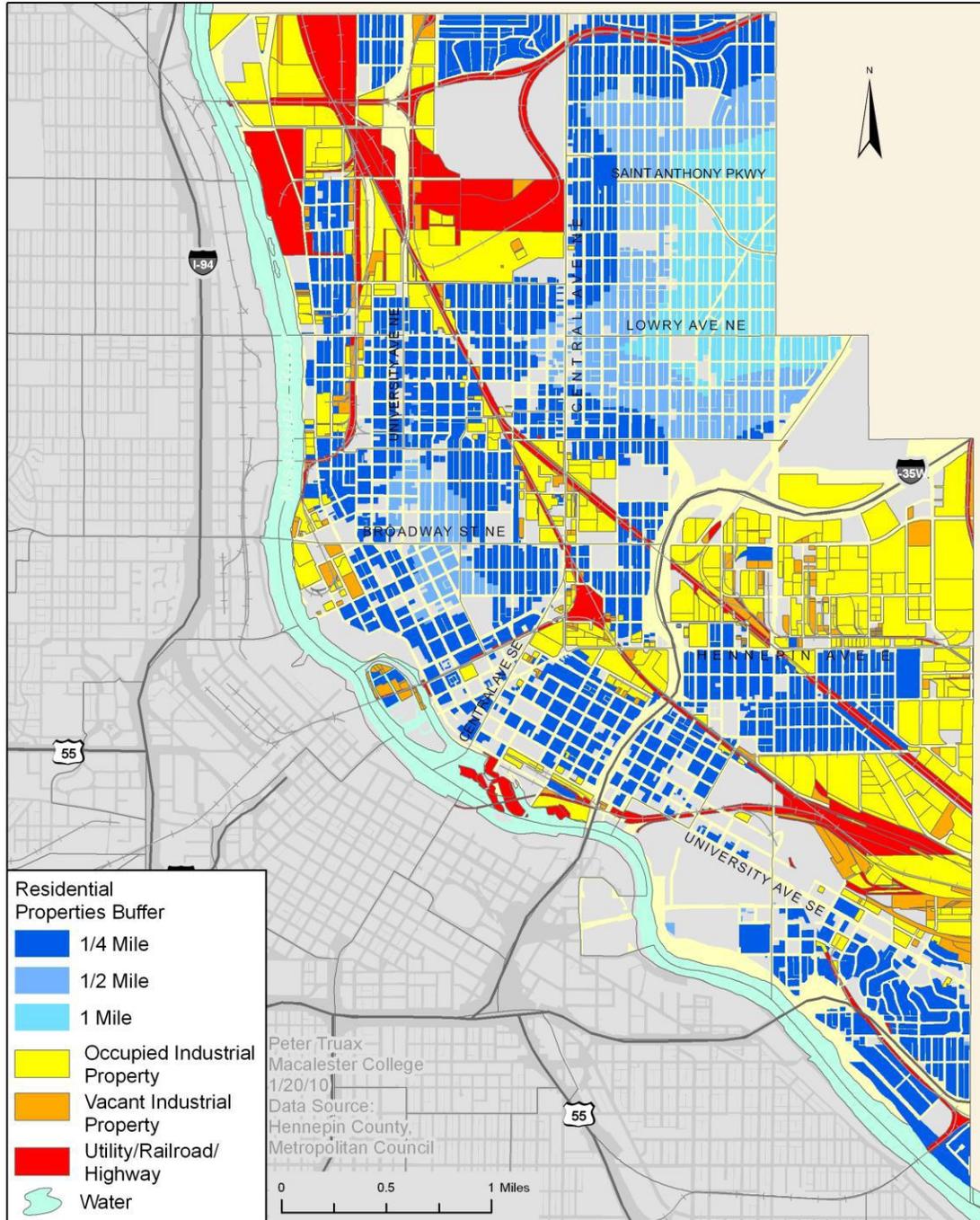
Map 2 – Industrial Properties in Northeast Minneapolis

Residential Property Buffers Around Industrial & Utility Properties Minneapolis, MN - 2009



Map 3 – Proximity of Minneapolis residents to Industrial land use

Residential Properties Buffers Around Industrial & Utility Properties East Side, Minneapolis, MN - 2009



Map 4 – Proximity of Northeast Minneapolis residents to Industrial land use

This paper focuses on the particular case of a household hazardous waste disposal and transfer facility¹ that was planned to be built in Northeast Minneapolis between 2004 and 2009. The HHW facility was put forward by the city of Minneapolis and Hennepin County as a means of providing residents greater geographic accessibility for HHW disposal. Household hazardous waste includes any sort of hazardous waste normally found in a home, such as house paint, lawn chemicals, plumbing chemicals, and the like. It cannot be disposed of with non-hazardous household waste, except during special neighborhood pick-up events. Beyond these events, HHW must be disposed of by residents at specific facilities, such as the one planned by the city. (City of Minneapolis, 2004a)

The specific motivations and processes the city undertook are analyzed later in this paper, but the city proposed the facility to mitigate risk to the exchange value of the land in Northeast Minneapolis. Residents, on the other hand, reacted to the proposal in opposition. An HHW facility, zoned by the city in the most intensive industrial land use category, would have negatively impacted the use value of their land². In the end, the plan was mothballed following a decision by the site owner not to sell the property to the city of Minneapolis. These introductory facts beg answers for larger questions however. How did the city put forward its plan to build the HHW facility, and why did it choose Northeast Minneapolis as the site of the facility? Why did it want a facility to dispose of HHW at all, for that matter? Why did residents oppose the facility, and how is this opposition justifiable or not justifiable? How does this ‘victory’ of use value over exchange value contribute to understanding larger processes at work around the country and the world today?

¹ Referred to hereafter as ‘the HHW facility’ or ‘the facility’.

² The concepts of use versus exchange value of land will be defined and discussed later, in the literature and theory section of this paper.

With these questions in mind, I argue the thesis that the city of Minneapolis, as a non-resident actor, put forward the plan for the HHW facility in the interest of furthering value-free growth to increase the city's return on exchange value through taxes. Furthermore, I argue that residents' objections to the facility were justifiable because their tie to the use value of the land would be at risk if the city built the facility. Expanding on this thesis requires the background documentation of the case, an examination of relevant theory, and a critical analysis of the case in relation to theory.

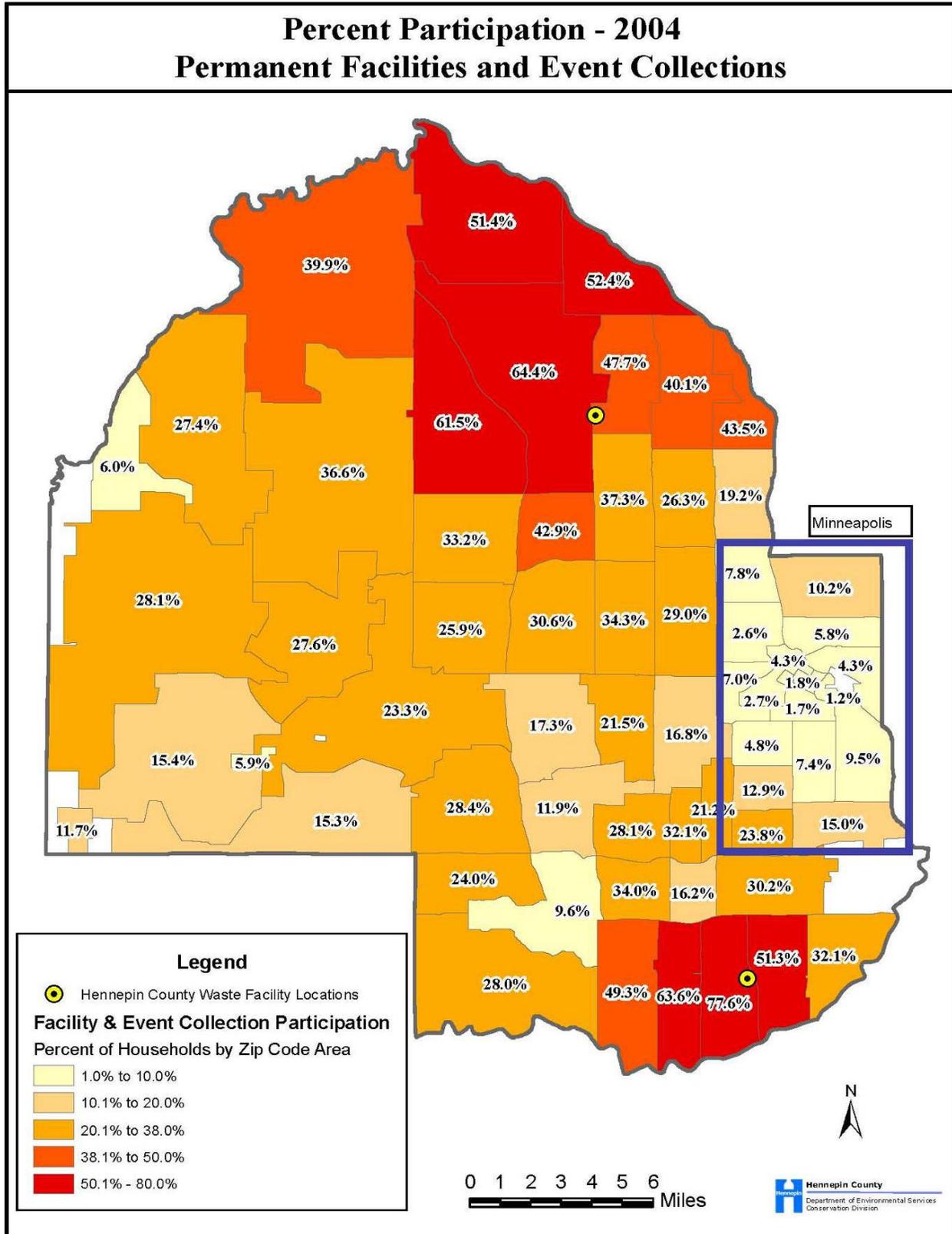
Consequently, this paper is organized into four sections. The first section puts forward the data collected for this paper and the methods used to analyze the case. The second section reviews the relevant literature on the theories of the political economy of place, NIMBYism and environmental justice, to establish a framework for understanding the specifics of this case. The third section analyzes the data of the case through the lens of theory, proving the thesis above. The fourth section concludes the paper with an assessment of the significance of this research bears on understanding the political economy of place perspective.

Data and Methods – Putting Together the Case:

In putting together this case study, I have relied on documents from the city of Minneapolis, primarily from the Transportation and Public Works Committee, which is responsible for overseeing infrastructural projects in the city such as the HHW facility plan. In addition to those city documents, I have relied on my previous research into industrialization in Northeast Minneapolis which was conducted in the fall of 2009 for the Windom Park Citizens in Action (WPCIA) organization. The WPCIA were the primary actors in agitating against the HHW facility, and I have also drawn upon their meeting minutes that have dealt with the HHW

facility. Tying these sources together creates a narrative for describing the steps taken by the city and residents in relation to the plan.

The case of the HHW facility in Northeast Minneapolis came to be in January 2004, when the city of Minneapolis put forward a plan to build a household hazardous waste facility in the city. The reason behind this decision was, the city argued, that participation in HHW management is inversely correlated to the distance traveled to dispose of HHW, and since Minneapolis residents have a lower rate of automobile ownership than residents in surrounding suburbs, an HHW facility in the city would encourage greater participation. (City of Minneapolis, 2004a) Prior to this, residents were able to dispose of HHW at a transfer station in South Minneapolis off of Hiawatha Avenue, which was then taken to one of the two HHW facilities to the north and south of the city, operated by Hennepin County. (City of Minneapolis, 2004b) Map 5 illustrates the distribution of participation in HHW management across Hennepin County. It shows that indeed Minneapolis has a low percentage of people participating in HHW management, while residents who live in areas closest to the HHW facilities north and south of the city participate in greater numbers according to proximity.



Map 5 – Distribution of participation in HHW management across Hennepin County (credit: City of Minneapolis)

In 2006, the city sold this transfer station in South Minneapolis to the Green Institute for use as a biomass heat and power station. At the same time, it began investigating possible sites for constructing a new HHW facility. (City of Minneapolis, 2004c; *ibid.* 2006d) The first site under consideration was a property in the SEMI district of Northeast Minneapolis off Malcolm Avenue. This Malcolm Ave site was negotiated for and purchased by the city, and is currently in operation as a waste disposal facility; though not currently accepting HHW disposal, this facility is slated to accept HHW in the future.³ (City of Minneapolis, 2006e) Having already purchased one site, the city then proceeded to examine possible sites for a second facility. The site chosen was off of Industrial Boulevard in Northeast Minneapolis, in the Mid-City Industrial District. (City of Minneapolis, 2008b) This is the site in question for this case study. The site was formerly owned by Macy's, and then by a bottling company, but the current property owner leaves the site vacant. The decision to site the facility here came because the facility is limited to an I-3 zone, or a general industry zone. Northeast Minneapolis has the highest abundance of I-3 zones in the city, but by no means are they exclusive to this area. Beyond this, the facility is part of a larger industrial redevelopment plan which is centered on revitalizing industry in Northeast Minneapolis while changing industrial land uses elsewhere to mixed commercial and residential developments. (City of Minneapolis, 2006a; Truax, 2009) This answers the first research question of this paper, of how the plan came to be put in place.

Upon learning about the proposed plan, residents in the Windom Park neighborhood of Northeast Minneapolis began to investigate the nature of the facility. Neighborhood group meeting minutes reveal residents' reactions towards the facility, citing as opposition an over-abundance of industry already present in Northeast Minneapolis, as well as concerns that the

³ Because the facility at Malcolm Ave is not accepting HHW at this time, it does not factor in significantly to this case, other than as background information.

facility would lead to increased traffic, among other impacts. (WPCIA, 2009) Among these other impacts was a growing unease among residents about the risk posed by the concentration of industrial properties in Northeast Minneapolis and the negative environmental impact they caused. (Truax, 2009) In reaction to these concerns and in the spirit of residents' concerns, the property owner of the Industrial Blvd site declined to sell the property to the city. As a consequence, the plan for the HHW facility was mothballed. This research is limited in its scope since exact causes of why the property owner did not sell to the city could not be investigated.

How did this happen? The path this case has followed is simple to describe. The city wanted to increase collection of household hazardous waste by siting a facility in Northeast Minneapolis where it would be easy to access by residents without cars. The residents there objected because the facility was further unwanted industrial development which put them at risk. In turn, the property owner decided not to sell to the city, and the plan was ended. Why did this happen though? This is not a simple question to answer. To do so, the case must be understood through a framework of theory which elaborates on how different actors prioritize the value of their land, and mitigate the risks to those values.

Literature and Theory – Building Up the Case

The thesis of this paper argues that the city put forward the plan for the HHW facility to increase its tax revenues through value-free growth, but that residents' objections were justifiable because Northeast Minneapolis residents' ties to their use value would at risk from the facility. What is the growth machine, and what is use value versus exchange value? To unpack these contentions, it is necessary to understand the foundational theory contributing to this case, the perspective of political economy of place.

Political economy of place: land, its values, and those who value it

The political economy of place perspective puts forward that land is a unique commodity; the uniqueness of which is described in two values. The first value is that land carries with it particular attachments by the people who use that land, known as the use value. These attachments range from the emotional – land as ‘home’ – to the practical – land as a place to live and exist. Because of these attachments, the use value of land is not easily transferrable to a dissimilar location, and consequently the use value of land is highly sensitive to change in the area surrounding it. Use value of land may increase or diminish as a result of changes to that land – adding a garage to a house or having the roof collapse, for instance. However, use value is also affected by outside changes. An increase in local crime, a decrease in air quality, or the construction of a new school in the area will all affect the use value of land profoundly as the emotional and practical attachments to that land change according to the situation. The second form of land’s uniqueness is that land is a commodity, and like all commodities it can be bought and sold at a price. This is the exchange value of land. (Logan & Molotch, 1987)

While all land possesses use and exchange values in some way, the actors concerned with that land prioritize which value is most important to them differently. Residents, defined for this case as homeowners⁴, prioritize the use value of land more than the exchange value because residents typically buy land to live on it⁵. A resident’s land is their livelihood – part of the wider ‘triple dream’ of home, land and community. The derivation of this livelihood comes through a transformation of land from a natural state through day to day actions into a place that supports the life of the resident. (Hayden, 2004; Pred, 1984) Their investment in land is typically

⁴ Renters are residents who have different characteristics associated with their use of land, but they are excluded from the discussion of this theory because renters are not a significant group of actors in this case study.

⁵ At least during periods of residency when they are not concerned with buying or selling land.

substantial, as most of a resident's assets are fixed to the land they own. This investment is also immobile, since most residents are not multiple-property owners and only live in one place at one time. Because of the high substantiality and immobility of the investment residents make into land, and because they derive their livelihood by living on their land, their investment has high risk⁶. Use value, represented as a portion of their total investment in land, is therefore sensitive and at risk to change. (Fischel, 2001; Logan & Molotch, 1987)

Non-resident actors, including corporations, utilities, and governments – and who are also known as rentiers -, prioritize the exchange value of land. This is because for them land is not being bought to be lived on, and as such the emotional and practical attachments to land are minimal. What matters for actors concerned with exchange value is just that: the value of the land in monetary terms. Additionally, since non-resident actors are primarily not concerned with use value, changes in use value – from crime, pollution or the like – tend to be negligible risks for their investment. The non-resident actors who, operating at a larger geographic scale, possess the most influence are those with substantial capital and a diversity of land ownership. Consider a development firm or a city government, for example, which possess large sums of capital and large amounts of land. As a result of possessing substantial capital and diverse land holdings, the investment of non-resident actors into any one piece of land is usually insubstantial compared to the whole of their wealth. Furthermore, because they possess multiple pieces of land, they can move a desired land use from place to place with relative ease. This low substantiality and high mobility means that the investment risk of any one piece of land is low. Risk does exist however, and the specifics of this risk are detailed later on. (Fischel, 2001;

⁶ Risk is defined here as the likelihood that the value – use or exchange – of land will decrease while in the ownership of the purchasing agent and that this decrease will have a substantial impact on the recoupment of the initial investment (Fischel, 2001)

Logan & Molotch, 1987) Table 1 broadly illustrates the characteristics of these two actors and their relationship with land.

Table 1 – Characteristics of actors’ relationship with land

Actor	Mobility of investment	Substantiality of investment	Concern with use value	Concern with exchange value	Risk to investment
Residents	Low	High	High	Low	High
Non-Residents	High	Low	Low	High	Low

So far the political economy of place perspective establishes definitions of use value and exchange value, their importance to different actors, and the relative risk associated with land investment for both types of actors. The next theoretical piece that is necessary to understand is the concept of the growth machine.

Capitalism is predicated under the Schumpeterian principal of creative destruction. New growth is based on the destruction of what came before. Because new growth brings wealth to those who have invested in that growth, the system perpetuates itself for as long as the investors benefit from growth. In short, this is the growth machine. A fundamental component of the growth machine is the concept of value-free growth, where growth in any form is perceived as a public good. Growth machines tend to be put into place and operated by local elites – corporations, utilities and governments, for instance – for their own benefit, but in the process bring benefits to the surrounding community, through jobs, infrastructural improvement, and the like. Over the course of time, the concept of the growth machine has become engrained into the structures of public life as a legitimate means of using space. (Logan & Molotch, 1987; Pred, 1984) Because this is normally how growth machines are perceived by the public – as being a hegemonic public good – they continue to perpetuate. Normally. There are important exceptions though where the hegemony of value free growth is challenged, and the case of the

HHW facility is one such exception. To understand how it is an exception though, the theory of NIMBYism must be introduced into this discussion of theory.

NIMBYism: minimizing risk to use value

NIMBYism, which means ‘not in my back yard’, is the concept of group opposition to a given development in a local area, usually due to the development’s perceived negative externalities. NIMBYism was first coined in the 1980s, and has since entered into both the academic and mainstream vocabulary, usually as a pejorative associated with intolerant, short-sighted and obstructionist opposition by residents. (McClymont & O’Hare, 2008) These criticisms arise when NIMBYs oppose seemingly innocuous or even beneficial development. However, NIMBYism is a rational and defensible principle when understood in the context of what is at stake for NIMBYs. NIMBYs are almost exclusively residents, though NIMBYs may coordinate with non-resident actors to further their opposition. Because NIMBYs are residents, and because residents have high investment risk associated with their land, residents want to keep that risk to a minimum. (Fischel, 2001) How then is risk minimized? To answer this, it is necessary to interpret NIMBYism in the context of the political economy of place perspective.

Residents invest in their land under a certain set of assumptions. Namely, that their investment is not going to excessively depreciate over time. Residents can directly control how their land depreciates in use value by making improvements to and maintaining their land⁷. This preserves their livelihood within the parameters of their land itself. However, changes to the surrounding area are not directly controllable by residents, and consequently any depreciation in use value, in this context, is outside their control. Therefore, residents want stability more than they want change, because change can negatively affect use value, and consequently affect their

⁷ Residents rarely seek to depreciate the use value of their land. Consequently, it can be assumed that any action taken on their part would be towards minimizing or countering depreciation of use value.

livelihood. It is true that not all change is bad, but residents are not concerned with whether change is good or bad. To residents, the risk to their livelihood presented by possible negative change always outweighs the risk to their livelihood presented by no change at all. Use value reflects not just what is happening on the land now, but the odds of what will happen in the future as well. Therefore, even the perception of risk can bring about depreciation in use value. (Fischel, 1990; Fischel, 2001) Table 2 illustrates the different ways in which residents experience risk to the use value of their land, and subsequently, to their livelihood.

Table 2 – Residents’ control over change in land use and risk posed to use value by change

	Direct Change	Indirect Change	Stability (No Change)
Residents’ Control	High	Low	Dependent
Risk to use value	Low	High	Low

A resident’s control over the stability of their land depends on how vigilant they are about opposing development. The most successful residents are those who are well-connected with one another in organizing opposition, who are well-informed of the details of any proposed change in land use around their land, and who are frequently present and vocal in their opposition. (Heiman, 1990) Among the most successful NIMBY campaigns ever was the work of Jane Jacobs and others in New York City during the 1960s to combat the many public works projects of Robert Moses and other city planners. These efforts, from stopping the renovation of Washington Square Park to stopping the construction of the Lower Manhattan Expressway, involved a large network of New York residents in various capacities – lawyers, printers, mothers, journalists – all collaborating with one another to publicize the perceived damage that these city plans would have on the livelihoods of residents. The triumph of NIMBYism in this case was a watershed moment in changing public perception of the growth machine from it being

an inevitable force for the greater good to being a thing that is not universally benign and can be opposed. (Alexiou, 2006)

NIMBYism centers on minimizing risk to use value and livelihood for residents. As mentioned earlier, risk also exists for non-resident actors, though in a different sense. Non-resident actors tend not to be NIMBYs, since they do not prioritize use value as highly as they prioritize exchange value. Also, the diffuse, mobile investment of non-resident actors translates into lower risk. Exchange value benefits non-resident actors most when, at the time of disinvestment, it has increased from the initial investment. This increase depends on growth, i.e. something happening on the land to make it more valuable. It is therefore in the best interest of non-resident actors to do something to the land they have invested in to increase exchange value, even if this in turn decreases use value for surrounding residents. Stability of exchange value is antithetical for non-resident actors, since they derive nothing from not growing their investment. The higher the exchange value, the better off the non-resident actor who invested in the land initially is. For a non-resident actor, their risk is land not gaining exchange value from initial investment to disinvestment. (Fischel, 2001; Logan & Molotch, 1987)

To reiterate, residents seek to minimize the risk that first, their land will depreciate in use value, and second, that their livelihoods will be negatively impacted as a consequence. Non-resident actors must put forward growth to increase the exchange value of the land they have invested in so they gain more at the time of disinvestment. Not doing so would mean risking a loss of investment. For residents though, this growth represents a risk that the use value of their land might depreciate. In response to this possible depreciation and loss of livelihood, they oppose growth through NIMBYism. NIMBYism manifests itself when residents understand

what growth will occur that will impact their use value and organizing themselves to oppose that growth. (Fischel, 2001; Heiman, 1990; Logan & Molotch, 1987)

NIMBYism - understood here through the terms established from the political economy of place perspective - provides a broad understanding of why non-resident actors favor growth and why residents oppose growth. However, the specifics of the case of HHW facility are more nuanced than NIMBYism alone can explain. The HHW facility and industrial land use in general carry a negative connotation in people's minds as a land use, and rightly so since these land uses disproportionately depreciate residents' use values in relation to other forms of growth, like other residential land use or commercial land use. Understanding how and why industrial growth is particular in this way requires an investigation of environmental justice.

Environmental Justice: industry, depreciation of value, and stopping both

Environmental justice is defined for this case as the principle that all people and communities are entitled to equal protection of environmental and public health laws and regulation. (Bullard, 1996) What, though, are these laws protecting against? The short answer is environmental degradation. The long answer is that environmental justice protects against and fights the abuse by industries of the environment and the depreciation of livelihoods of residents proximate to those industries. Before that is discussed though, a definition of industrial land use is required.

Industrial land use has many definitions. In the planning context of the city of Minneapolis, industry is divided into three land use categories: I-1, light industry; I-2, medium industry; and I-3, general industry. (City of Minneapolis, 2006a) These descriptors by themselves define almost nothing, other than that each category is successively more intensive in

its land use. Definitions from other sources provide more information. Light industry tends to be consumer-oriented and has a small environmental impact. (O'Sullivan & Sheffrin, 2007) General industry, otherwise known as heavy industry, lacks a specific definition, but this case study uses the definition that general industry is the opposite of light industry. General industry tends to produce goods for or to service other industries, and have the greatest impact on the environment of any industrial land use. The characteristics of medium industry fall in between those of light and general industry. Because the HHW facility is zoned I-3, or general industry, it can be inferred that it has a high environmental impact relative to light and medium industrial land uses. Bearing this high impact in mind, it is now time to delve into the details of environmental justice.

Environmental justice calls for the elimination of environmental disparities and hazards that disproportionately impact communities. Studies show that hazardous waste facilities, like the HHW facility in Northeast Minneapolis, tend to be sited in areas with communities already experiencing risk to their livelihoods, and that these communities as a consequence shoulder a disproportionate amount of the burden on the environment relative to other surrounding communities. (Boone et al., 2009; Bullard, 1996; Coburn, 2003; Lejano & Iseki, 2001) The process of how and the reason why residents desire environmental justice where they live can be understood through the political economy of place.

It has been established that non-resident actors wish to minimize the risk to their investment in land by putting forward growth to increase the exchange value of that land. Residents desire to minimize the risk to the use value of their land by opposing this growth. It has also been established that the growth machine is dependent on growth being perceived as a public good. Growth tied to industrial land use complicates the notion of growth for the public

good however, since industrial land use can produce serious and visible damages to the livelihood of residents and non-resident actors alike. Activism and science in recent years have exposed the severe dangers posed to human livelihoods by pollution and environmental degradation. (Wolch, 2007) Generally, environmental degradation leads to a collapse of vital natural systems – the water cycle, food production, etc. Consequently, environmental degradation is sought to be avoided. (Wheeler, 1998)

Specific to this case, land contaminated by industrial pollution - or Brownfield land - has lower use and exchange value than uncontaminated land - or Greenfield land. Furthermore Brownfield land lowers these values for surrounding properties. Remediation is necessary for land to be worthwhile for residents to use or for non-residents to invest in for the purpose of future exchange. Remediation of Brownfield land is significantly more expensive than investment in Greenfield land, since Brownfield land must be brought back to a point of usefulness through investment in cleanup, while Greenfield land is already at a point of usefulness. Because of these high costs, the total percentage of all remediation efforts undertaken is usually by non-resident actors more often than by residents. This is because they have more assets and operate at over larger areas. (De Sousa, 2006; De Sousa et al., 2009)

Figure 1 illustrates the total cost of investing in Brownfield versus Greenfield land.

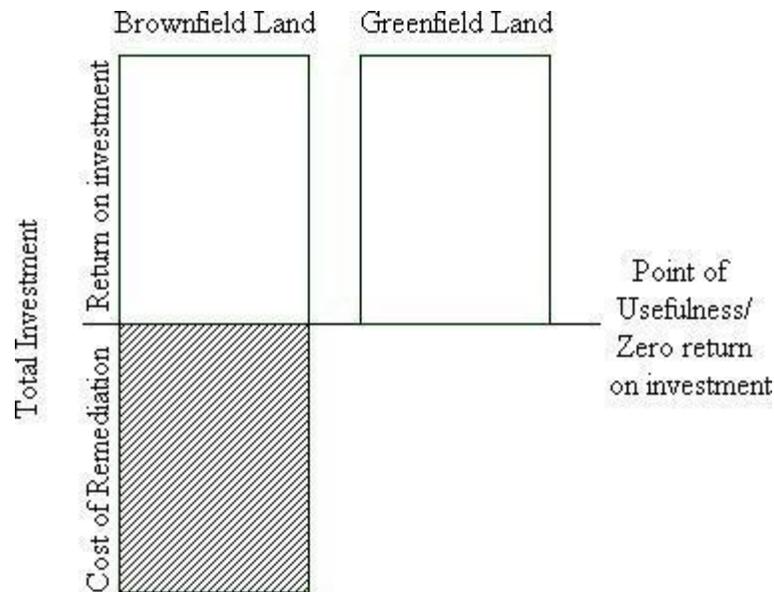


Figure 1 – Total cost of investing in Brownfield versus Greenfield land

Industrial contamination produces Brownfield land, which requires significant investment to be made useful again. While market logic would predict that no one would invest in Brownfield remediation when they could reap greater benefits from investment into Greenfield land, land is a limited resource. As such, two trends appear in the pursuit of environmental justice. The first trend is remediation, or the cleanup of the land to a point where it has equal usefulness to Greenfield land. The second trend, which is of most concern to this case, is prevention of contamination. (De Sousa, 2009) Preventing contamination of land is uncertain work. After all, how does one stop something from happening that might never occur in the first place? Preventing land contamination therefore centers on risk management. Within the approach of contamination prevention, there are yet another two divergent branches for mitigating risk; the first is containment of hazards *ex post facto*, the second is elimination of hazards *ex ante facto*.

Containment of hazards legitimates that certain hazardous substances must be produced and disseminated in the public sphere - to either fulfill the livelihoods of residents or to

propagate the growth machine upon which non-resident actors depend - and that these hazardous substances must be cleaned up and disposed of after they have been used for their intended purpose. For residents, these hazardous substances include paint, plumbing chemicals, lawn fertilizers, and the like – in short, they constitute household hazardous waste. For non-resident actors, hazardous substances can range from petroleum naphtha used for heating to heavy metals used in high-tech scientific research. Containment of hazardous substances requires the construction and operation of facilities designed to handle the waste in a controlled manner. The HHW facility in Northeast Minneapolis is an example of such a facility. (Isaacs, 2001; Truax, 2009)

Elimination of hazards, on the contrary, does not legitimate that certain hazardous substances must be produced and disseminated. This approach can be summed up in the acronym NIABY, or ‘not in anyone’s back yard’. Rather than uncritically accepting that hazardous substances are needed to fulfill livelihoods or propagate growth, NIABYism calls for the rethinking and reshaping of production and use of substances so that they are not a hazard to the public sphere in the first place. (Heiman, 1990; Watson & Bulkeley, 2005)

Both approaches have benefits and costs, of course. The benefit of containment is that it allows for the use of hazardous substances that are considered necessary for livelihood or for growth, provided that after they have fulfilled their usefulness, these substances will be cleaned up and disposed of properly. However, the cost is that this provision is not always followed through to completion, and hazardous substances end up contaminating the environment at the cost of both use and exchange value. Northeast Minneapolis alone contains more than 300 industrial producers of hazardous waste and over 100 sites of industrial contamination, a high proportion relative to the rest of the city. (Truax, 2009) In order for containment to be

successful, facilities must be built to dispose of hazardous waste, and more importantly hazardous waste must be safely and reliably brought to these disposal sites for removal. (City of Minneapolis, 2004a; Isaacs, 2001) The benefit of elimination, through NIABYism, is that it keeps hazardous substances from being a risk in the first place by delegitimizing their use for livelihoods or for growth. The cost, though, is that this requires the producers of hazardous substances to not produce them in the first place, and for the consumers of hazardous products to not consume them. In short, it requires residents and non-resident actors to make do with non-hazardous substances to fulfill their livelihood or propagate growth. (Heiman, 1990) The next component that is necessary to understand is who prefers which method of contamination prevention and why.

Generally speaking, non-resident actors tend to favor containment. They benefit from the growth associated with the production of hazardous substances, the value of their dissemination through sale, and the exchange value tied up in constructing facilities for the disposal of hazardous waste. Residents, particularly NIMBYs and NIABYs, tend to favor elimination. They benefit from the complete removal of risk to the use value of their land associated with hazardous substances, whereas under containment risk is only removed when containment is successfully carried out. It is important to stress that non-resident actors benefit from both approaches to risk prevention, since the risk of Brownfield contamination, and consequently the risk to exchange value, is mitigated when either approach is successfully carried out. However, the risk is more substantial under a policy of containment, since containment is not always successful and Brownfield contamination may still occur. True, elimination is not always successful as well, but all things being equal, risk is less through elimination than through containment.

At this point, the theory of this case has established seven contentions. First, residents prioritize use value because land is their livelihood, while non-resident actors prioritize exchange value because land is their means of acquiring wealth. Second, non-resident actors perpetuate the hegemony of value-free growth, because through growth land increases in exchange value from the point of initial investment to the point of disinvestment. Third, there are exceptions to this hegemony; principally the NIMBY concept, which centers on opposing growth to minimize the potential risk that the use value of a resident's land might depreciate as a result of growth. Fourth, risk also exists for non-resident actors in the form of not increasing exchange value above the point of initial investment, and therefore non-resident actors put forward growth as a means of ensuring an increased return on their investment into land. Fifth, growth in industrial land use – particularly heavy or general industry - bears disproportionate risk in relation to other forms of growth because contamination from industry decreases use and exchange value and is costly to remediate. Sixth, environmental justice seeks to protect those at risk from environmental degradation by preventing contamination of land, principally by industry. Seventh, environmental justice fulfills this protective role in two ways; the first, favored by non-resident actors, is the containment of hazardous substances after they have been disseminated into the public sphere, and the second, favored by residents, is the elimination of hazardous substances before they enter the public sphere. Having made these contentions, it is time to reexamine the thesis of this paper.

I argue that the city of Minneapolis put forward the HHW facility to further value-free growth and increase its return on exchange values through taxation, and that residents' objections were justifiable because their tie to use value puts them at risk were the HHW facility to be built. It is evident at this point - albeit only in general terms - that residents prioritize use value because

they derive their livelihood from their land. Their land is a substantial, immobile investment that is subject to high risk, and the preservation of that use value is of utmost importance, lest their livelihood be negatively affected. What is not evident is how the city of Minneapolis benefits from exchange values. To understand this, and to refine the understanding of residents' prioritization of use values to specific terms, it is necessary to understand the political economy of place perspective as it relates to scale and spaces of dependence and engagement.

Scale: where actors act, how actors act, why actors act

How does the city of Minneapolis, or any city for that matter, benefit from exchange values? Taxes! Cities are essentially whole-scale rentiers, who piggyback upon the gains of other, smaller non-resident actors. By taxing residents and non-resident actors for the use and exchange of land, cities receive a percentage of all investments and disinvestments within their jurisdiction, and consequently become beneficiaries of the growth machine. Cities are allowed to do this because they have a monopoly on power within their jurisdiction which is legitimated through the spending their tax revenues by providing. (Cox, 1998; Hegel, 1991; Logan & Molotch, 1987; Pred, 1984) Implicit in this power dynamic between the city and those it taxes are the issues of spaces of dependence and spaces of engagement. A space of dependence is defined simply as the space in which material wellbeing –livelihood - is realized. For residents and non-resident actors alike, these spaces of dependence are tied to their land. A space of engagement is defined simply as the space where actions transpire protecting the systems that allow spaces of dependence to operate. (Cox, 1998)

For residents - viewed within the context of the political economy of place - a space of engagement ranges from their land where they exert direct control over the depreciation of use

values all the way to the global level where they exert indirect control over the depreciation of use values. For this case study, however, the relevant spaces of engagement extend only to the city-wide level. Similar scales exist for the spaces of engagement utilized by non-resident actors. Again for this case study, the relevant spaces of engagement for the non-resident actor in question – the city of Minneapolis – extend to the city-wide level.

Though land is the space of dependence for both residents and non-resident actors, the scale of this dependence differs significantly. As mentioned earlier, a resident typically does not possess more than one piece of land upon which to derive their livelihood. However, because residents prioritize use value, and because use value is sensitive to outside changes, their space of dependence must be larger than the land itself. The realization of their material wellbeing is dependent on surrounding spaces not being a source of use value change; commonly, depreciation. Protecting use value from direct change can only be exercised at a scale limited to the land itself, and so the space of engagement matches this scale. Protecting use value from indirect change requires ensuring the space of engagement is at a scale that matches the extent to which surrounding spaces risk affecting the use value of their land. Consequently, ensuring no change in surrounding spaces requires engaging those surrounding spaces and mitigating the risk they pose to the use value of the land in question. Table 3 illustrates the extent to which spaces of dependence and engagement for residents must extend in order to affect direct, indirect and no change.

Table 3 – Necessary extent of spaces of dependence and engagement to affect direct, indirect and no change

	Direct Change	Indirect Change	Stability (No Change)
Space of Dependence	Land itself	Surrounding Spaces (Risks)	
Space of Engagement			

The methods residents use for mitigating risk are variable from context to context. Those that concern this case are the methods outlined under NIMBYism and environmental justice. They include neighborhood education of risks presented by growth and organizing to oppose that growth. In the context of industrial growth, residents organize in opposition of land contamination from hazardous waste and argue for the elimination of hazardous substances from the public sphere.

For non-resident actors like the city of Minneapolis, the space of dependence is their taxation jurisdiction, or all the land within the city. A city, after all, is a non-resident actor which is concerned with exchange value more than use value. Its investment into land does not manifest itself specifically through the purchase and sale of land to recoup exchange value, but rather manifests itself primarily through taxation⁸. As a result, the space of engagement for the city encompasses all this land, and the purpose of this engagement is to ensure that taxes will continue to come into the city coffers. The structures that allow a city to maintain its monopoly on power are based on the assumption that the city uses the benefits of its power – taxes – to minimize the risk to exchange values of the land in their jurisdiction. In this way, the city perpetuates the growth machine by using the methods at its disposal to ensure that the non-resident actors within its jurisdiction experience the highest return on their proper investments into land. Consequently, these non-resident actors pay taxes at an optimal level⁹. The methods in question for ensuring optimal taxes are diverse, but those that are of most concern for this case study are the methods by which the city mitigates Brownfield contamination – principally through waste management. (Cox, 1998; Logan & Molotch, 1987; Pred, 1984)

⁸ Cities do purchase and sell land, but a city never owns a majority of the land in its jurisdiction.

⁹ Optimal level is the state where non-resident actors receive an uninhibited return on investment in land. Non-optimal level is the state where the return on investment is inhibited, say by Brownfield contamination.

Additionally, this circle of taxation and service provision benefits residents as well, who experience a minimization of risk to use value because the city – operating at a larger scale space of engagement than they – mitigates those risks through service provision. In return, residents fulfill their livelihoods and pay taxes at an optimal level. The city is not majorly concerned with protecting use value though. This is because the city only stands to lose tax revenue when use value is at risk, and cannot gain more than a maximum amount when use value is not at risk. Figure 2 illustrates the difference in theoretical tax revenue in relation to risk for non-resident actors and residents.

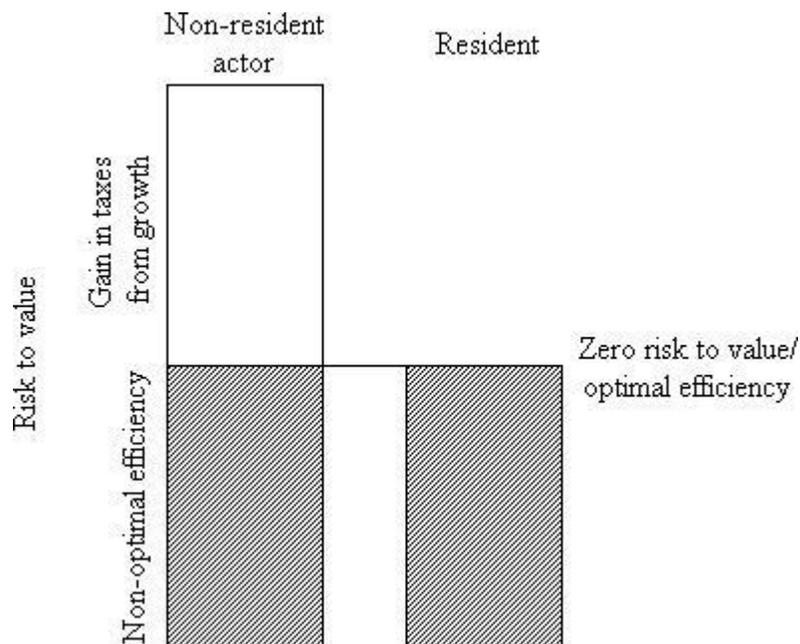


Figure 2 – Tax potential of different actors in relation to risk

Because the city stands to gain more in taxes from ensuring non-resident actors experience less risk than from ensuring the same for residents, the city concentrates its efforts accordingly. However, because the actions of the city are not monolithic, i.e. they do not benefit only one group of actors over another, residents perpetuate the power monopoly of the city since they too benefit from the perpetuation of the growth machine. Without the city providing services from

taxation, exchange value and use value would be at risk. Therefore, risk mitigation would be up to individual residents and non-resident actors who typically operate at scales too small to effectively do that. (Logan & Molotch, 1987) Figure 3 illustrates the relationship between the city, residents and non-resident actors in terms of risk mitigation, service provision and taxation.

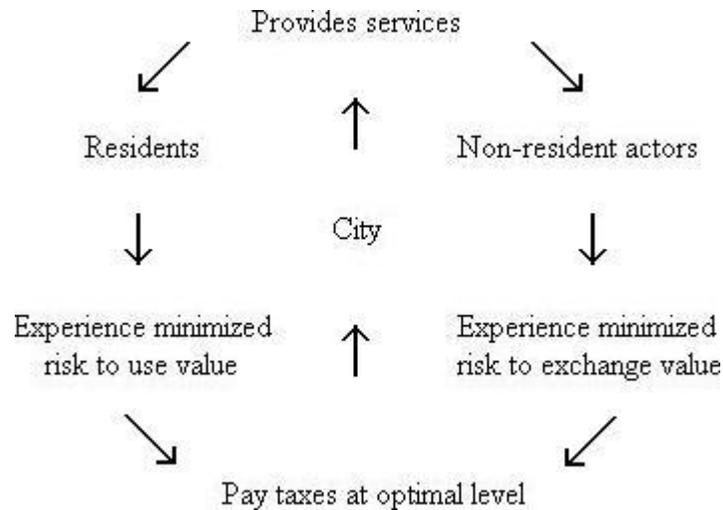


Figure 3 – Relationship between city, residents and non-resident actors

Before moving on, in addition to the seven contentions outlined earlier, the issue of scale presents two new contentions. The eighth contention is that, since use value is sensitive to indirect change from outside, the spaces of dependence and engagement of residents must extend to include surrounding spaces in order to mitigate that risk. The ninth contention is that cities, as non-resident actors possessing a monopoly on power in their jurisdiction (read: space of dependence), act to propagate the growth machine to increase their tax revenues and in turn legitimate their power over their jurisdiction (read: space of engagement).

This entire relationship between the city, residents and non-resident actors assumes that the propagation of the growth machine in turn mitigates risk successfully and universally. Astride this assumption sits the principal criticism that this case study presents against value-free growth – that the actions a city takes to mitigate risk may actually create risk. Understanding

this criticism requires that the nine contentions outlined in this paper be applied to the case. Now it is time to examine how and why the growth machine of the city of Minneapolis was stopped from building a household hazardous waste facility by some of the very residents it thought would benefit from the facility.

Analysis – Understanding the Case

Having rigorously illuminated the theoretical framework necessary to understand the case, now it is time to do just that. The second research question of this paper asks why the city wanted an HHW facility at all. Drawing upon the political economy of place perspective, the city of Minneapolis wanted an HHW facility to mitigate the risk that household hazardous waste would depreciate the value of land from which the city draws its taxes. The city of Minneapolis, as a non-resident actor, prioritizes exchange value. Growth increases exchange values from initial investment to the point of disinvestment, and the city of Minneapolis capitalizes on this growth through taxation. The city of Minneapolis, after all, derives its livelihood not from living on land but from taxing the land in its jurisdiction. Mitigating risk to use value benefits the city's tax revenue only so far as use value is preserved at the point of optimal efficiency for taxation. On the other hand, mitigating risk to exchange value benefits the city's tax revenue from the point of optimal efficiency and above. Mitigating risk to exchange value, therefore, becomes the most lucrative means by which the city can increase its tax revenue and perpetuate its monopoly on power.

Household hazardous waste, when exposed to the environment, becomes a contaminant and valuable Greenfield land depreciates in use and exchange value to Brownfield land. As a consequence, the city garnishes fewer taxes from this contaminated land, and costly remediation must be undertaken for the land to return to usefulness. Because participation in HHW

management is low in Minneapolis, the result of residents not having access to the facilities which exist in Brooklyn Park and Bloomington, HHW in Minneapolis represents a controllable – though currently uncontrolled – risk. In other words, there is room for improvement. The HHW facility in Northeast Minneapolis would provide a geographically proximate place for residents to dispose of HHW, and in turn mitigate the risk of value depreciation through contamination. The risk of value depreciation would be unacceptable to the city, since the loss of revenue from taxes means that it cannot provide as many services to residents and non-resident actors within their jurisdiction. This would delegitimize their monopoly on power. No one wants the city of Minneapolis to lose its monopoly on power, because the city is uniquely positioned with a space of engagement which can mitigate risks too large for individual actors to tackle. In this vein, the HHW facility plan mitigates risks to value – both exchange and use – for all actors in the city and should be perceived as a public good under normal circumstances.

Once again though, this paper focuses on the abnormal. The third research question of this paper asks why residents objected to the HHW facility. Under normal circumstances, greater access to participation in HHW management would benefit residents. Not only would the city draw more taxes and be able to provide more services - increasing the use value of residents' land - the risk posed to use value by HHW contamination would be mitigated as well. This argumentation assumes two things. First, that the HHW facility would successfully provide greater access for participation in HHW management; second, that the HHW facility itself would not impact use value in the area surrounding it. These assumptions are both false.

Key to the city's logic of increasing participation in HHW management is that a geographically proximate HHW facility would be accessible by residents without automobiles. The HHW facility is sited in between Industrial Boulevard and Highway 280 in Northeast

Minneapolis. Access to this site by public transportation is minimal, since it lies away from bus and light rail lines. Additionally, the site is not easily accessible by foot. These facts are insubstantial though since household hazardous waste is not easily transferable by any transportation mode other than private automobile or municipal waste vehicles. For example, it is hard to conceive of anyone bringing old five-gallon paint cans or empty bottles of plumbing chemicals on a city bus, and then carrying those things from the bus stop to the HHW facility itself. To wit, the problem with increasing participation in HHW management cannot be solved by building a geographically proximate facility. Access to this facility is still impeded by a fundamental lack of transportation. This analysis invalidates the concept that the planned HHW facility would mitigate risk citywide by removing the threat of contamination from HHW from the environment. Of course, the objections of residents are not justifiable based on this point alone. Just because the facility would not be fully accessible is no reason to oppose it – ‘do not let the perfect stand in the way of the good’ one might say. Justifying residents’ objections to the HHW facility requires examining the scale of the impact of the facility as a structure.

The second assumption is the more serious one that the city makes in this case. Contrary to being a benign form of growth, the HHW facility negatively affects the use value of the land surrounding it in three ways. First, use value is more sensitive to change than exchange value, and the HHW facility represents a change and consequently a risk to use value. Second, the HHW facility is an industrial property, and as such represents an increase in the percentage of industrial properties already present in over-industrialized Northeast Minneapolis, which negatively impacts use value. Third, the HHW facility encourages the dissemination of household hazardous waste into the public sphere rather than eliminating waste out right. As

HHW is allowed to disseminate, it presents a risk to use value, which in turn negatively impacts use value.

Residents in Northeast Minneapolis, like residents anywhere, invested in the land they own under a set of existing conditions. These conditions basically equal that the land would not excessively depreciate over time. They control the depreciation over their land in a direct way, but indirectly controlling change requires operating at a space of engagement that is larger than the land of any one resident, and requires the space of engagement to encompass all possible risks. The HHW facility is a risk, since it represents change, and change always carries with it a risk of negative impact. The residents of Northeast Minneapolis want stability in the land surrounding them, so that change cannot negatively impact their use value and in turn their livelihoods. For the reason that the HHW facility represents a change in the land surrounding them, the residents' opposition to the facility is justified.

Furthermore, the HHW facility is an industrial property and industrial properties carry the risk of contaminating the surrounding land. Despite the fact that the HHW is a means of containing hazardous waste, it also represents a concentration of hazardous waste whose accidental release into the public sphere would be significantly more detrimental to use value in the surrounding area. This concentrated contamination poses a high risk for Northeast Minneapolis residents. Because Northeast Minneapolis residents derive their livelihoods at a small scale – their individual pieces of land – concentrated contamination would affect them seriously and entirely. For the city, whose livelihood is diffused across the entire jurisdiction of the city, a concentrated contamination in Northeast Minneapolis would only partially affect the city. Northeast Minneapolis therefore bears the burden of all the risk from HHW in the city being concentrated in their back yard, as it were. Though the HHW facility would have

safeguards, the only sure prevention of accidental contamination is that there be no contaminants around in the first place. Neighborhood residents were aware of the risks posed by an accidental concentrated contamination when they objected to the facility. It was one of the key points of contention outlined in their meetings with the city. (WPCIA, 2009) Northeast Minneapolis residents' objections are founded in NIMBYism, since they argue against the negative impact posed to their use value and livelihoods by the HHW facility. Further evidence of NIMBYism comes from Northeast Minneapolis residents highlighting the HHW facility as further unwanted industrialization, and in response, organizing to gather information on how to best prevent further industrialization. My own work previously was a result of this NIMBYist organizing for information. (Truax, 2009) Because of this risk of contamination, the objections of Northeast Minneapolis residents are further justified.

Finally, the very existence of the HHW facility represents a regressive step in ensuring that hazardous waste is removed from the public sphere altogether. The objections of Northeast Minneapolis residents' follow in the vein of environmental justice by seeking the elimination of hazardous substances rather than simply containing them after they have been produced and disseminated. Even if the facility were built, and even if it were successful, it would still leave HHW in the public sphere – a potential risk to use value and livelihoods across the city. By objecting to the HHW facility, Northeast Minneapolis residents promote the cause of ensuring environmental justice by removing hazardous substances from the entire public sphere, not just those who participate in the city's HHW management efforts. This would mitigate the risk to use value across the city in such a way that HHW would never again present a risk to use value. Constructing the HHW facility would only invite the specter of risk that use values would one

day be negatively impacted by household hazardous waste contamination. For this reason, the objections of residents are justified.

Returning at last to the thesis of this paper, I have argued that the city of Minneapolis put forward the plan for the HHW facility in Northeast Minneapolis to increase its return on exchange value through the collection of more taxes. The HHW facility would do this by mitigating the risk to exchange value posed by possible contamination from household hazardous waste which would reduce the exchange value of land. I have also argued that the objections of Northeast Minneapolis residents against the facility are justified. This is because their tie to use value is at risk because of the HHW facility plan. The city of Minneapolis is a non-resident actor, and like all non-resident actors it experiences risk to its investments in the land. This risk, however, is diffuse and small because the risk to any one piece of land is, for the city, insignificant compared to the whole. By comparison, the residents of Northeast Minneapolis experience a much more acute risk to their livelihood. To summarize, the HHW facility in particular would negatively impact the use value of residents' land because it represents a potential change that could depreciate use value for Northeast Minneapolis residents. Additionally, the facility poses a risk of unleashing contaminants in a concentrated area, again depreciating use value for residents. Finally, the HHW facility encourages the dissemination of possible contaminants throughout the city which would negatively impact use value for residents, not only in Northeast Minneapolis, but throughout the city. The HHW facility therefore represents a significant and concentrated risk to the livelihoods of residents, while only marginally benefiting the city in mitigating an already small, diffuse risk.

The plan for the HHW facility failed on the one hand because the property owner of the site desired by the city refused to sell. On the other hand and upon deeper examination, it is

apparent that the reason how and why the plan failed can only be understood through the political economy of place perspective. The plan for the HHW facility is seated in the political economy of place perspective – a plan by a non-resident actor to increase exchange values through value-free growth. The objections against this facility by Northeast Minneapolis residents are seated in NIMBYism and environmental justice – objections for stability of surrounding land use, against further risky industrialization, and against the dissemination of hazardous substances. These objections are also seated in the political economy of place perspective – objections against risks to the use value and livelihoods that residents derive from their land. In the end, because the plan puts residents at risks more than it benefits them, their objections are justified.

This is the case of the household hazardous waste facility in Northeast Minneapolis, put forward by the city as value-free growth, and stopped by residents who objected to the risk it would cause them. It is now time to conclude this paper, and discuss how this case can be used in application to broader themes of theory.

Conclusion – The Case in a Larger Context

The fourth and final research question of this paper asks how the victory of use value over exchange value examined in this case can be applied to larger processes beyond Minneapolis. The answer comes in two parts. The first part is that it furthers the NIMBY/environmental justice concept of arguing against value-free growth. The second part is that it broadens – and critiques – the political economy of place perspective.

NIMBYism and environmental justice were not the products of spontaneous demonstration, but were instead built up in the public consciousness as problem after problem began to be systematically opposed by those whom the problems affected. These reactions

continue to gain support today as the potentially damaging structures which support the growth machine are viewed with increased skepticism and objection. In this sense, the individual actions of NIMBYs and those seeking environmental justice aggregate together to form a coherent voice questioning growth. The residents of Northeast Minneapolis, in objecting to the HHW facility, add to that voice.

The victory of use value over exchange value in this case also impacts the way the political economy of place perspective is conceived. This perspective puts forward value-free growth as hegemonic, but clearly in this case value-free growth does not prevail. Stability through no growth and the preservation of use value ends up being the dominant action. Therefore, the emphasis placed on growth in this perspective does not hold true. There are exceptions to the hegemony of value-free growth – important ones that need to be incorporated into this theory of political economy of place.

This case also critiques the political economy of place perspective since it is lacking in several descriptive measures. The theory does not take into account individual or group agency, which was addressed here through NIMBYism and environmental justice. Actors who resist the growth machine and the actions they take in resistance can only be described in a dichotomy in the political economy of place perspective. The actions of actors are prescribed only along one of two paths – either prioritizing use value or prioritizing exchange value. What of those who prioritize both, or neither? This case demonstrates that while the political economy of place theory is useful in analyzing the actions of different actors, it is not perfect.

To end, the case of the household hazardous waste facility in Northeast Minneapolis is a valuable interpretation of the political economy of place perspective, not only because the theory helps us to understand the case but because the case elaborates the theory. This case also illustrates important critiques of the theory. The grim, winter scene in the industrial city which began this paper is unreal, it has turned out. The failure of the city has become a boon for

residents, secure now that their livelihoods will not be impacted by the value-free growth represented by the facility. Their opposition has furthered the cause of anti-growth criticisms, protected use values elsewhere, and revealed that value-free growth spurred by the growth machine may not be inevitable after all.

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