

Middletown No More? Globalization and the Declining Positionality of Muncie, Indiana

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This thesis titled  
Middletown No More? Globalization and the Declining Positionality of Muncie, Indiana

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## ABSTRACT

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Globalization has transformed the economic landscape, as activities have become increasingly organized into networked spaces. Positionality, the relative power of actors within these networks, becomes an important element in understanding globalization. This study employs network positionality as a guiding framework to analyze the decline of Muncie, Indiana, a small city typical of the U.S. manufacturing region. Analysis of the city positionality is based on an examination of key companies that led the city economy, and provided its main connection point to economic networks. As in many small cities, Muncie's leading companies have been mostly branch plants of larger firms, so the city positionality is mediated first through firm networks, then industries, and wider economic networks. Examining the decline of the city's leading companies through this framework allows added nuance in understanding the city's deindustrialization. I conclude that Muncie's positionality has weakened, and connections have been severed.

Approved: \_\_\_\_\_

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## CHAPTER 1: INTRODUCTION

In the early 1920s, Muncie, Indiana drew the attention of a young pair of sociologists looking for a site to study the impact of industrialization on a typical American small city, a “Middletown,” in their words. In two seminal sociological studies, *Middletown* (1929) and *Middletown in Transition* (1937), Robert and Helen Lynd chronicled life in the city, focusing on themes of work, family, government, leisure, religion, and education. The Lynds’ books made Muncie famous as a research subject, and have spawned a plethora of follow-up and spin-off studies, as well as a research center at the local university<sup>1</sup> (Hoover, 1996). In recent years, however, the historians at the Center for Middletown Studies have documented deindustrialization rather than industrialization. It is perhaps fitting that a city made famous as a subject for research on industrialization is now a subject for studies of deindustrialization. It is in this vein that I add my examination of Muncie, looking to contextualize and better understand its deindustrialization by applying analytical tools from studies of globalization, focusing on networks and positionality.

From early in its history, Muncie has been an industrial city. In the late 19<sup>th</sup> century, the discovery of natural gas in the area fueled the first industrialization, as a concentration of glass manufacturing sprung up to take advantage of the cheap energy. According to Ball State historian Dwight Hoover, this industrial foundation, combined with entrepreneurial inventors and a supportive local banking sector, helped the city

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<sup>1</sup> Ball State University in Muncie established the Center for Middletown Studies to catalogue and continue studies of the city (Center for Middletown Studies, [www.bsu.edu/middletown](http://www.bsu.edu/middletown)).

transition into new industries when the gas supply petered out (Borg Warner Oral History Project, 2009). The early glass industry left a lasting impression on the city through the Ball Brothers glass company, a household name for its canning jars, which was founded in Muncie. Though most of the company's production left town decades ago, the headquarters only recently relocated to Colorado. The Ball family also left an indelible mark on the city as patrons and philanthropists, lending their wealth and name to Ball State University and Ball Memorial Hospital (now Cardinal Health Systems) among others. Along with the Ball Corporation, numerous manufacturing concerns started in the city, especially in the auto industry. The longest lasting of these Muncie startups was Warner Gear, which later became Borg Warner, a leading auto parts supplier to this day (though its Muncie operations recently closed). These industries led Muncie's economy, and helped shape it into an auto-manufacturing city (Hoover, 1996; Borg Warner Oral History Project, 2009).

However, over the past few decades Muncie has seen a dramatic deindustrialization, as all the leading manufacturers have left town. This decline forms the focus of my study. Many small cities in the traditional manufacturing core likewise have been deindustrialized, and from the 1970s and 1980s through the present, a great deal of literature has documented deindustrialization in general, and in small cities (e.g. Bluestone and Harrison, 1982; Perry, 1987; Cormier and Craypo, 2000). While extensive, this literature has often been descriptive and under-theorized. Meanwhile, theoretical work on economic globalization has rarely extended to incorporate study of small cities (Robinson, 2002). The global economy is theorized as series of networks,

where connections are forged across space irrespective to proximity, and power is unevenly distributed between nodes; but the peripheral reaches of the networks are seldom the focus of research. Through the case study of Muncie, this paper seeks to bridge the gap between descriptions of decline and globalization theories based on world cities, examining economic changes in the city through the lens of network analysis. By drawing from and mixing the two distinct traditions, I hope to contribute to the dialogue in each.

This thesis examines the changes that have reshaped Muncie's economy, using ideas of networks and positionality to contextualize and analyze the change. The project is based largely on fieldwork and interviews conducted during the summer and fall of 2009, as well as oral history recordings from the Center for Middletown studies at Ball State University, archival research, and socio-economic statistical data. Focusing on key industries and firms<sup>2</sup>, I discuss the positionality of Muncie in economic networks, ranging from the firm level to the global. Most of the leading employers in Muncie have been branch plants of larger firms, creating a situation common to many small cities, in which the city's economic connections are mediated first through firm and industry networks. In this reality, the dynamics of firm networks and decision-making gain added importance. By examining them we are able to add nuance to understandings of deindustrialization, eschewing explanations based too heavily on economic metrics and

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<sup>2</sup> Throughout this paper, I use the term 'firm' exclusively to refer to the entirety of a corporation, including all subsidiaries, headquarters, branches, factories, plants, companies, etc. In contradistinction, I use terms like 'business,' 'company,' 'plant,' to describe sub-units of firms. A 'company' or 'plant,' then, could be a subsidiary, a branch plant, or some other sub-unit, while the term 'firm' always refers to the full unit.

trade theory. In the end, I conclude that the departure of its key firms has marginalized Muncie's positionality, severing it from the networks that once connected its places, people, and institutions to the global economy. However, alternatives can be imagined for Muncie and other small or deindustrialized cities, centering on strategies to reposition the city and (re)establish network connections.

## CHAPTER 2: LITERATURE REVIEW

### Small Cities Research

Before highlighting the existing small cities literature, I want to briefly open the question of defining the small city. Almost all studies of small cities define the term by population level, but these classifications have been scattershot, with the upper limit ranging as low as cities of 50,000 (National League of Cities, 1991) and as high as metros of 1,000,000 (Erickcek and McKinney, 2006). Rather than debate population thresholds, however, I believe a functional definition is better constructed based on characteristics. While small cities exist in a variety of contexts, in this study I specifically focus on Muncie, a small city in the traditional U.S. manufacturing core, and my operational definition of small cities reflects that context. Most small cities research has likewise focused on traditional western manufacturing regions<sup>3</sup>.

In defining small cities, I look to account for two elements: ‘city’ and ‘small.’ First of all, a small city must be a city, which I conceptualize as a settlement that contains to some degree all the basic elements of urban life; employment, administrative functions, retail outlets, and so on<sup>4</sup>. In the case of small cities, it is important to draw the distinction that the city must stand alone as the center of its own urban area; in other words, the term ‘small city’ cannot be applied to suburbs (Siegel and Waxman, 2001). In

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<sup>3</sup> Jennifer Robinson (2002) and others have called for more inclusion of cities beyond the traditional cores and global north. While this study does not fit precisely within the category, I nonetheless consider it to work toward the general goal of more inclusive theorization of globalization, as it examines a city outside the world city focus of much study on the subject.

<sup>4</sup> I contrast this with a ‘town,’ which may have some basic urban elements, but not a full range, so that residents have to go to a city, for example, for routine medical care or to process basic government paperwork.



defining the second term, ‘small,’ I look to Bell and Jayne (2009), who have led the push for more theoretically robust treatment of small cities. “Smallness,” they argue, “can be more productively thought of in terms of influence and reach, rather than population size, density or growth” (p.689). In this view, small refers to a limited influence beyond the city’s immediate hinterland. A small city, then, is fully a city, the center of its own urban area, but has little influence or reach within the wider urban system. As can be seen in the Study Area section (Chapter 4), Muncie fits within this definition; it is a fully functional, stand-alone city, but is overshadowed by numerous larger cities nearby (Indianapolis, Cincinnati, Dayton, Fort Wayne) that limit its influence.

The literature on small cities has touched on a wide variety of topics, but the predominant focus has been on examining the decline of many small cities (for an overview of the literature, see Bell and Janyne, 2009). Siegel and Waxman’s (2001) study of American small cities, commissioned by the U.S. Economic Development Administration, is one of the most comprehensive studies of the economic challenges facing small cities (what they call ‘third-tier cities’). They identified six recurring themes: poor infrastructure, dependence on traditional industry, loss of human capital, declining regional competitiveness, lack of civic infrastructure, and limited access to resources. A quantitative approach using principle components analysis allowed Erickcek and McKinney (2006) to identify statistical similarities among small American metros, and to group them into eight clusters. Their approach paints a similarly gloomy picture. The two largest clusters are comprised of “old economy places in slow decline” and “private sector dependent places,” and only two of the eight groupings are

characterized by economic or population growth (p.243). These studies are representative of much research on small cities.

The literature on small cities in the manufacturing core, and on deindustrialization in general, has thoroughly reported the decline of industrial cities (e.g. Bluestone and Harrison, 1982; Perry, 1987). Deindustrialization has been particularly harsh in many small cities, which often lack economic diversity. Studies of cities dependent on auto manufacturing (Cormier and Craypo, 2000), textiles (Forrant, 2001), and steel (Zippay, 1991; 2002) all found that the loss of the dominant employer has long-lasting consequences for small cities. Erickcek and McKinney's study (2006) identified two clusters of cities characterized as "company towns left behind." The lack of diversity in many small city economies leaves them more severely impacted by deindustrialization than their larger counterparts.

Theories of evolutionary economics and path dependence explain how a development path can become institutionalized over time, leading to and exacerbating the dependence many small cities have on single industries (Martin and Sunley, 2006). Social and political institutions that beneficially promoted a dominant industry in its prime, such as chambers of commerce, local politicians, and development authorities, are often slow to adapt to new realities, and can stand in the way of necessary changes or new innovations (Hassink, 2005). In this way, path dependence and political lock in often worsen the impacts of deindustrialization.

As deindustrialization continues apace, it has largely become accepted, and for many the focus has shifted toward promoting a 'new economy' based on services. In the

discourse of the new economy, manufacturing is relegated to the past and accepted as the realm of developing countries, while a 'new economy' path is put forward as the preordained solution (Aarnio, 1999; McCann, 2004; Smith, 2001). In the new economy, the focus is on high value added sectors, especially advanced services, but also technology, research and development, and specialized manufacturing. David Harvey (1996) laments that despite his and other critics' serious questions about its benefits, the service economy has become normalized as the necessary redevelopment path for struggling areas.

Proponents argue that the strength of finance and corporate headquarters (Sassen, 2000), or 'creative' jobs (Florida, 2002) leads the new economy. However, the increasing concentration of many advanced employment sectors, especially finance and business services, in the few global cities precludes most places from attracting these industries (Amin and Graham, 1997; McCann, 2002; Robinson, 2002). Small cities in the traditional manufacturing cores especially have struggled to adopt the new economy model. In a majority of small or peripheral cities, the service economy is more likely to be built around education, healthcare, and basic services than the high-value added sectors described above (Boyer, 2004). While education and healthcare are decent paying, stable sectors, they are usually inadequate to spur service-led growth (Hodos, 2002). Even new economy booster Richard Florida concedes that, "education and healthcare (on their own) do not appear to add significantly to regional labor productivity and wealth" (Florida et al, 2008, p.626).

Small city researchers have been critical of the new economy path, disputing its feasibility outside of major metropolises (Bell and Jayne, 2009). While some deindustrialized cities have succeeded in restructuring, most are caught in a fruitless battle to attract firms and foster native growth in advanced services. In this competition to be one of a limited number of technology and business services centers, most cities are destined to fail (Amin and Graham, 1997; Hodos, 2002). This bodes poorly for small cities, which have seen a continuing exodus of the young, educated portion of their populations. Even small cities with universities often struggle to retain the graduates who might spark new innovations and growth (Siegel and Waxman, 2001).

Along with high value-added service sectors, much emphasis has been placed on innovation as a driver of economic growth. Economic geographers have suggested that fostering innovation can spur endogenous growth as a counterbalance to deindustrialization (see Fields, 2006). However, as product life cycles quicken in many industries, continual innovation is necessary for a firm (or city) to sustain success (Murtha et al, 2004). While innovation certainly can play a positive role for small cities, it remains unlikely that the majority of small cities will be home to types and quantities of innovations sufficient to drive the economy.

As outlined above, a wide variety of researchers have documented and examined the deindustrialization and continuing struggles of small cities. However, I argue that there have been two pervasive problems in this literature: policy and development prescriptions that are overly focused on the site characteristics of the cities, and a discursive naturalization of these cities' declines. The first problem is caused by narrow

focus on the cities in question, leading to policy suggestions that only address the cities' site characteristics, and pay little attention to their connections to other cities and economic networks. In part, this focus has been motivated by the shifting scales of economic activities. As neo-liberal rescaling has altered the economic sphere, the onus of economic growth is shifted ever more from national to 'local' actors<sup>5</sup>. Increasingly, pressure has fallen on city governments and development bodies to independently produce results. However, in a globalizing world, city economies cannot be examined in isolation.

Most policy suggestions for small cities have focused on ideas of service led growth and innovation, as well as cultural and amenity led growth. Siegel and Waxman (2001) give a small city spin to traditional development ideas, calling for cities to enhance amenities, capitalize on universities, and build civic infrastructure. Multiple chapters in Bell and Jayne's (2006) edited volume on small cities focus on the prospects of 'cultural economy' as a new economic base, while Ofori-Amoah's (2007) edited volume has a similar emphasis on downtown revitalization. Other authors have promoted the potential for university-community partnerships to promote innovation and spur endogenous growth in small cities (Forrant, 2001; Bernhardt et al, 2002). While this work has made important contributions by exploring avenues for revitalization and development in small cities, much of it focuses too heavily on site characteristics.

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<sup>5</sup> One major implication of neo-liberal scale restructuring rises from a process Erik Swyngedouw (1997) describes as 'glocalization.' In this process, the global and the local become the key scales upon which economic activity is carried out. In a neo-liberalized economic world, competition takes place in a global arena, and sub-national units (the 'local') become the main protagonists.

Sheppard argues that attempts to change the economic outlook in a place cannot focus solely on improving local conditions, be it infrastructure, amenities, regulatory regimes, or any other condition. Rather, the positionalities of that place must be considered. “If positionality matters,” he argues, “no amount of tinkering with local conditions is sufficient to bring about development” (Sheppard, 2002, p.325). Though this argument does not negate the importance of improving place bound conditions, it qualifies their effectiveness if positionality is not considered. I argue that employing a network-positionality framework will help avoid this pitfall; I will return to this idea and to policy suggestions in the conclusion (Chapter 8).

The second problem is that in much of the writing on small cities, their decline has been naturalized. Even as authors lament decline and outline possible avenues for revival, they accept and reproduce the narrative that these cities declines are inevitable, caused by immutable economic forces of capitalism and globalization. In the popular press, concepts like the shifting international division of labor are broadly invoked as causes of inevitable decline (e.g. Roysdon, 2009a). Globalization is often treated as a disembodied force, emanating from the command centers of global cities, and reshaping the world uncontested (or ineffectually contested) (Smith, 2001). In this grand narrative, individual actors do not enter the picture, as any possibility of agency on the part of individuals is reflexively discounted. Rather than treating abstract processes as the principal actors in globalization, Michael Peter Smith (2001) argues we should return actors and decision making to a central role in theorizations of global processes. Rather

than simply describing the decline of small cities, we must examine the underlying processes, and the roles of various actors in those processes.

In addition to naturalization of their struggles, small cities have been discursively marginalized by a 'bigger is better' narrative within urban studies. In this normative of urban growth, smallness is seen as the result of historic failures, and the economic malaise of many small cities is naturalized (Clancey, 2004). If smallness is seen as failure, it is all but expected that small cities will be struggling. The struggles of small cities need to be re-problematized, so that new possibilities can be envisioned. Along with noting economic trends, it is important to also include more theoretical analysis, as continuing to describe the struggles of these cities without more thoroughly interrogating their causes would help perpetuate the discourse of their marginalization. Instead, I believe that reexamining these assumptions through a positionality analysis will provide fertile avenues for expanding our understanding of these cities.

### Network Positionality Analysis and the Small City

Globalization, argues Peter Dicken (2007), is a widely used but often poorly understood term. Generally, it can be defined as an intensification of the connectedness of various places, through numerous processes, economic, social, cultural, and so on. For this paper, I use globalization in a limited sense to refer to economic globalization<sup>6</sup>. Just as people take globalization to mean many things, so too there are many ways of

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<sup>6</sup> David Throsby (2001) raises interesting questions about the interconnectedness of economic and cultural realms, emphasizing that there is no clear break between the two. While the point is well taken, I do not focus on it in this paper.

conceptualizing it (Dicken, 2007), with the network view taken in this paper as one of the most common. A network view conceptualizes globalization as a process where by economic activity is increasingly organized through network connections, often irrespective to space and distance. In the network view, physical proximity of places or actors is less important than their (social, economic, etc.) connections. Network theorists argue that technological advances have led to the annihilation of space by time. New communication and data technologies have enabled connections to be forged irrespective to location (Castells, 1996). A useful metaphor describes networks as folding space; connections can be formed between distant places while nearby places can potentially remain unconnected within a network. In this regard, networks do not *cover* space, but rather *span* it (for a summary see Leitner et al, 2002).

While network theory allows us to consider connections outside the realm of physical proximity, Eric Sheppard (2002) warns of its potential limits, and offers the idea of ‘positionality’ as a corrective. He argues that writing on networks often overemphasizes the network itself and the possibilities it creates, while ignoring the unequal relationships between members of the network; “much attention is paid to the networks a place participates in, but much less to how it is positioned within the spaces of those networks” (Sheppard, 2002, p.317). Borrowing from feminist theory, Sheppard uses the term positionality to describe the importance of the relative positions of different actors within networks. In this view, the possibilities of actors are partially constrained-enabled by their position relative to other actors, and within networks. Positionality reflects that actors within networks have varying power; certain positionalitys are more



influential than others. Finally, positionality, as a socially constructed relationship, is continually (re)created through everyday processes. The relative positionalities of actors are resilient and path-dependent, reflecting historical and locational contexts, but they are also potentially fluid and contestable (Sheppard, 2002).

The idea of positionality has several important implications for studies of small cities. Network theory stresses the enabling power of technology as a key component in network creation. However, even in the so called ‘information age,’ the application of communication and data technologies is far from uniform or universal. Uneven application of technological advances improves the positionality of some places (usually those already well positioned), and decreases the relative positionality of others (Sheppard, 2002). As Siegel and Waxman (2001) noted, data and communication networks have been notoriously slow upgrading or expanding to many small cities; continuing advances in these technologies actually leads to a decreased relative positionality for these cities, then. Similarly, places with privileged positionality in the inland water travel networks of the 19th century might now be very poorly positioned within air travel or data networks.

In order to use a network positionality framework in analyzing economic change in a small city, the key firms of the city stand as the main connection point. In an economic-focused examination of globalization, firms serve as the primary conduit through which a place is connected to economic networks. As Dicken and Malmberg (2001) summarize, “the economies of territories reflect the ways in which they are ‘inserted’ into the organizational spaces of firms” (p.359). The firm provides a

connection to intra-firm and industry networks, and through these to more generalized global economic networks. Firm networks are often highly asymmetrical, with power distributed unevenly among units within the firm (Sturgeon et al, 2008). As discussed above, this unequal power within firm networks underlines the need to examine not only the firms network connections, but also positionality<sup>7</sup>. We can examine the positionality of companies in our example within industry networks, as well as firm networks.

Examining firm network positionalities is particularly worthwhile in small cities like Muncie due to the prominence of branch plant economies. The leading companies in many small cities are often branch plants embedded within larger firm networks. Siegel and Waxman (2001) note that in most small cities, local ownership of key industries is a thing of the past. Instead, employers that are paramount to the city are usually just one piece of a larger corporation. In this branch plant development model, the economic fortunes of a city are deeply impacted by internal firm dynamics, such as the decisions of corporate managers (McCann, 2004). Especially in small cities where branch plant development is prominent, an important component of the positionality of a city is mediated through the networks of its key firms. My analysis of Muncie builds on this idea, as I examine the positionality of the city by focusing on key (branch plant) companies in the city.

In examining globalization, especially in the case of small cities and branch plant economies, attention to scale also holds paramount importance. From a scale approach,

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<sup>7</sup> As firms will be a key entry point in this study, careful attention to agency within the firm will help us to avoid falling into an “undersocialized conception of the firm” (Dicken and Malmberg, 2001, p.352), in which firms are uncritically treated as unitary, rational actors.

current globalization is fundamentally characterized by a reconfiguration of the spatial scales upon which economic, social, and regulatory processes are carried out (Marston, 2000)<sup>8</sup>. During the Fordist period, the national scale was preeminent in the organization of economic and social activity. From the 1970s on, this temporarily stable crystallization of scalar structure has been thawed, largely due to the crisis of Fordism and the ascendancy of neo-liberalism (Peck, 2002; Sheppard, 2002). The organization of much of the economic sphere was shifted from the national to the international scale; the scalar structure of the processes was reconfigured through the use of unequal power relations on the part of neo-liberal political actors (Brenner, 2001).

The power relations underlying scale extend beyond the construction or reconfiguration of scale; even without shifting scalar structures, power can be exerted through ‘scale jumping’ (Swyngedouw, 1997; Brenner, 2001). In certain circumstances, an actor or group is able to shift their activities from one scale to another, leaving behind the constraints and contestations of the former scale, thus ‘jumping’ scales. The rise of neo-liberalism opened new opportunities for scale jumping. Under Fordism, the regulatory regime limited the mobility of capital, creating a situation in which labor and capital both largely operated on the national scale (Peck, 2002). With the shift to neo-liberal policies, the door was opened for corporations to re-scale their investment on an international level, while labor remained nationally organized. Jumping scales, many

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<sup>8</sup> Questions of scale have drawn significant theoretical attention in globalization research. Theorists argue that commonly accepted scales such as the local, national, and global are socially constructed, as are the hierarchical relationships between scales (Marston, 2000; Brenner, 2001). The production of scale reflects and reinforces existing power relationships, though those constructions are potentially fluid and contestable (Swyngedouw, 1997).

corporations were able to escape previously binding relationships of labor, regulation, taxation, and so on by relocating (or threatening to relocate) operations internationally (Swyngedouw, 1997). At its base, scale jumping is enabled by having greater mobility *relative* to others (Massey, 1996). In this sense, it is not necessary to alter the scalar structures in place; relative advantage can be gained by being more mobile than other actors, moving activities to a scale beyond the reach of their effective contestation or outside the constraints of previously binding arrangements. As globalization continues, Swyngedouw argues, “jumping scale is a central strategy in acquiring or strengthening control” (1997, p.156). Scale jumping often plays an important role in branch plant economies, as plants’ roles and positionalities within firm networks are redefined.

Though it could be tempting to draw a line between positionality analysis and scale analysis, Sheppard argues that “the construction of scale inevitably involves shifts in positionality” (2002, p.319). Rather than employing scale or positionality, we instead can view scale, positionality and networks as interconnected. Scalar reconfigurations and scale jumping alter the positionality of firms, cities, and actors. Similarly, depending on what scale of analysis is adopted, the various positionalities of an individual, place, firm, etc. are seen, as actors can have multiple positionalities within different networks and within different scales of view. Similarly, Jessop et al (2008) argue that at different times networks, scale, territory, and place each can be dominant concepts, and therefore attention should be paid to a variety of analytical frameworks. Following these ideas, I employ a positionality analysis in this paper, but also pay careful attention to scale politics and other aspects of place.

### Small Cities Contribution to Globalization Literature

The theoretical framework for this analysis, the network and positionality conceptualization of globalization, has a firm foundation in globalization research. A prominent line of research has furthered the network concept through study of global cities. Numerous studies examine the networks of global cities, often defining global city hierarchies based on various economic functions, such as concentrations of finance and business services (Sassen, 1991; 2000) volumes of passenger air travel (Smith and Timberlake, 1995) or international law firm headquarters (Beaverstock et al., 2000), for example. This work has been instrumental in outlining the network view of globalization, and lays the foundation for incorporating positionality in this analysis.

However, many scholars are beginning to call for an expansion from this global cities focus toward more inclusive application of globalization research (e.g. Amin and Graham, 1997; Robinson, 2002). While the importance and connectedness of global cities like New York, London, and Tokyo cannot be denied, criticisms have been leveled at a perceived preoccupation with these cities. In the introduction to his study of Lexington, Kentucky, Eugene McCann argues that within this mindset, “places like Lexington are easily overlooked” (McCann, 2004, p. 2316). Hierarchical frameworks and mega-cities focuses prioritize research on a few select cities, subordinating many other cities (and research on other cities) to the few (Yeoh, 1999).

Many small cities have only been included in theorizations of globalization as the small dots on network maps, the peripheral locations on network fringes. As such, they have largely been addressed at a distance, not as the subjects of study, but as locations

beyond the focus of theoretical attention. However, it is in these cities that network and positionality theories can perhaps best be demonstrated. Examining the positionality or network connections of New York, for example, through any one firm, or even industry, gives at best a very partial picture. In small cities where a single industry or company often dominates, examining globalization through firm mediated network and positionality analysis is much more tenable, and has stronger explanatory power. In this regard, study of small cities provides a potentially valuable avenue for furthering our understanding of globalization networks and the importance of positionality.

In addition to providing a distinct opportunity for applying globalization theories, small cities also are representative of much of the urban sphere. Though world cities capture the imagination of many globalization theorists, it has been argued that small and medium cities present a more typical urban experience, and thus are fertile ground for research (Bell and Jayne, 2009). Clancey (2004) argues, “the common American experience of urbanization, like the common experience in most countries, does not include living or working within a megacity or even the ‘secondary’ cities in which urban theorists typically centre their research” (Clancey, 2004, p. 2238). Indeed, the 2000 census found 55% of Americans lived in cities of 10,000 to 250,000 (Ofori-Amoah, 2007). While global cities are the hallmarks of globalization theory, they should not be its sole focus.

In this regard, I look to Jennifer Robinson (2002) and Amin and Graham (1997) and their concept of ‘ordinary cities,’ as an organizing logic in the study of the global-local nexus in urban settings. Building on critiques of the global cities focus, they argue

that in order to gain a wider understanding of globalization in cities, all cities should be treated as ‘ordinary,’ and emphasis should be focused on the processes and interactions of economic, social, and political forces across numerous scales (Amin and Graham, 1997; Robinson, 2002; 2006). Timothy Luke (2003) proposes a similar move, toward examining the “globalness” of all cities rather than the few “Global Cities” (p.15). Gregory Clancey (2004) goes much farther, suggesting that small cities are perhaps more global than mega cities, as large cities’ strength allows them to foster local particularities while small cities’ dependence on outside support precludes or dilutes truly local forms. These authors all emphasize the value of studying a wide range of cities to further understanding of the variety of urban forms, as well as to continue to hone our theoretical frameworks.

The expansion of globalization research will not only benefit understanding of the small cities currently left out, but also benefit leading theories through application in these new venues. If our goal is to produce theories that are generalizable to the varied urban forms of globalization, these theories must be tested in and reflective of more than just global and mega cities (Bell and Jayne, 2009). As Jennifer Robinson (2002) argues, we must acknowledge that urban theories are ‘located’ in the cities they draw from; expanding the relevance of globalization theories requires expanding the scope of research. Treating all cities as ordinary will help move toward a theorization of the global-local nexus that is ‘located’ in a diverse range of cities.

### CHAPTER 3: RESEARCH METHODS

Throughout this project I applied a qualitative research approach, focusing on understanding the nature of changes in Muncie, and incorporating this case study with existing theories of globalization and economic geography. My examination of the case focused on four main sources of information: my own interviews, local archives and newspapers, Census and other sources of numerical data, and oral history transcripts and audio obtained from other researchers and projects. I used focused coding to analyze the collected information, and draw thematic connections between sources.

The primary fieldwork component of this project was completed during the fall of 2009, focusing on interviews, observation, and archival research. I arranged and conducted eight in-depth interviews, summarized in Table 1. Interviews were conducted using a semi-structured format in order to facilitate open conversation, and encourage active informant response, following the method outlined in Bernard (2006). A snowball method was employed (Hay, 2005), but with little success; few interviewees suggested contacts that connected me to a new interviewee. Instead, most interviews built on existing contacts, chance encounters, or cold-calls to public figures. I also obtained information from the Public Relations division of Borg Warner Inc. via email. In addition, a sideline foray into social media networking failed to garner useful information or interview contacts.<sup>9</sup> Finally, the nearly complete loss of active UAW locals in the city

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<sup>9</sup> I located a Facebook interest group called “Lost Muncie,” which has over 2,800 members, and is an active forum for nostalgic reminiscences of the city. I posted new topics to the discussion board (disclosing my research aims) hoping to spark discussion of topics related to globalization, and with the goal of eventually connecting with



Table 1. List of Interviews.

Interviewee	Position	Date and Location of Interview
Brian Van Matre	President, UAW local 499	October 27, 2009; UAW hall, Muncie.
John Littler	President, Littler Diecast	November 13, 2009; Littler offices, Albany, Indiana.
Terry Murphy	Vice-President for Economic Development, Muncie-Delaware County Economic Development Alliance	September 23, 2009; EDA offices, Muncie.
Connie Trout	Project Manager for Workforce and Economic Development, Ivy Tech Community College	October 6, 2009; Ivy Tech Community College, Muncie.
Dennis Tyler	State Representative, Indiana District 34	October 28, 2009; Ball State University Library, Muncie.
Former factory worker	Union production worker, Borg Warner, 1986-2009, semi-retired.	October 8, 2009; interviewee's residence, Selma, Indiana.
Former factory worker	Union production worker, GM Muncie, GM Ft. Wayne, Delco Battery, 1967-2007, retired.	October 7, 2009; Starbucks, Muncie.
Former factory worker	Union production worker, GM Muncie, GM Ft. Wayne, 1981-present	September 25, 2009; New Castle Public Library, New Castle, Indiana.
Erika Nielsen	Director of Marketing and Public Relations, Borg Warner Inc., Auburn Hills, MI	September 25 and November 9, 2009; e-mail communication.

precluded networking through what would in decades past have been a potentially vital connection to interviewees. Despite these challenges, the interviews I conducted were very successful in informing this research project. Interviews averaged 45 minutes, and

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individuals to interview, either in person or online. However, my posts did not elicit any responses, nor was I able to locate relevant material in other discussion threads.

were fully transcribed and coded. For those interviewed in an official capacity, the name and position of the individual is included, while non-officials' names are withheld<sup>10</sup>.

Through research at the local history archives of Ball State University and the Minnetrista Center, I was able to access a variety of pertinent materials. The chamber of commerce files at Minnetrista proved especially valuable, providing important historical information about city businesses and economic trends. I collected hundreds of newspaper articles from the archives, from online databases, and from current editions during my research period. I specifically searched for articles about the historic key factories in the city, new or growing companies, deindustrialization, economic development, city policies, and budget politics. The overwhelming majority of these articles are taken from the Muncie Star Press, though a variety of other media outlets are also included. Statistical information for the Muncie metropolitan statistical area (MSA), which includes Muncie and Delaware County, was compiled primarily from the Census Bureau ([www.census.gov](http://www.census.gov)), the Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)) and from the Ball State Center for Business and Economic Research ([cms.bsu.edu/Academics/CentersandInstitutes/BBR.aspx](http://cms.bsu.edu/Academics/CentersandInstitutes/BBR.aspx)).

Finally, additional interview material was obtained from the Center for Middletown Studies at Ball State University. An oral history project in 2005-2006 documented the city's labor history through a set of fifteen interviews (<http://libx.bsu.edu/cdm4/collection.php?CISOROOT=/MidOrHis9>), and a second oral

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<sup>10</sup> For my own personal interviews the names of non-officials are withheld. However, for the oral histories obtained from the Center for Middletown Studies, I have occasionally used the names of non-officials, as the full transcripts and audio recordings of these interviews are already available to the general public online.

history project in 2008 included seventeen interviews about economic development in the city (<http://libx.bsu.edu/cdm4/collection.php?CISOROOT=/MidOrHis11>). I obtained full transcripts and audio files for both sets of interviews. In addition, Dr. James Connolly of the Center for Middletown Studies generously provided me with audio files and notes from a video project the Center is producing about the closing of Borg Warner's Muncie plant (forthcoming)<sup>11</sup>. These resources proved invaluable, and were fully incorporated into my analysis.

After conducting interviews and collecting the additional data, I used focused coding as my primary analytical method. With careful reading and coding, this method allowed me to draw connections between the myriad sources, using my research questions as organizing themes (Hay, 2005). While not performing a complete open coding of the material (as in Burck, 2005), the detailed examination of the collected information nonetheless allowed me to identify new connections and themes beyond my original questions.

Initial coding focused on organizing material by firms, as firms are used as the main avenue for analysis in this study; coding included my own interviews, as well as the oral histories from the Center for Middletown studies, and the newspaper articles and archival materials. All materials related to each key firm were collected and organized together. Many sources touched on multiple topics and firms, and I was careful to include these segments in their respective codes. I grouped sources by firms, most

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<sup>11</sup> These interviews are cited in this study as Borg Warner Oral History Project, 2009.

notably Borg Warner, General Motors, and Delco, as well as code groupings for unions and general industry (sources that discussed the entirety of industrial activity in the city).

A second round of coding focused on identifying material that related to the theoretical concepts I have employed. These two layers of coding are non-exclusive; sources and segments within sources were coded in both rounds of coding (as well as having multiple codes within one round). Thus, these codes were examined within each firm, and aggregately for all the collected materials. The codes were developed in order to examine the ideas of positionality, networks, scale, and agency in the Muncie case. The main codes are listed in Table 2.

Table 2. Summary of Focused Codes.

Key Theory Codes	
Industrial era, prior strength	Explanations of decline/change
Deindustrialization, decline	Locating decision making – scale and agency
Current position/outlook	Individual agency within groups/organizations
Network connections	Public attitudes/viewpoints

## CHAPTER 4: STUDY AREA

### Profile of Muncie - Demographics

Muncie is located in east-central Indiana, approximately 60 miles northeast of Indianapolis (Figure 1); it is the seat of Delaware County, which makes up the Muncie metropolitan statistical area (MSA). The metropolitan area had a 2007 population of 115,000, with over half of that (65,000) within the Muncie city limits. The population peaked in 1970 at nearly 130,000 and has fallen slowly but steadily since (Figure 3). Muncie is the only large city in the metro area and its clear socio-economic center<sup>12</sup>.



Figure 1: Map of Muncie (Source: [www.nationalatlas.gov](http://www.nationalatlas.gov)).

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<sup>12</sup> The validity of the MSA as a coherent analytical unit is underscored by a reorganization plan currently under consideration in Muncie-Delaware County that would consolidate city and county governments into a single unit (Werner, 2010).

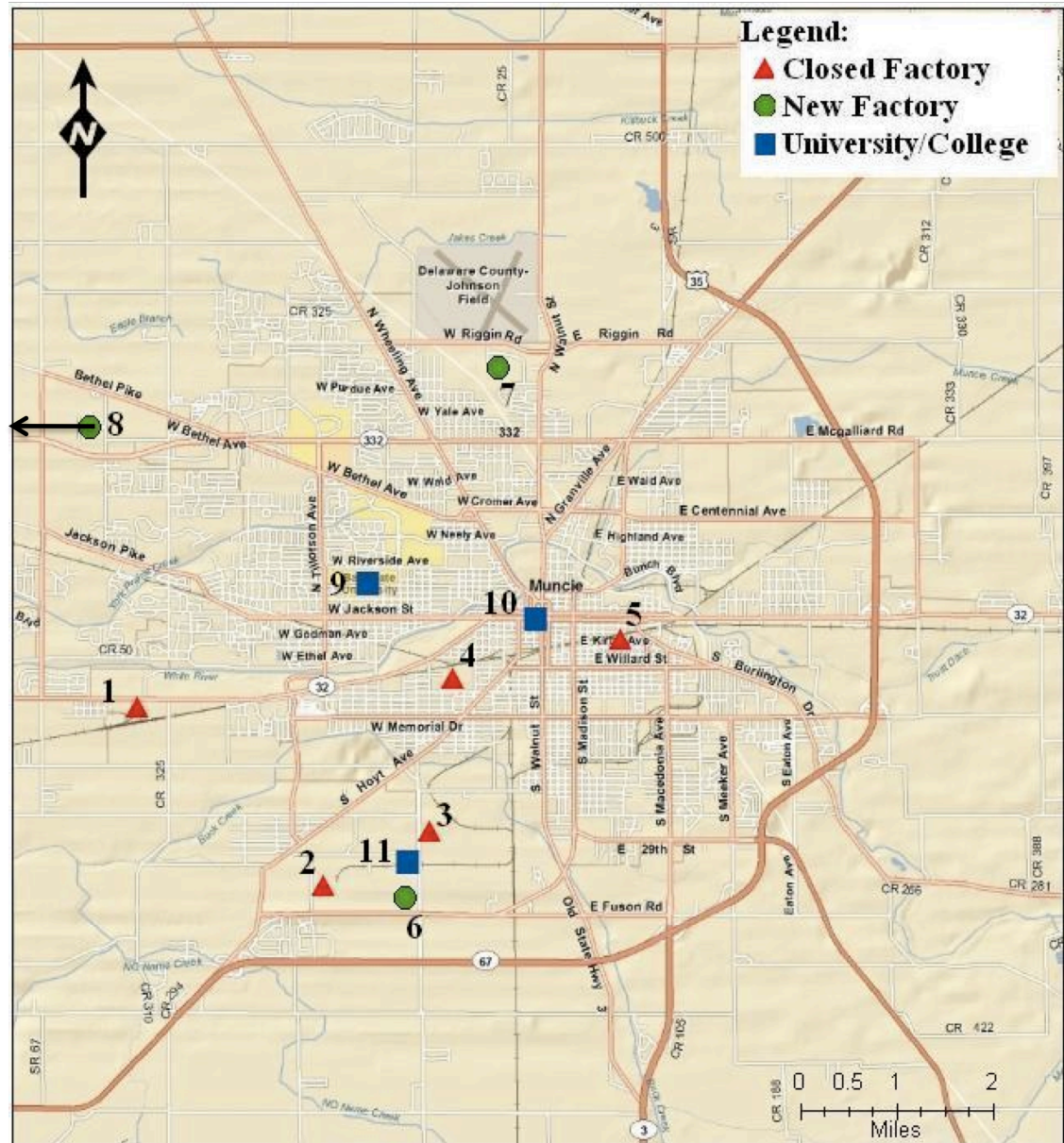


Figure 2: Map of Muncie Industries: Numbered locations of selected current and former factories in Muncie, along with university/college locations. 1) Borg Warner – Plant 3. 2) Delco Battery. 3) ABB/Westinghouse. 4) Muncie Chevrolet (and original Delco Battery site). 5) Borg Warner – Plants 1 and 2. 6) Magna Powertrain. 7) Keihin Aircon. 8) Brevini. 9) Ball State University. 10) Ivy Tech – Downtown campus. 11) Ivy Tech – Cowan Road campus. (Source data: ESRI. Map by author, 2010).

In this paper, ‘Muncie’ is used to generically describe the city and metro area, and statistics are given at the MSA level. The use of MSA data is appropriate for this study due to the high number of people who work in the city but live in non-incorporated developments and surrounding rural areas.

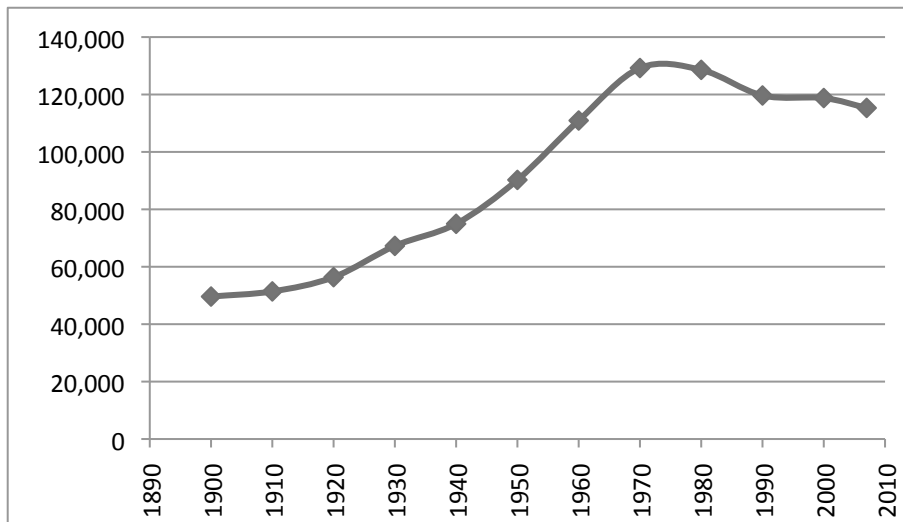


Figure 3. Population of Muncie MSA, 1900-2008. (Source: Census Bureau).

The population distribution in Muncie follows the expected pattern for the U.S., with a relatively even age and sex distribution, and a high number of elderly people. There is a notable concentration of college age population due to Ball State, but it does not extend beyond 24, suggesting that most students who move to Muncie for schooling do not stay in the city. This trend is mirrored by the education data. Muncie has an average educational profile, with less than a quarter of the population having college degrees (Table 3). This distribution almost exactly matches the state as a whole, and

corroborates the observation above, that the presence of the university has not benefited the city by generating high education levels in the general population. Erickcek and McKinney's (2006) classification of Muncie into the group of "college towns leaking grads" seems quite fitting; most Ball State students indeed appear to leave Muncie after graduation.

Table 3. Highest Educational Attainment of Residents Age 25+ for Muncie MSA and Indiana Average, 2007.

Education Level	Muncie	Indiana
No H.S. Diploma	13.5%	14.1%
H.S. Diploma	63.4%	63.6%
Bachelor or above	23.1%	22.3%

(Source: Census Bureau)

Muncie has a fairly homogeneous population, primarily white (90%) with a small African-American minority (7%). It is notable that of the minority population, 86% lives within Muncie proper; outside the city the population is over 97% white. Three-quarters of MSA residents were born in the state of Indiana, and a mere 0.5% were born outside the U.S. (Census Bureau). Despite the presence of a major university, there is little diversity in the city. These demographic statistics are not encouraging for Muncie's future; the city has a falling population, little diversity, and un-exceptional educational levels.

Unfortunately, Muncie's demographics are mirrored in the economic sphere. I provide an economic profile of the city, moving from general measures to more specific. Looking at median household income, a basic economic indicator, Muncie has clearly



lagged. In the late 1960s, median household income in Muncie was nearly equal to the state average. Heavy layoffs during the early 1980s recession caused a slump in income relative to the average, though by 1995 the economy had recovered, factories had recalled many workers, and Muncie households were back to making about 90% of the state average. However, Muncie has again fallen behind; by 2006 the median income in Muncie (\$36,650) was less than 80% of the Indiana average (\$46,475). (Census Bureau). In contrast to the earlier dip caused primarily by temporary layoffs, the factory closures of the past decade make recovery of median income a much more difficult proposition, as will be discussed below.

Social indicators also show a struggling city. The poverty rate in Muncie has consistently surpassed the state average. During the early 2000s, when Indiana poverty levels were about 8%, Muncie hovered around 12% (Census Bureau). Unemployment in Muncie has been higher than both state and national averages throughout the current decade (Faulk, 2008). From 2001 to 2009, even though the population was decreasing, over 1,000 children were added to the roles of free and reduced-cost school lunch programs (Faulk, 2009). In addition, Delaware County has the second highest economic inequality level in the state, based on the GINI coefficient (Burkey, 2006).

The past four decades have seen the number of social security recipients in Muncie double, and three-quarters of these are retirees. At over 15% of the total population, retirees figure ever more prominently as the population shrinks (Census Bureau). These retirees have helped cushion employment losses in the city, helping sustain industries like retail and healthcare. However, as current retirees leave Muncie or

pass away, the generation of baby boomers preparing to retire will not have the same quality health benefits and retirement that their union predecessors currently enjoy. The growing number of retirees, low household incomes, and high social services use suggest a deeply troubled city.

### Profile of Muncie – Industries

We can move from population-level figures to broad industry statistics to further the profile. In Muncie, the economy was long based around manufacturing. Throughout the first two-thirds of the twentieth century, manufacturing employed nearly half the workforce (Historical Census Browser, 2004). However, from the 1970s on, manufacturing employment in the city has fallen (Figure 4). In 1970, 40% of jobs in Muncie were in manufacturing. By 2008, manufacturing employed a mere 9% of the workforce. That decline is not just in the relative importance of manufacturing, but rather shows a very significant drop off in absolute terms (recall that during this same period, the city population has decreased). Compared to 18,300 manufacturing jobs in 1970, the figure in 2009 was 4,000 and still falling.

Manufacturing decline in Muncie broadly occurred in two waves (see Figure 4). Employment levels were high during the post-World War II period, through the 1960s. The first major wave of job loss occurred in the 1970s, and lasted through the recession of the early 1980s. Employment stabilized in the mid-1980s, and remained relatively steady in the range of 11,000 for more than a decade. It appeared as though deindustrialization had largely run its course, and Muncie had perhaps escaped less

affected than many industrial cities. Much of the job loss had been the result of automation and efficiency improvements, rather than factory closures. However, from 1998 to 2009, a second wave of manufacturing decline was precipitated by the closure of the top four industrial employers in the city. Indeed, manufacturing job loss from 1970 to 1983 (about 8,000) was nearly matched by the second wave loss of 7,000 manufacturing jobs between 1997 and 2009.

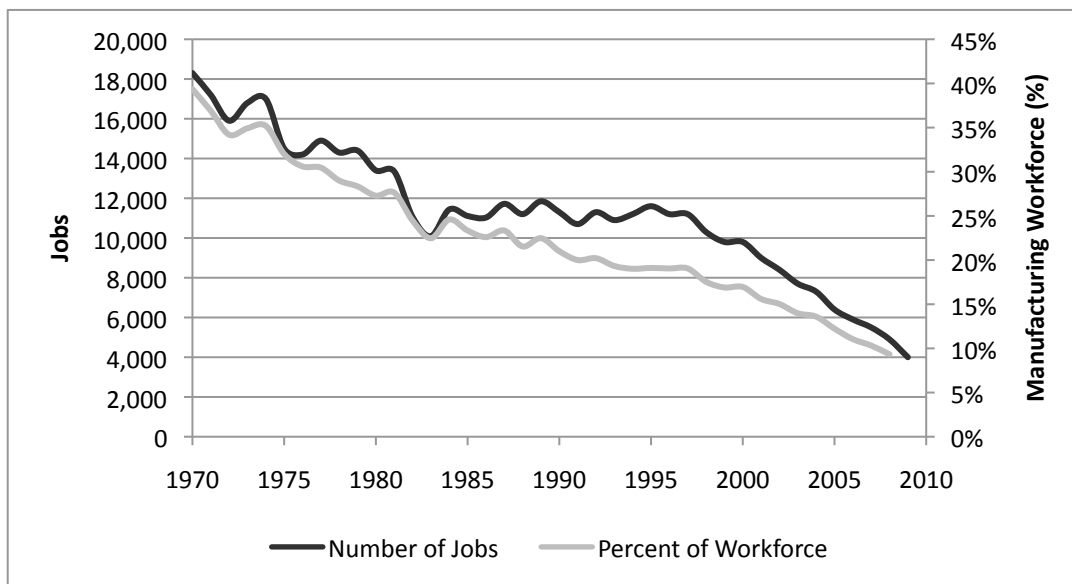


Figure 4. Manufacturing employment, absolute numbers and percent of workforce, 1970-2008. (Source: compiled from Indiana Employment Security Division, Census Bureau, and Bureau of Labor Statistics).

This incredible falloff in manufacturing has deeply affected Muncie, and goes a long way toward explaining the above statistics of lagging incomes. It must be noted that despite the dramatic drop in manufacturing, overall employment in the city has been

relatively stable. The jobs lost in manufacturing have been replaced largely with growth in the service industries. Service jobs grew from about 6,500 in the late 1970s to over 25,000 by 2006, by which time they made up over 45% of the workforce (Census Bureau). However, all service jobs are not created equal. Education and healthcare, the leading service sectors in the city by total employment and average wage, have not been the force behind service growth. Over the last decade, as manufacturing shed 6,000 jobs, education and healthcare employment merely held steady (Figure 5). Ball State University and Cardinal Health Systems (the local hospital corporation) are the two top

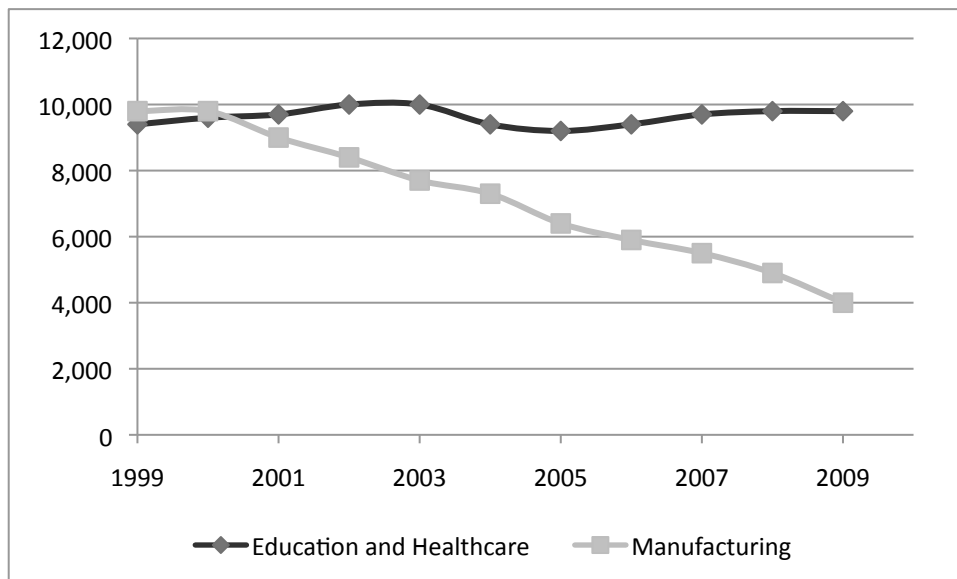


Figure 5. Employment in Manufacturing, and Education and Healthcare in Muncie, 1999-2009. (Source: Bureau of Labor Statistics).

employers in the city with 3,500 and 3,200 employees respectively (Roysdon, 2007), but those numbers are up only moderately from their 1980 levels of 2,650 and 2,100 (Delaware-Muncie Metropolitan Plan Commission, 1981).

Instead, low wage sectors such as entertainment, food service, and retail have been the main growth areas, now employing nearly as many people as education and healthcare (Census Bureau). Jobs in these sectors tend to be contingent, often part-time, and low wage; from 2005 to 2007 roughly 65% of entertainment and foodservice jobs and over half of retail jobs in Muncie were part-time (Table 4). Although aggregate jobs numbers have held fairly steady, the changes in employment in the city have been important. As manufacturing shrinks, education and healthcare have just held steady, and most growth has been in low-wage, contingent service sectors.

Table 4. Average Annual Income and Percent Part-Time Workers in Muncie for Selected Sectors, 2005-2007.

Sector	Average annual income	Percent part-time workers (<40 hrs/wk)
Manufacturing	\$30,621	10.1%
Healthcare	\$27,922	33.3%
Education	\$23,432	46.7%
Retail	\$17,072	52.5%
Entertainment, foodservice, etc.	\$11,492	65.0%

(Source: Census Bureau)

This picture fits in with the arguments of ‘new economy’ critics, who argue that the high-end service industry in small cities tends to be concentrated in education and healthcare, not the finance, management, research and development that factor heavily in

top global cities, and are the keys to new economy growth models (Boyer, 2004).

Without those dynamic, innovative sectors, the new economy model appears invalid in most small cities (Hodos, 2002; Florida et al., 2008). These criticisms ring true in Muncie; despite substantial education and healthcare sectors the city has not seen service led prosperity. The shift from a manufacturing to services driven economy in Muncie has been accompanied by a relative fall in wages, and persistently high poverty indicators.



Figure 6. Abandoned Factory: Vacant factories and brownfields litter Muncie's south side. (Author photo, 2009).

## CHAPTER 5: MUNCIE POSITIONALITY AND KEY FIRMS

### Muncie's Positionality in the Global Economy

As a precursor to discussing Muncie's changing positionality, it is necessary to establish the prior connectedness and strong positionality of the city. I briefly examine the positionality of the city here through the auto component industry generally, then below move to firm level analysis to further the discussion. For much of the early and mid-twentieth century, industrial networks were central to the U.S. economy. The famous claim, what's good for GM is good for America, is emblematic of the importance of industry in the era, as well as the importance of GM (and other domestic auto companies) within industry. Muncie, with its Borg Warner, General Motors, and Delco plants, was a strongly connected node in the auto manufacturing network. In addition to these main firms, Muncie also had numerous small, independent tool and die shops. The tool and die industry, suppliers to auto manufacturers, has a strong concentration in the Midwest, and Muncie was one of the leading tool and die locations in the country (Personal Interviews, 2009). "Muncie has always been a very important supplier city" for the auto industry, summarized Sean McAlinden, an economist at the Center for Automotive Research (Roysdon, 2009a). The auto industry was not only the leading employer in the city, but also the key connection between the city and economic networks.

In the industrial era, Muncie was well connected within industrial networks, which at that time were the leading networks of the U.S. economy. Muncie had important units of important firms in possibly the most important industry of the era. In

other words, Muncie, through its key industry and firms, had a strong positionality across various scales of economic networks. The auto industry, and indeed the economy in general, was not truly globalized during this era, so it would be a stretch to argue that Muncie was ‘globalized;’ however, it did have a strong positionality within the leading economic network of the era. Muncie was on the economic map.

However, over the last few decades, Muncie’s positionality within economic networks has weakened dramatically. As the economy has transformed to a more globalized, networked configuration, Muncie has been left behind. Auto manufacturing has transformed from a series of national industries into a globalized industry network (Sturgeon and Florida, 2004). However, Muncie’s positionality has fallen within the network, so that while the industry was globalizing, Muncie did not globalize with it.

We can see broadly how Muncie’s positionality has weakened across three scales of economic networks. Even as the industry has globalized, the positionality of auto manufacturing (and manufacturing in general) has weakened. Where it was once a leading industry in (national) economic networks, it is now less-strongly positioned in the global economy, as finance, services, and high tech sectors have gained prominence. Within the auto-manufacturing network, domestic companies like GM have lost considerable market share, and network dominance. In this regard, we can see that the positionality of parent firms of Muncie branches was weakened within industry networks. In addition, the key Muncie plants’ positionalities were undermined within their firm networks (as is discussed in detail below), and eventually the plants were closed.



In short, the once-strong positionality of Muncie, through its leading factories, declined on industry, firm, and plant levels even before their eventual closures, weakening the city's positionality in economic networks. Those closures, then, finally severed the network ties that had connected Muncie to the global economy. From this perspective, Muncie has been marginalized positionally; its well connected positionality of the manufacturing era has been lost. As economic networks have globalized, including the manufacturing networks within which Muncie was once strongly positioned, Muncie has been left behind.

Concluding that Muncie's positionality has been marginalized is not simply an analytical exercise, however. The city has lost considerable power, and with it the ability to shape its own outcomes. This idea returns to Sheppard's (2002) original outlining of positionality; that power within economic networks is uneven. Positionality, in short, *is power* within a network. As the economic networks within which it was positioned have transformed and globalized, Muncie has lost power (positionality), and the agency of local actors has been constrained. The agency of Muncie branches within firms are constrained, the agency of local politicians and government is constrained, and the agency of residents is constrained. While the city and its inhabitants are not completely at the mercy of outside actors, they have seen a very real loss of power within the networks that form the global economy.

### Branch Plants and Manufacturing Decline

While I have argued in broad terms that Muncie has seen its positionality weaken, this assertion as yet does little to explain precisely why or how this process occurred. In order to better understand the positionality decline of the city, I extend my analysis to a more careful examination on the firm level. It is easy to accept explanations based on trade theory, or focusing on rational profit maximization by corporations moving production to lower cost locations, but these explanations do not capture the full complexity of the situation. By focusing on historical context, firm dynamics, individual and group agency, and questions of scale, I present a more nuanced explanation of the plants' declines, and by proxy, Muncie's. The agency of a variety of actors within the firms, unions, and networks gains added importance, as we examine the internal contestations that shape group and firm action (Markusen, 2003; Fields, 2006). I argue that to gain a better understanding of the Muncie closures, we should examine the internal dynamics of the firm and industry networks and the positionality of the Muncie plants within those networks.

The manufacturing sector in Muncie historically has been anchored by a handful of large factories. Initially, these were a mix of local companies and branch plants, though the latter have dominated for many decades. In the earliest industrial periods, glass manufacturers like Ball Brothers were key players, as well as Warner Gear and other early automobile companies (Hoover, 1996). In the more recent past, auto component factories have been the clear leaders in Muncie, with Borg Warner (the later incarnation of Warner Gear), General Motors, and Delco Battery leading the way. A

large electrical transformer factory owned by Asea Brown Boveri (ABB) (originally a Westinghouse plant) rounded out the leading group. In 1970, near the peak of manufacturing in Muncie, these four factories accounted for over half of the manufacturing jobs in the city, with the other half scattered between 100-plus smaller firms and plants (Muncie-Delaware County Chamber of Commerce, 1970).

Just as these four factories led Muncie in prosperous times, they have also led in its deindustrialization. All four have closed in the last decade, capped by Borg Warner closing its plant on Kilgore Avenue in 2009. These four factories went from a combined workforce of nearly 10,000 employees in Muncie in 1970, to zero by 2009. They account for more than two-thirds of the net manufacturing job loss since 1970; apart from these plants, only 4,000 manufacturing jobs were lost over the same period.

While aggregate sector data allows valuable analysis, we can delve deeper by examining these key examples. As discussed above, and as we have seen in the profile of Muncie, these key firms were indeed the main connection points between the city and wider economic networks. Especially in cities like Muncie, which rely on branch plant economies, the city's economic connections are largely mediated through firm networks. Over the next few pages, I overview the city's key factories individually and briefly discuss their declines, before continuing the positionality analysis through a more in-depth examination of Borg Warner.

*Westinghouse / Asea Brown Boveri (ABB)*

While auto components were the mainstay of Muncie's manufacturing heyday, the Westinghouse/ABB factory also was an important employer in the city (Figure 8). Westinghouse's Muncie transformer plant opened in 1961, and soon employed about 1,600 people. The factory was purpose built to produce huge transformers for electricity transmission. During the early 1980s the plant struggled, due to the national recession and de-regulation of electric utilities, with employment falling to just 460 in 1984 (Roysdon, 2006). In 1987 Westinghouse bought out the transformer unit of General Electric, its main domestic competitor, and integrated GE technologies into the Muncie operation (Carey, 2001).

Despite this move, however, the plant continued to struggle, and in 1989 the European giant ABB purchased Westinghouse's transformer operations and took over the Muncie factory. For the first few years under ABB the Muncie plant maintained relatively steady employment, but heavy layoffs in 1993 foreshadowed the plant's closure five years later (Roysdon, 2006). When the factory closed in 1998, it was less than 40 years old, and the work once done in Muncie was absorbed into existing ABB plants in Canada and Spain (Muncie Economic Development Oral History Project, 2008).

Understanding the plant closure largely hinges on deregulation of electricity markets. Deregulation mandated that utilities open their distribution systems to allow private competition; facing this new challenge, utilities aggressively looked to cut costs



Figure 7. Humble Remains: The former Westinghouse/ABB transformer factory south of Muncie has entered a humble second life, recently being used as seasonal storage for a ketchup company, and housing an industrial-themed haunted house in this October, 2009 photo. (Author photo, 2009).

for infrastructure (Belanger et al, 1999). “Utility companies were our demise,” concluded a former employee. “They were basically broke, and they were patching up old transformers to keep them running rather than to buy new ones” (Muncie Labor Oral History Project, 2006). By purchasing the Muncie plant during a downturn, ABB was able to cheaply acquire US market share. However, the company did not need the additional production capacity, and the Muncie plant was closed. The plant went from being centrally positioned in the Westinghouse firm network, to being an expendable plant for ABB, and it appears that domestic politics (in the form of deregulation) factored heavily in the shift.

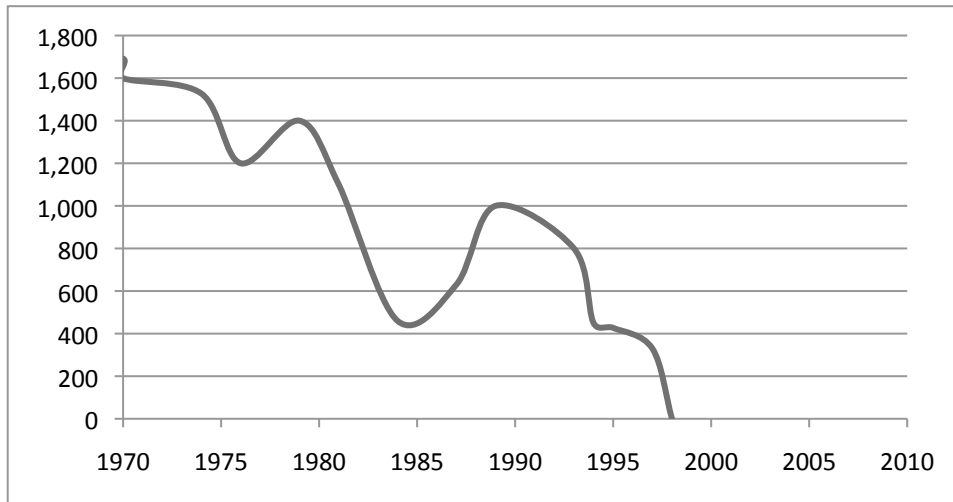


Figure 8. Westinghouse/ABB Muncie employment levels, 1970-1998. (Multiple sources<sup>13</sup>).

### *Delco Battery*

Delco Battery, a subsidiary of General Motors<sup>14</sup>, has a long history in Muncie. The plant opened in 1928 as General Motors' first battery factory, and for a time a Muncie-made battery was in every new GM car and truck. Employment at Delco peaked at around 1,500 in the late 1960s. In 1977 a new plant was constructed in an industrial park on the edge of the city, and the older Willard Street facility on the city's south side was closed (Harrison and Spurgeon, 1984). Advances in automation and efficiency at the new plant dramatically decreased the workforce, while output remained steady (Muncie Labor Oral History Project, 2006) (Figure 9). In the early 1990s, the Muncie plant was

<sup>13</sup> Muncie-Delaware County Chamber of Commerce, 1970; 1979; Indiana Department of Commerce, 1974; Delaware-Muncie Metropolitan Plan Commission, 1981; 1997; Post-Tribune, 1989; Cincinnati Post, 1997; Roysdon, 2006.

<sup>14</sup> Delco was absorbed into Delphi and spun-off from General Motors around the same time the Muncie plant was closing down.

chosen to produce batteries for the EV1 and EV2, GM's fledgling first steps toward mass-produced electric cars (Post-Tribune, 1991). However, the EV models were short lived, never becoming the mainstay of the factory as many had hoped. Instead, the Muncie plant was closed in 1998, despite being "the newest of any of (GM's) battery plants," according to a former employee (Personal Interview, 2009). The production lines from Muncie were officially consolidated into existing plants in Kansas and Georgia (Noble, 1998), though at the same time a new battery plant was constructed in Saudi Arabia (Howes, 1998). As GM reconfigured its battery operations nationally and internationally, the Muncie plant seems to have been closed due more to positionality (lower positionality within the firm relative to other domestic battery plants), rather than problems with the actual facilities or production.

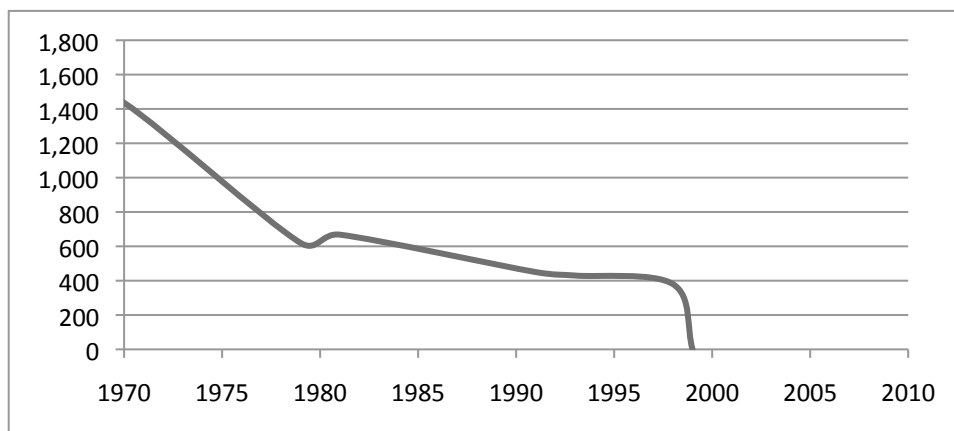


Figure 9. Delco Battery Muncie employment levels, 1970-1998. (Multiple sources<sup>15</sup>).

<sup>15</sup> Muncie-Delaware County Chamber of Commerce, 1970; 1979b; 1995; Delaware-Muncie Metropolitan Plan Commission, 1981; Post-Tribune, 1991; Noble, 1998; McBride, 2005.



Figure 10. Delco Battery Site: The former site of Delco Battery in Muncie; the plant was demolished soon after its closure due to concerns over chemical contamination. (Author photo, 2009).

### *Muncie Chevrolet*

General Motors has a long history in Muncie, stretching back to 1919. The 8<sup>th</sup> Street factory on the city's south side has had numerous names within GM over the years, but for simplicity I refer to it as Muncie Chevrolet, reflecting its longest lasting name (McBride, 2002). Despite the name changes, the main product line throughout the plant's history was manual transmissions (Harrison and Spurgeon, 1984). Peak employment at the plant was over 3,000 during the 1960s, and again briefly in the early 1980s (Figure 11). However, declining popularity of manual transmissions severely depleted business, and by the late 1980s employment was down to 1,000 and the plant was only functioning



at half-capacity (Chicago Tribune, 1989). In 1990 the plant became part of a pioneering joint venture between GM and Chrysler, which combined the Muncie factory and a Chrysler plant in Syracuse, New York, into a new company called New Venture Gear. NVG was profitable for a time, though that success was based largely on the Syracuse plant, which produced four-wheel drive parts for the SUVs that were then in fashion (Hannagan, 1995). The Muncie plant continued to make manual transmissions, now for Chrysler as well as GM, but never expanded back to full output or employment.

In 2002 NVG was dissolved, and Chrysler and GM re-absorbed their respective facilities. With GM already facing over-capacity problems in its existing automatic transmission factories, there was little hope for the plant to diversify away from manual transmissions. In the end, that reliance on manuals was the downfall of the plant. When the Muncie plant closed in 2006, the production lines were discontinued, rather than transferred to another GM facility, according to Brian Van Matre, the current president of the plant's union (Personal Interview, 2009). A former Muncie worker who transferred to a GM truck assembly plant in Ft. Wayne, Indiana, explained:

We don't put any manual transmissions into pickup trucks in Ft. Wayne anymore. We stopped doing that in the 2007 models, about the same time they closed down the Muncie plant. (Personal interview, 2009).

The decline of the key product line left the plant struggling economically, which decreased its positionality within the firm network. At the same time, overcapacity within the firm precluded retooling for new production lines, and thereby precluded the plant from repositioning within the firm (Personal Interview, 2009). In addition, the fact that GM plants in Ohio and Michigan still manufacture transmissions helps rebut an

economistic interpretation that the Muncie plant's closure is a simple case of a union factory in the traditional manufacturing core that could not compete. A combination of the specifics of the plant's product line, overcapacity problems in the firm, and weak positionality within the firm network also contributed significantly to its eventual closure.

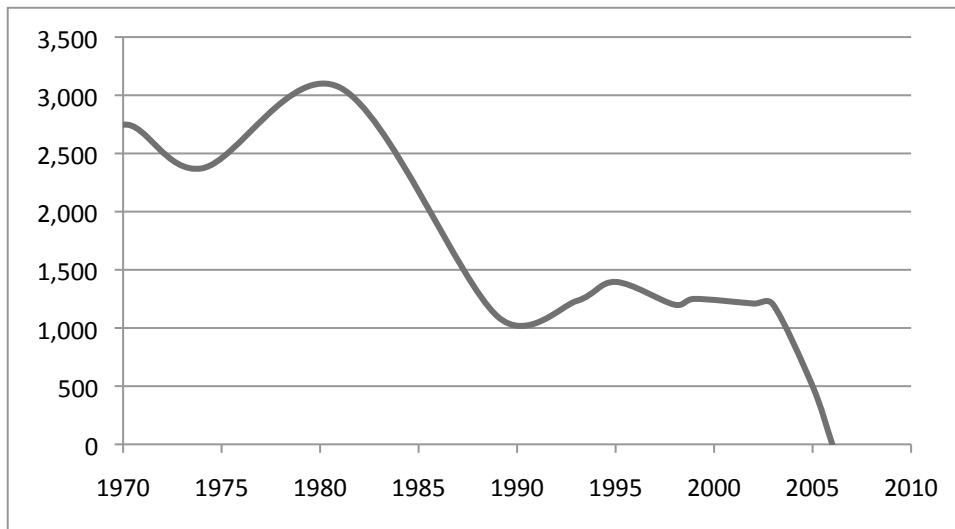


Figure 11. Muncie Chevrolet employment levels, 1970-2006. (Multiple sources<sup>16</sup>).

<sup>16</sup> Muncie-Delaware County Chamber of Commerce, 1970; 1995; Indiana Department of Commerce, 1974; Delaware-Muncie Metropolitan Plan Commission, 1981; 1997; Harrison and Spurgeon, 1984; Chicago Tribune, 1989; Howes, 1998; McBride, 2002; Roysdon, 2008.

*Borg Warner*

Borg Warner, a major international automotive parts supplier, traces its roots partly to Muncie. Warner Gear was founded in Muncie, and developed early transmissions; in 1928 it merged with three other companies to form Borg Warner. The Warner Gear division in Muncie remained important to the company, developing and producing numerous transmission products (Harrison and Spurgeon, 1984). To the original factory on Seymour Street on Muncie's south side, Borg Warner added a second Seymour Street plant, and a third plant on Kilgore Avenue, on the west edge of the city. With three plants, the company saw peak employment in Muncie of over 6,000 during the 1950s (McBride, 2001). In 1977, after extensive renovations to the Kilgore Avenue facility, Borg Warner consolidated Muncie operations there, closing the two Seymour Avenue plants and reducing the workforce (Star Press, 2007) (Figure 12).

A few watershed moments have shaped the Muncie operations in recent decades. In the late-1980s Borg Warner moved its industrial and marine transmission production lines from Muncie to an existing factory in Wales, costing the Muncie factory hundreds of jobs (Chicago Tribune, 1986). A decade later the company sold its manual transmission operations, long a mainstay of the Muncie plant but recently struggling, to a company based in Queretaro, Mexico (Penticuff, 1996). Following these two departures, the main product line for Borg Warner in Muncie was four-wheel drive transfer cases. At the centennial celebration for Warner Gear in 2001, Borg Warner division president Tim Manganello boasted, "there is always going to be four-wheel drive, and there is potential for more growth in Muncie" (McBride, 2001). However, the reliance on four-wheel

drive components left the Muncie plant vulnerable to the coming downturn in the SUV market. In 2009 Borg Warner's Muncie plant closed, and the remaining production lines were moved to an existing Borg Warner facility in Seneca, South Carolina (Nielsen, Personal Communication, 2009).

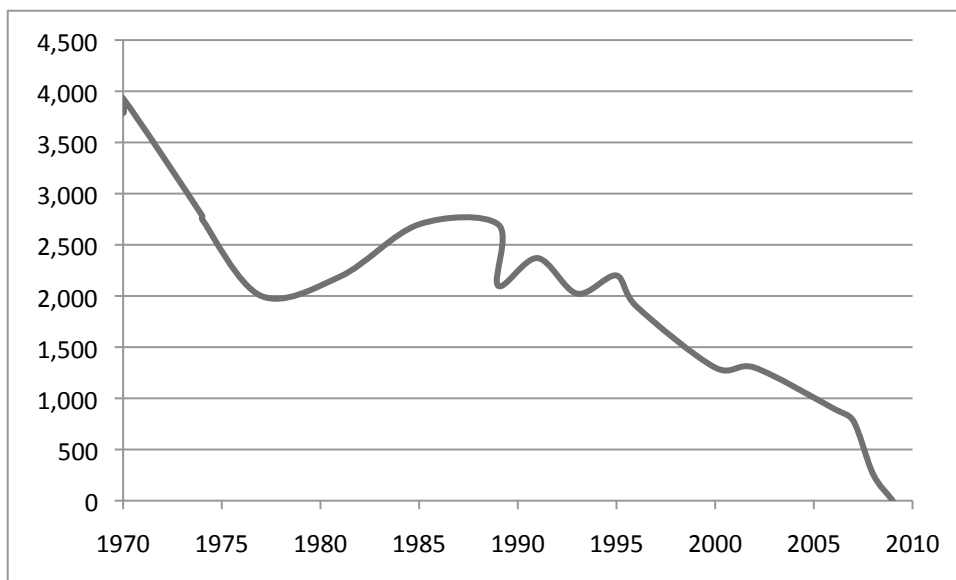


Figure 12. Borg Warner Muncie employment levels, 1970-2009. (Multiple sources<sup>17</sup>).

<sup>17</sup> Muncie-Delaware County Chamber of Commerce, 1970; 1995; Indiana Department of Commerce, 1974; Delaware-Muncie Metropolitan Plan Commission, 1981; 1997; Harrison and Spurgeon, 1984; Chicago Tribune 1985; Star Press, 2007; Roysdon, 2009.

## CHAPTER 6: THE END OF AN ERA - BORG WARNER

Warner Gear, as mentioned in the profile above, was founded in Muncie in 1901. When it merged in 1928 with three other companies to form Borg Warner, the first chairman of the new company came from Warner Gear, and directed the company for over twenty years (Hoover, 1996). Though the new company was headquartered in Chicago<sup>18</sup>, the Muncie plant was central to the firm network from its inception. According to many sources, both production and management, union and salary, the Muncie plant was a lynchpin in the Borg Warner Corporation (Personal Interviews, 2009; Borg Warner Oral History Project, 2009). Bill McIntosh, a union leader, summed it up; “we have always been a productive plant. Borg Warner built their corporation off Warner Gear” (Borg Warner Oral History Project, 2009).

For many years, Muncie was a key location for Borg Warner, providing the company with both profits and innovations. Profits from the very successful transmission lines made in Muncie helped bankroll expansions and acquisitions for Borg Warner as it transformed into a global company (Muncie Labor Oral History Project, 2006). The plant had a diverse product line, making transmissions and related products for cars, trucks, boats, and industrial vehicles. In those days, former Borg Warner employee Terry Coop said, “if you had an engine and needed to connect it to wheels,” the Muncie plant made a transmission for it (Borg Warner Oral History Project, 2009).

Many of the innovative and successful products manufactured in Muncie were developed in-house, starting from the original Warner Gear differential and three-speed

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<sup>18</sup> The Borg Warner Corporation moved its headquarters from Chicago to Auburn Hills, Michigan in 2005.

manual transmissions. The plant developed the first automatic transmissions for Ford in the early 1950s, the T5 manual transmission that was in nearly every American sports car of the 1980s and 1990s, and shift-on-the-fly four wheel drive transmissions for trucks and SUVs. The Muncie plant was known for its innovations, both within the corporation, and in the wider auto-manufacturing network (Borg Warner Oral History Project, 2009).

The Muncie plant was not just a production site for Borg Warner, it was a fully functional unit within the corporation. “The Kilgore (Avenue) plant was a company,” Larry Bennett, an engineer at Borg Warner emphasized. “They had marketing, they had sales, they had engineering, they had all the product development, they had everything that comprises an entire company and those products were designed right here” (Borg Warner Oral History Project, 2009).

As I have outlined, the Muncie plant was central to the Borg Warner company network, producing both profits and innovations that were paramount for the company. As a leader in development of innovative transmission products, from automatics to high-performance manuals to four-wheel drive, the Muncie plant was indeed well positioned not just within the Borg Warner company network, but also within the auto component manufacturing network more generally. The Borg Warner plant, and through it the city of Muncie, occupied strong positionalities within both firm and industry networks.

However, this elevated positionality was lost over the last few decades, setting the stage for the eventual closure of the Muncie plant. Through my own interviews and the Center for Middletown Studies oral histories, a few related explanations are oft repeated in explaining the decline of the Muncie plant; changes in corporate management, union

issues, and loss of product lines. I examine these themes below, and underline how they combined to dramatically re-position Muncie within the firm and industry networks.



Figure 13. Borg Warner Closes: A strange new sight for Muncie residents: the Borg Warner plant with empty parking lots, soon after its closure in 2009. (Author photo, 2009).

Throughout most of its history, the managers of the Muncie plant were brought through the ranks within the plant. The managers were well acquainted with the facility, the product lines, and the city. However, in the late 1980s and 1990s, management

positions in Muncie started to be staffed more and more from other areas of the corporation. The insulated management cadre at Muncie was replaced with corporate managers, as the Muncie plant became a stepping-stone in the corporate ladder, according to a former Borg Warner employee (Borg Warner Oral History Project, 2009). In the eyes of many Muncie workers, the shift to more ‘outside’ management was a key turning point in the direction of the factory. They said that despite occasional tensions, the plant previously had good management built on personal relationships, but that was lost as management shifted (Borg Warner Oral History Project, 2009; Personal Interviews, 2009). Bruce Reynolds, a Borg Warner retiree, sums up the sentiment:

Once Borg Warner went from a locally owned and operated entity, and went corporate wide, nation wide, world wide, they lost the vision for this plant and this facility, that’s the reason why we lost the jobs here in Muncie, Indiana. Corporate lost the vision for this plant. (Borg Warner Oral History Project, 2009).

For some, explanations for this shift away from a local (factory-level) management structure focus on two key events: the temporary privatization of the firm, and the strike of 1989. In 1987, Merrill Lynch Capital Partners took over Borg Warner Corporation through a leveraged buyout, later returning the firm to public trading in 1993 (Star Press, 2007). Though Borg Warner was still making profitable products, the sizeable debt incurred through the buyout led the new owners to sell off most of its non-automotive holdings. Around the same time, in 1989, the Muncie plant had an eight-week strike (Star Press, 2007). This series of events, according to one employee, was the downfall of the Muncie plant. After the buyout, management shifted away from in-house promotion, and the plant “lost the connection with the community” (Borg Warner Oral



History Project, 2009). Another Borg Warner employee saw the strike as the turning point, when “the whole attitude of the place changed; there was no dedication to Muncie” (Roysdon, 2009). Whether precipitated by the buyout, the strike, or other factors, employees agree that this time period saw an important shift in management. Rather than crafting decisions around how to make the plant successful and profitable, management shifted toward a corporation-wide focus, in which the specific plant became secondary (at best).

While these two watershed events may have been the proximate causes of the management shift in Muncie, Larry Bennett speculated that there were deeper issues at play. In his view, the shift in the management structure in Muncie had more to do with corporate control of the unit. The plant was seen as too independent, and managers were brought in from outside to bring the plant more firmly under corporate control.

There was a feeling that the corporation resented how much money Muncie made, because the corporation, they had a very difficult time dictating Muncie. (The Muncie plant) provided enough gross income for the corporation that they could stand up and say no. And I think there was a lot of resentment for that. (Borg Warner Oral History Project, 2009).

These explanations put forward by former Muncie employees highlight the role of agency within the firm, eschewing economic assumptions of the firm as a unitary, rational decision maker. Competing interests and factions within the corporation and plant influenced the outcome of events. The positionality of the Muncie plant was changed not only by market forces or economic maxims playing out, but also by the decisions of key individuals and groups. The shift in management in Muncie deeply impacted the positionality of the plant within the firm network. I do not mean to argue

that the Muncie plant was purposefully or maliciously marginalized and downgraded, but rather to deny a simplistic interpretation that immutable economic forces were the sole determinant factors.

While the shift in plant management had important ramifications in Muncie, the loss of production lines also greatly impacted the positionality of the factory within the firm network. In the words of a former employee, the Muncie factory has always been a “job shop,” changing products based on contracts with the major auto companies (Personal Interview, 2009). However, certain lines were mainstays at the plant at different times, like the Ford-O-Matic automatic transmission and the T10 and T5 manual transmissions. These key lines were lost for a variety of reasons. Some were beyond the control of both Muncie managers and the Borg Warner Corporation, such as the loss of the Ford-O-Matic. Although engineers at the Muncie plant helped develop the transmission, the product line was lost when Ford opened its Sharonville, Ohio factory and took the work in-house. Following this loss, the two older plants in the city were closed, and operations were consolidated in the Kilgore Avenue plant (Borg Warner Oral History Project, 2009).

However, other changes were more firmly within the control of the corporation, as lines were moved from Muncie to other plants within the firm, or sold off. The marine and industrial transmission lines were moved to a Borg Warner facility in Wales in the late-1980s. The manual transmission lines that had been a hallmark of the plant, developed and produced in Muncie, and that had been extremely profitable for Borg Warner throughout the 1980s, were sold off in the late-1990s. That was when some

employees began to suspect the corporation planned to close the Muncie plant. “They intended to sell off half the machinery and lay off half the employees,” one employee said, “so if you had any common sense at all you knew the end was coming” (Borg Warner Oral History Project, 2009). Mike Copeland drew the same conclusions about the loss of the manual transmission lines.

I used to always think the plant couldn’t move. It was just too big. But I know in 1998 when they moved the transmission business out, I seen a lot of machinery just picked up and moved, just like that. That kind of woke me up to the fact that this plant could be gone some day. Just because them machines weigh a few tons, they can (still) move them. (Borg Warner Oral History Project, 2009).

For another union retiree, the loss of research and development functions was the real tipping point in Muncie. Without an R&D arm, the plant lost its innovation capacity. An engineer at the Muncie plant drew similar conclusions, regarding the expiration of patents as a major contributor to the decline of the plant. The innovations made in Muncie had propelled the plant and the firm, but as the products matured and the patents expired, low-cost overseas competitors were able to push into the market (Borg Warner Oral History Project, 2009). From being a self-contained operation known for its innovative products, the Muncie plant became dependent on the corporate R&D center or outside contracts to provide product lines.

The loss of product lines and R&D dramatically changed the positionality of the Muncie plant. By the time the manual transmission lines moved out, only one production line remained, transfer cases for four-wheel drive, which mostly went into Ford trucks and SUVs. A plant that had once been a lynchpin of the Borg Warner corporation, and had at times been paramount within the entire auto manufacturing network (especially in

the 1980s with T5 transmissions in nearly every American sports car), now produced only one minor product, and had no capabilities to develop new lines. The profits made from the Muncie operation had not been reinvested in the plant to keep it viable.

At the bitter end, when the Muncie plant was closed in 2009, that final four-wheel drive product line was relocated to a Borg Warner plant in Seneca, South Carolina. In the eyes of many Muncie workers, it was this final move that really epitomized the decline of the Muncie plant, as the line moved from a union plant in Muncie to a non-union plant in Seneca. A worker who took early retirement when the plant closed in 2009 summed it up:

They moved the work that we were doing, over the years, they transferred to other companies that they have. We were the last of the union companies that they had, and I think that was one of the factors; they didn't want, you know, they'd have less problems with a non-union plant. (Personal Interview, 2009).

Through all the changes in management and products, these workers speculate that the driving factor in marginalizing and then closing the Muncie plant was the union. Muncie was one of only two union plants left in the corporation, and the only one in the transmission division, according to Erika Nielsen, Director of Marketing and Public Relations at Borg Warner (Personal Communication, 2009).

Shifts of labor-capital relations are a classic example of scale power, as capital has effectively used scale jumping to escape from a once solidified balance of power. This explanation seems relevant to Muncie, as internal reorganization allowed the firm to sidestep the union. The fact that Muncie was a lone union plant in the division, and not part of a national agreement like many UAW locals, made the change that much easier for the company (Personal Interview, 2009). However, a one sided analysis of firm-

union dynamics focusing on just the firm would only serve to further marginalize the union. Just as we have looked more closely at the firm, we also need to examine the union, not simply treating it as a unitary group, but examining the agency of individuals and groups within the union.

As the purpose of the union is to give workers a voice through collective action, there is important individual agency within the organization. Union members note that there was a small core of influential leaders that really directed the organization (Personal Interview, 2009; Borg Warner Oral History Project, 2009). One retiree argued that over time the average worker had become less active in the union, especially when meetings went from being mandatory to optional. “That was a major turning point in who had control of the union,” he said. “At that point some of the more radical people could push their more radical agendas through” (Borg Warner Oral History Project, 2009). Another retiree agreed:

I’m a union man, I’ve worked union factories all my life, but the union spends 95% of their time with 5% of people. (Personal Interview, 2009).

In this case, both salary and union workers point to the strike of 1989 as a watershed moment in union-management relations, and as a point when a few individual actors shaped the outcome. As one retiree saw it, these more “radical” members resort to vandalism and intimidation during the eight-week strike was a major turning point in hardening the company’s attitude against the union and the Muncie plant. The strike also turned many in the community against the union, which was perceived as demanding too

much, even by many workers (Borg Warner Oral History Project, 2009; Personal Interviews, 2009).

Even before the 1989 strike, there had been significant union-management conflict. Ball State historian Dwight Hoover explained that relations were often adversarial, and that there were numerous strikes at Borg Warner in decades past (Borg Warner Oral History Project, 2009). Despite the conflicts, though, 1960s and 70s union leader Charlie Michael contended that the union and management had previously maintained a functional relationship, and kept open lines of communication (Muncie Labor Oral History Project, 2006). Bill McIntosh, the plant union president at the time it closed, said those lines of communication had broken down, and relations were strained (Borg Warner Oral History Project, 2009). Though there had always been a degree of conflict, the tenor of the relationship had deteriorated.

Many union members argue that lack of support from the national UAW was a major impediment for the Muncie plant. After forty years as a union man at Borg Warner, one retiree said he feels like the UAW “sold them out” (Borg Warner Oral History Project, 2009). With all the other issues facing the UAW, especially the troubles of the Big Three automakers, the Muncie plant was a low priority. To the national UAW leaders, said another union employee, “it was just another little fire going on over here that we have to deal with.” The focus on the big manufacturers left the independent parts suppliers’ union locals to fend for themselves (Borg Warner Oral History Project, 2009).

Though the union network had been built horizontally, plant by plant, it had become hierarchical over time, leaving the Muncie local lower down the network.

Problems at the primary nodes (the national unions for the Big Three) were prioritized over supporting a single union plant for an independent parts supplier. Just as it had within the firm network, the Muncie plant had fallen to a low positionality within the national UAW network. In this light, we can see how the adversarial union-management relationship and the weak positionality in the national union network also contributed to the decline of the Muncie plant.

## CHAPTER 7: DISCUSSION

### Borg Warner, New Auto Plants, and Muncie's Positionality

Taking such a detailed look at the Borg Warner example allowed me to move beyond generalizations, to examine not only Muncie's declining positionality, but also some of the factors and specifics of the changes. Muncie's positionality has been shaped by the firm and industry networks of its factories, as is demonstrated through the Borg Warner example. As the Muncie plant was producing innovative products and propelling the Borg Warner Corporation, the city was on the map. As the corporation scaled back the Muncie plant and redirected investment elsewhere, as the innovations matured along the product life cycle, and as union-management relations soured, the Muncie plant faded into the neglected peripheries of firm and industrial networks, and basically fell off the map of the global economy.

While such a detailed analysis of each key firm would certainly provide further insights into the decline of Muncie's positionality, space does not allow such indulgence. Nonetheless, the case is instructive, and illustrates the argument that it is important not just to discuss the decline of the city and its key plants, but also to look through positionality at the specifics of the case. Through this analysis we add depth to our understanding of the changes in Muncie. In this regard, a brief further example will serve to highlight the extent of the weakening of Muncie's positionality within the auto-manufacturing network.

The recent opening of two new auto component manufacturers in the city actually serves to underscore how far the city has fallen within the auto-manufacturing network.



While Muncie was once well positioned within the industry network, these openings highlight that its positionality was weakened, and that it is now being re-positioned within same industry as a peripheral production site.

Hailed as the “future of (the) local auto industry” (Roysdon, 2007a), within the last five years Keihin, a Japanese Honda supplier, opened an air conditioner factory on the north side of the city, and Magna, a Canadian auto giant, opened a drive train plant on the southern edge. Each plant employs about 200 workers (Roysdon, 2007). Both plants are non-union, and wages are considerably lower than those made previously by workers at Borg Warner, GM, and Delco. In an ironic twist, some of the jobs gained at Magna came as the company closed down a union plant in New York and shifted the work to the non-union Muncie plant<sup>19</sup> (Hannagan, 2009; Personal Interview, 2009).

These examples underscore Muncie’s shift in positionality. On the surface these openings might seem to renew Muncie’s connection to the auto industry. Magna, for example, was fourth on the 2008 list of top global suppliers in the auto industry (Nussel, 2009). The firm is a very important node in the auto parts manufacturing network. However, the Muncie plant’s positionality within the firm network is very weak. It is a small, peripheral plant within the firm. I argue that rather than reestablishing Muncie in the auto industry, these openings serve rather to emphasize the extent of its fall. The positionality of Muncie has fallen so far that it now has been re-cast into the role of low-cost production site, on the receiving end of anti-union restructuring. Despite the

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<sup>19</sup> The plant Magna closed in Syracuse is the same plant that was formerly owned by Chrysler, and was the sister plant of Muncie Chevrolet in New Venture Gear.

strength of the parent firm, the plant does little to reconnect Muncie, due to its peripheral position within the firm network.



Figure 14. Magna Opens in Muncie: The Magna powertrain plant south of Muncie, located near the idled ABB factory and former Delco Battery site. (Author photo, 2009).

Keihin is a similar example. While it is a supplier for Honda, a strong and growing firm with a new assembly plant nearby in Greensburg, Indiana, the plant does not establish strong network positionality. Keihin is a minor supplier for Honda, positioning the Muncie branch plant in the far periphery of that network as well. This trend can be seen in Christopher Johnson's (2002) study of deindustrialization and globalization as well, in which he argues that future growth in deindustrialized cities

often will come only after they have fallen far enough to be re-positioned as low-cost sites.

These shifts have an important human dimension as well; the new auto jobs in Muncie, along with being much fewer in number, also pay much less than the lost jobs. Dennis Tyler, the state representative for Muncie, tells of meeting a cashier at a Lowe's hardware store who worked there as a second job to supplement her income from Keihin. Tyler says a relative of his has worked at Keihin for five years, and makes just \$11 per hour, less than half the average wage at Borg Warner (Muncie Economic Development Oral History Project, 2008). The high paying manufacturing jobs have left, and "those places are being replaced by small factories and service jobs that pay \$8 an hour," lamented former Borg Warner employee Jerry Barrett. "How the hell am I supposed to live on \$8 an hour?" (Fournier, 2008). Don Miller, a former manager at Borg Warner, agrees. He now works at Magna, and tells the younger workers there that they probably cannot count on the auto industry to get them through to retirement (Borg Warner Oral History Project, 2009).

A major element in the falling manufacturing wages in Muncie has been the loss of union jobs. At one time, Representative Tyler estimates, there were close to 20,000 union jobs in Muncie (Personal Interview, 2009). The cutbacks and then closures of the four major factories in the city, all union plants, took away most of the union jobs. The last UAW shop in the city was Duffy Tool, a tool and die maker that mostly supplied the auto industry. It closed in 2009, effectively erasing the UAW presence in a city that was long known as a union town (Personal Interview, 2009). In many ways, the positionality

of Muncie in the national union network paralleled its position in industrial and firm networks. While the factories were strong, so too were the unions, giving the city another level of network connectivity. As such, the decline of the unions in Muncie can be seen as another facet of its falling positionality, in this instance within organized labor networks.



Figure 15. Union Past: A boarded-up union hall south of downtown Muncie reflects the city's past, and the diminished role of unions today. (Author photo, 2009).

The argument that Muncie has been bypassed by economic globalization requires an additional brief clarification. One might contest the claim, noting the presence of Magna and Keihin, along with numerous other global corporations including IBM and Wal-Mart, demonstrates that Muncie is indeed imbedded in global economic networks. It is true that many of the retail, commercial, and manufacturing businesses in the city currently are part of regional, national, or even global firms. However, the important distinction lies in positionality. Whereas the auto factories of the manufacturing era were well positioned within their firm and industry networks, the current branches almost universally occupy very peripheral network positionality. Using an extreme example to emphasize the point, having McDonalds and Starbucks does indeed provide a connection to global economic networks, but the positionality is so peripheral that the connection loses its salience. Similarly, the Sallie Mae and IBM call centers that have recently opened in Muncie, which have been touted loudly by local politicians and development officials (Personal Interview, 2009), are peripheral operations within their national and international firm networks. While these call centers provide welcome jobs, they do little to establish strong connections within the globalizing economy. The strong positionality of the past made Muncie a participant key economic networks; its current positionality has converted the city to a recipient, with very little agency. This example illustrates the importance of considering not just the networks a city is part of (through its firms), but also positionality within those networks.

In this regard, a network-positionality focus overlaps with criticisms of branch plant development. Eugene McCann (2004) critiques that a branch plant development

model relies on attracting mobile capital, then expecting it to remain immobile indefinitely in the desired location. This critique focuses on the unreliability of branch plant development, a claim that rings true in the example of Muncie. However, I would also argue that if a branch plant has too weak a positionality within its firm networks, its value is limited in establishing the kind of network connections that are so important for cities. At the risk of stating the obvious, the opening of an IBM customer service call center has far different implications for the city than would a research and development lab, for example. The differences in the type and pay of jobs are quite obvious, but the difference in positionality and network connectedness can be just as important.

The case of the university and hospital is similar at its base. Healthcare and education networks are essentially non-hierarchical (or only slightly hierarchical), and very widespread networks. Having a university and a hospital provide little meaningful connection between Muncie and the global economy. Ball State has begun to expand its activities to include more economic development and business incubation work, but the presence of the university in and of itself provides only limited connections.

While thus far I have focused on the decline of Muncie's economic connections in terms of globalization, it is also worth briefly examining the regional implications of these changes. The same industrial and union networks that once strongly tied Muncie to the world economy also tied it to its regional neighbors. Other Indiana industrial cities like Kokomo, Marion, and Anderson were very closely connected to Muncie, as they interacted within these networks. However, as Muncie (and many of these cities as well) has been deindustrialized, disconnected, and re-positioned, the network ties between

these cities largely have been lost. Where industry and union networks once strengthened the ties between these communities beyond those of simple proximity, the loss of that economic connectedness seems to leave a sense of isolation disproportionate to distance. In this sense, perhaps Muncie has been not only left behind by economic globalization, but also disconnected from its regional neighbors.

### What Now? Development Efforts and Muncie's Outlook

We were sitting on top of the world (in the early 1990s), and all of a sudden the roof caves in and we lose Delco, we lose ABB, Ball Corporation says they are moving, and then the next thing you know the General Motors-New Venture Gear place announced that they are going to close. All these, the best manufacturing jobs in Indiana are just gone overnight, and it was a wake up call, and the government realized that we have to do something, and we have to do something now. -- Terry Murphy (Muncie Economic Development Oral History Project, 2008).

As much as the loss of factories and the decline of network positionality hurt in Muncie, people are trying to move in new directions to reestablish its economy. "It's a changing world out there, we can't be just an automotive city anymore," reflected Terry Murphy, the vice president for economic development at the Muncie Delaware County Economic Development Alliance. "We have to look at diversification and be involved in other areas" (Personal Interview, 2009). For many cities, though, it has proven difficult to move beyond the economic base and connections of a past era; institutions and attitudes become locked in, and resistant to change. The positive agglomeration effects of yesterday become the negative path dependence and lock-ins of today. There are certainly hints of this trend in Muncie.

It is heard in the quotes of a GM union leader, that “Muncie has always been a transmission town, and hopefully it always will be” (McBride, 2000), and of the retraining coordinator at the community college, that “even though we may not be an *auto* manufacturing town, we’re still a *manufacturing* region.” Expanding industries, she explains, “will still naturally look here” (Personal Interview, 2009). Perhaps the most telling, however, is the implicit focus on the auto industry that is still visible in a recent brochure from the Muncie Delaware County Economic Development Alliance (Figure 16).

The brochure, created for a Japanese target audience, stresses the geographic proximity of Muncie to other Midwestern cities, and to transportation networks. However, the greatest emphasis is placed on the city’s proximity, and implicit connectedness, to the auto assembly plants of Honda, Toyota, and Subaru. The map’s goal appears to be to attract new branch plant developments of parts suppliers for the auto industry. Continued focus on the auto-manufacturing path, perhaps to the level of dependence and lock-in, is visible in the map.

I want to be careful not to seem too critical of these comments and development efforts. I do not mean to paint these individuals as ill informed, nor their efforts to attract auto parts suppliers as misguided. Indeed, I believe these individuals are intelligent and earnest, and hope to see them succeed in revitalizing Muncie. Likewise, I do not discount the positive role that (even low paying) new auto jobs may be able to play in some future





Figure 16. Map from Vision 2011, Japan brochure. (Source: Muncie Delaware County Economic Development Alliance, circa 2006).

recovery. My aim, rather, is to reflect on possible examples of locked-in attitudes and institutions as a cautionary note. Successful economic directions for the city may or may not build on past industries; the key is not to be uncritically locked-in to one economic

path. Indeed, as evidenced in the two quotes from Terry Murphy, city leaders are at least aware of the dangers of negative path dependencies. The question, then, is whether they will effectively employ this awareness in shaping possible outcomes for the city.

Continuing the use of a network-positionality framework, (re)development efforts in Muncie can be understood as attempts not just to bring jobs to the city, but also to establish and strengthen economic network connections. New and stronger connections, in this view, are the key to reversing the weakening positionality of Muncie, by (re)connecting it to, and (re)positioning it within, global economic networks. As discussed above, if positionality is roughly understood as power within economic networks, establishing strong positionality can be key for improving outcomes in the city. A few possibilities merit examination in this regard.

The first is the expansion of local companies. Murphy and the Development Alliance focus on local firms as a primary tool for job creation (Personal Interview, 2009). If “local” firms scale up, they can establish network connections that could help reposition themselves and the city. To see the possibility in this argument, one need look no further than the examples of the Ball Corporation and Warner Gear, two Muncie-founded companies that transformed from local to national and global companies and (for a time) connected the city within the world economy. While attempting to pinpoint specific firms for this type of growth would be folly, I briefly introduce one example that at least highlights the potential for reconnection in this avenue.

Located in Albany, a village within the Muncie metro area, Littler Diecast is a small, family owned aluminum die-maker. While the tool and die industry is well

established in Muncie, Littler diverges from most of its counterparts in primarily doing business outside the auto industry. The company has succeeded, building a reputation for problem solving and quality engineering, and has been able to expand its customer base to include companies in Mexico, Brazil, and Hungary. From its plant near Muncie, Littler is thinking big, and hoping to continue expanding its customer base around the world (Personal Interview, 2009). As Muncie looks to reestablish itself, local companies “going global” is perhaps a promising possibility.

Another much ballyhooed direction for Muncie (though also for nearly everywhere else) is the “green” energy sector. Brevini, a German company, recently announced it will relocate its US wind division headquarters to Muncie and begin manufacturing wind turbine gearboxes in the city, fanning hopes for an industrial revival built around green energy. The company is on track to begin production in late 2010, and plans to employ around 450, with average pay as high as \$46,000 per year (Roysdon, 2008a; Roysdon, 2010). Governor Mitch Daniels celebrated the announcement, declaring, “it’s (not) a stretch of the imagination to say we could have a rebirth (of industry) for Muncie” (Roysdon, 2008a). The nascent green energy sector will get a further boost as Ball State engages in a \$65 million project to build a geothermal heating and cooling system for the campus (Dishman, 2009).

As the green energy sector grows nationally and globally, there is potential for Muncie to see growth in the sector, and reestablish itself through that network. However, the competition within the sector will be fierce, as more than a few rust-belt governors, mayors, and city-boosters are envisioning revivals for their areas built around green

industry. Terry Murphy sees promise in green energy, and thinks that Muncie's start in the industry will give the city an advantage in attracting more developments, but he is realistic about the prospects.

There's a lot of opportunity in the green energy sector, but it's not going to ever pull us back to the manufacturing levels that we were at before. (Personal Interview, 2009).

Discussion of the city's future often has focused also on Ball State. On the heels of Borg Warner's closure announcement, township assessor Deb Crosley suggested, "Muncie is a college town now" (Slabaugh, 2007). Ball State can indeed arguably be seen as the central feature of the city. In addition, Ivy Tech Community College is expanding from the south edge of the city, opening a new downtown campus as enrollment rises (Boyd, 2010). The expansion will help the college, and also provide a boost for the revitalizing downtown area. However, almost all of my interviewees scoffed at the idea of Muncie becoming a college town, arguing that the city would have to shrink much more than it has before it could base off of the university and community college. The historic town-and-gown divide between the north side (centered on Ball State) and south side (the traditional working class and industrial area) of the city further complicates this possibility. If Muncie were to re-orient itself around Ball State, they argue, the south side would almost certainly continue to decline (Personal Interviews, 2009). Already, significant abandonment and foreclosure problems on the south side face the city, which will demolish more than 100 condemned houses in 2010 (Slabaugh, 2009).

While there are possibilities for Muncie, there are also significant continuing challenges. Among them are questions of leadership. Along with decline and deindustrialization (and largely because of it), the city is facing a severe budget crisis. Cuts have included layoffs of firefighters and policemen, and nearly went so far as disconnecting half the city's streetlamps to save on electricity (Werner, 2009). The strain has produced a toxic environment in city and county politics (e.g. Werner, 2009a), which could complicate development activities. Siegel and Waxman (2001) note that effective leadership is key for small cities' development efforts. If reestablishing positionality enables development possibilities in Muncie, competent and functional public and private leadership will be critical to take advantage of those opportunities. The power and agency of city leaders have been constrained by Muncie's loss of positionality; will those leaders be able to cooperate enough to reestablish the city, and to effectively employ the increased agency that would entail? This landscape of possibilities and challenges will bear out whether Muncie can be reestablished and reconnected, or whether it will continue to be deindustrialized and bypassed by globalization.



Figure 17. Downtown Muncie: The downtown has seen significant renewal efforts in recent years, soon to be continued by the opening of a new Ivy Tech campus in the heart of the city. (Author photo, 2009).



Figure 18. Muncie's South Side: While downtown has improved, much of Muncie's south side has fallen into disrepair, coinciding with the departure of industries from the area. (Author photo, 2009).

## CHAPTER 8: CONCLUSION

The deindustrialization of Muncie, especially the second round during the last decade and a half, has had an incredible impact on the city. Unemployment is high, incomes are falling relative to the state and national averages, and empty factories and brownfields dotting the south side of the city serve as reminders of a bygone era. This paper examined the deindustrialization of Muncie through the analytical frameworks of globalization, focusing on economic networks and positionality. This view helped contextualize the decline of Muncie, and added depth to explanations for that decline. Not only did the city lose jobs and factories, it also lost its once strong positionality within and connections to important economic networks. The city went from an economically connected city during the industrial era, to a disconnected, deindustrialized city today. In the process some of the agency of city actors to shape their own outcomes was lost. The city declined in concrete terms, but also in connectivity and positionality.

This paper contributes to the literature in two main ways. First, it helps to bridge the gap between studies of small cities and theories of globalization. As I argued in the literature review, the application of the theoretical frameworks of globalization study to a small city case adds depth to understandings of these cities, as well as contributing to network and positionality literatures by extending them to a new venue. I would argue that the network and positionality based analysis above helps gain a more nuanced understanding of changes in Muncie, as I will discuss in the second point below. A network-positionality focus allows me to analyze these cities from a new perspective.

In addition, the focused application of a network analytical framework to an essentially peripheral location helps flesh out the spaces that had been left largely undefined and unexamined in network writing. Much of the work on globalization networks has focused on the most powerful nodes, global cities, or on supply chain networks. Applying this analytical framework to the study of locations in the periphery, and emphasizing not just networks but network positionality, we can continue expanding and adding depth to network ideas. Rather than being simply beyond the scope or at the edges of network maps and conceptualizations, these places should be drawn into analyses. Places with weak network connections and positionalities are no less valid sites for application and testing of network theories. The case study of Muncie bears out my earlier argument that small cities are perhaps the ideal locations for fleshing out these concepts. Where as attempting to identify the positionality of a world city would be extremely complicated, we can more easily apply the framework in a city like Muncie where one industry clearly dominates, and establishes the city's positionality.

The second important implication of this study, I argue, is that it allows an avenue to re-problematize the deindustrialization and marginalization of Muncie, and many other cities. A powerful narrative of progress has naturalized deindustrialization, but I believe that narrative should be contested. By focusing on firm-level networks, I have tried to build the case that there is much more to factory closures and deindustrialization than simple economic maxims. A more nuanced analysis is necessary to examine the wide range of influences that lead to deindustrialization. Certainly market forces are at play, and production cost functions have a very real and important influence, but so too do firm



dynamics, management decisions, worker and union actions, government policies and initiatives, trade regulations, environmental standards, and so on.

Many small city authors also stress that ideas of ‘success’ should be reconfigured to include equity and social stability, rather than simply focusing on economic growth, and to avoid discursive marginalization of smaller cities through bigger-is-better expectations. Though many small cities have fallen on hard times, alternative outcomes can be imagined and promoted. I believe that a network-positionality analysis of globalization and deindustrialization allows us to step back from the naturalizing narratives, and begin to reassess a range of causes, which in turn might be a first step toward envisioning alternatives to deindustrialization, and routes to improve the economic outlook of many deindustrialized cities. While it is beyond the purview of this study to develop plans or paths for Muncie or any other city, I argue that deconstructing these narratives is a valuable step in the right direction.

While much of the literature on small cities paints a fairly bleak picture, as does the case study of Muncie, avenues of possibility can and have been identified. Authors have suggested many possible avenues for recovery in struggling cities, ranging from the quotidian to the radical. While I have been critical of standard plans focusing on site characteristics, more radical ideas have also been studied; for example Tait (1997) examines efforts at establishing protected industrial zones, or reopening shuttered industrial facilities under worker ownership (Tait, 1997).

Other radical actors, wishing to alter the course of globalization, and with it the outcomes in many locations, have begun to employ scale in creative ways; for example,

circumventing institutionalized forms through scale jumping, attempting to re-engage capital in bounded social contracts, and envisioning new scalar structures based on non-capitalist logics (Brenner, 2001). While many theorists have focused on resistance through scale jumping and actions on the global scale, J.K. Gibson-Graham (2002) argue that global-based resistance is not the only possibility. In an argument reminiscent of Oren's (2003) insistence that globalization is constituted through ordinary, everyday acts, Gibson-Graham argue that individual, local, and other small-scale alternatives can alter capitalist globalization. Their assertion draws on the example of feminism, which became a transformative global force not through globally-oriented organization, but rather through the largely individual, personal change and resistance wrought by millions of women in their own households and everyday lives (Gibson-Graham, 2002). In this view the global is formed through the local, turning the dominant conception of scalar structure on its head. Attention to scale opens many new avenues for conceptualizing both the main streams of globalization, as well as alternatives and forms of resistance.

These radical avenues seem to hold the most possibility for small cities, especially when employing a positionality focus, which calls into question many commonly recommended development models for small cities. As I argued in Chapter 2, many of the policy prescriptions for small cities (and cities in general) have focused too narrowly on site characteristics. Pursuing a network-positionality focused analysis can open new angles for attempting to improve a city's outcomes. Recalling Sheppard's claim that, "if positionality matters, no amount of tinkering with local conditions is sufficient to bring

about development” (2002, p.325), development plans should aim to improve not just local conditions, but also network connections and positionality.

Taking a positionality focus also opens new avenues to affect resistance and change. Along with scale jumping and re-scaling efforts, actors can work to change the outcomes in a particular place by attempting to contest and rearrange the relative positionality of actors within a range of networks, as well as forging new connections (Sheppard, 2002). Attempts to contest and rearrange the relative positionality of a city within a range of networks can change the outcomes of that place, and the effectiveness of city leaders’ actions. In this light, attempting to establish new connections to economic networks, or to reposition the city within current networks should be part of any development efforts. As I discussed with the example of green energy, however, establishing strong positionality even within a young, dynamic network can be a highly contested process.

Finally, smaller cities present a challenge to the dominant urban policy prescriptions, which are often derived from larger cities. Small cities cannot be treated as miniature versions of mega cities, and policies developed for big cities often transfer very poorly (Siegel and Waxman, 2001). As discussed above, existing studies of smaller cities have revealed both similarities to global cities, and unique challenges. Policies must be adapted to reflect the realities of smaller cities, and many situations require new policy ideas developed specifically in small cities. In light of this varied array of policy suggestions and conceptual alternatives, city leaders face difficult challenges in identifying, developing, and carrying out (re)development plans. Returning to the case of

Muncie, there is not a clear or agreed upon path for the city to follow. Rather, leaders must negotiate contentious politics, historical context, path dependence, competition from other cities, and so on. However, I argue that a focus on positionality and non-traditional development ideas could provide fertile avenues, especially in small cities facing significant challenges.

In closing, I want to touch on two brief asides. First, this examination does not address cultural, social, or other disparate elements of globalization. It is important to recognize that despite concluding that Muncie's positionality has weakened and the city has been disconnected economically, other aspects of globalization are just as important in Muncie as elsewhere. Clancey's (2004) argument comes to mind, that small and peripheral cities are possibly more globalized in many ways, because their dependence and size limit their ability to sustain unique local features. Muncie is just as much part of the globalizing world as other cities, despite its declining economic positionality and connectedness.

Finally, though it had been an initial aim of this project, in the end I did not focus as heavily on the human impacts of Muncie's economic change. Time constraints and difficulties expanding from my interview base limited my ability to address this angle, but it certainly remains important. By focusing on employment figures for my main economic statistics I attempted to at least include an indicator of the human impacts. Further work is needed to incorporate more human dimensions into writing on globalization, networks, and positionality. Christopher Johnson (2002) closes his article on deindustrialization and globalization with a warning against overly detached treatment

of globalization. I echo that statement, despite perhaps not living up to the standard; I argue that consideration of human impacts should have an important place in writing on globalization.

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