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BUFFALO, NY SINCE THE GREAT RECESSION

A WORKSHOP ON ECONOMIC RESTRUCTURING IN THE RUST BELT SINCE THE GREAT RECESSION

BY: DINCER AND WHEATON

AUGUST 14-15 2017
CORNELL IN BUFFALO AND UAW LOCAL 774

PROGRAM

DAY 1, AUGUST 14, Cornell in Buffalo

Welcome, Arthur Wheaton, The Worker Institute, Cornell University 09AM-09.10AM

Introduction: The Contours of Economic Development in the Rust Belt since the Great Recession
Evren Dincer, Uludağ University
09.10AM-09.30AM

Session I

Main Trends and Issues of Economic Development in Buffalo 09.30AM-12PM

The Performance of the Buffalo Economy Since the Great Recession Jaison Abel, Federal Reserve Bank of New York

Healing Buffalo's Economy: The Buffalo Billion and Priorities for Economic Development John Slenker, New York State Department of Labor

General Trends in the Labor Market
Cesar Cabrera, New York State Department of Labor

Labor Market and Challenges for Workforce Development

<u>Heather Gresham, Executive Director, Buffalo and Erie County Workforce Investment Board</u>

Labor's Role in Economic Development and Organizing Richard Lipsitz Jr., Western New York Area Labor Federation

Economic Development from a Social Justice Perspective <u>Franchelle C. Hart, Open Buffalo</u>

Lunch Break: 12PM-1PM

Session II

Placing Buffalo in its Geographical and Economic Context:
Buffalo as part of New York State and the Rust Belt
1PM-2.45PM

The Role of New York City in the Economy of New York State James Parrott, Center for New York City Affairs at The New School

> Buffalo's Economic Relations with Albany Bruce Fisher, SUNY Buffalo State

The Role of Community Organizations in Buffalo's Economic Revitalization in a Comparative Perspective

Ronald Applegate, Cornell University

Buffalo's Economic Development Compared: Buffalo as Part of the Rust Belt Evren Dincer, Uludağ University

Coffee Break, 2.45PM-3.00PM

Session III Sectors in Perspective I 3PM-5PM

Buffalo's Housing Market since the Great Recession Sam Magavern, Partnership for the Public Good

Buffalo's Agricultural Economy since the Great Recession Diane Held, Cornell University Cooperative Extension

The Finance Sector in Buffalo since the Great Recession Gary Keith, M&T Bank

Buffalo-Niagara Medical Corridor Experiment: Perspectives on a Project for Economic Revitalization

<u>David Scott</u>, <u>Buffalo Niagara Medical Campus (TBC)</u>

The Energy Sector, Community Development and Sustainability in Buffalo since the Great Recession Rahwa Ghirmatzion, PUSH Buffalo

Concluding Remarks and Reflections on Day One Rosemary Batt, Cornell University

DAY 2, AUGUST 15, UAW Local 774

Session IV, 09AM-12PM
Sectors in Perspective II
Manufacturing and the Auto Industry

A Historical Review of the Auto Industry in the U.S. and Western New York

Art Wheaton, The Worker Institute at Cornell University

Recent Trends in Auto Manufacturing in Western New York

lan Greer, Cornell University

Canadian Auto Industry since the Great Recession: A Look at Buffalo from the other side of the Border

Mathieu Dupuis, School of Industrial Relations, University of Montreal

The Reindustrialization of the U.S.: Tonawanda Powertrain since the Great Recession <u>Evren Dincer, Uludağ University</u>

Auto Manufacturing in Buffalo since the Great Recession: A Managerial Perspective Steve Finch, Plant Manager, GM Tonawanda Powertrain

Labor Management Relations and Restructuring in Manufacturing since the Great Recession: A Union Perspective

Wenceslao Valentin III, President, UAW Local 774

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THE REINDUSTRIALIZATION OF THE U.S.: AN ETHNOGRAPHY OF AUTO WORKERS IN THE INDUSTRIAL RUST BELT

A Dissertation

Presented to the Faculty of the Graduate School of Cornell University

In Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

by
Evren M. Dincer
May 2016



THE REINDUSTRIALIZATION OF THE U.S.: AN ETHNOGRAPHY OF AUTO WORKERS IN THE INDUSTRIAL RUST BELT

Evren M. Dincer, Ph. D.

Cornell University 2016

Since the 1980s, the capital-intensive U.S. auto industry has faced entrenched, structural challenges competing with international firms. Although these issues cannot be resolved in the long-term by reducing labor costs, management has consistently sought to use international competition as a justification for undermining the job protections gained by unions over the course of the 20th century. Prior to 2007, these efforts resulted in limited success. But in the wake of the financial crisis of 2008, auto manufacturers finally gained support from the federal government to both 1) cut worker protections and 2) pursue technological retooling. These dramatic changes, which were posed as saving the auto industry, were penned in the 2009 Modifications to the 2007 National Agreement and later in the 2011 National Agreement.

This dissertation, based on 24 months of ethnographic research at a General Motors auto plant in Buffalo, New York, focuses on workers themselves as a means to understanding this watershed transition in the auto industry. The existing literature on the auto industry addresses the development of production models and technology as well as labor-management relations and institutional change without engaging directly with workers. In focusing on the rank and file, this study follows the methodological choice of Ely Chinoy and Ruth Milkman, who both placed auto workers at the center of their respective studies on the impact of early 20th century mass industrialization and the 1980s transition to "lean production" models in the U.S. A major advantage of

this approach is that it more accurately represents a key component of the labor process in analytical models, while demonstrating more specifically how labor-management relations are interlinked with wider industry developments. This study also privileges data over prevailing ideas about the attitudes of workers or the effects of technology upon work. As in Milkman's study, the workers at the GM plant in Buffalo do not share a single perspective.

Findings show that a federally mandated process of "reindustrialization" in Rust Belt labor markets created a generational schism in the industry such that workers hired after the bailout were subject to a radically transformed set of work rules, prospects for advancement, and job security. The research examines the meanings of work for these two generations, finding that they were further divided into several groups based on structural contingencies specific to both the industry and the plant. In spite of a wide array of opinions about work after the bailout, the older generation largely viewed the changes in terms of failure, while the new hires were largely grateful for union membership. Such contradictory views reveal the disparity in cultures of work between auto plants and the service industries that comprise the bulk of employment alternatives today. As unions continue to lose ground to contractual rhetoric, the gap narrows between union and non-union industrial workplaces in terms of worker protections.

Concomitantly, the study shows that the implementation of new technologies has not had a uniform effect on job reduction or deskilling. A nuanced look at the impact of new technologies grants an opportunity to understand the complex interplay of work, capitalism, and new technologies from the perspectives of the workers themselves. Overall the study shows that understanding the transition instigated by the bailout requires a lens of specificity where cultures of work emerge from the complex articulation between plant dynamics, regional labor markets, company policy and

industry trends. Ultimately, it is by attending to the voices of the rank and file that researchers can assess the implications of the bailout for the future of industrial work in America. This study contributes to the sociology of work in the U.S., as well as to theories of the state, working class culture, new technologies, and capitalism.

BIOGRAPHICAL SKETCH

Evren M. Dincer was born in Izmit, Turkey in 1982. He graduated with a B.A. in Sociology from Bogazici University in Istanbul in 2005. He holds a master's degree in the field of Modern Turkish History, also received from Bogazici University in 2007.

ACKNOWLEDGMENTS

Above all, I want to express my gratitude to my interlocutors in Buffalo, who remain anonymous in the text. Inside the plant, I was always received with kindness and welcome. This warm environment made this intense learning process not only easier but also enjoyable. I also want to thank management and union administrators for allowing me to conduct this research. Two people deserve special thanks: Peggy Gervase and Art Wheaton. Our relationships fortunately evolved along the way, and I now have the privilege of calling them friends. Their support at various levels made this research possible.

My adviser Shelley Feldman has been very supportive from the very beginning, even when I had nothing but a constellation of immature ideas. The ways in which she showed her trust in our relationship and my project gave me a huge boost of strength to continue this research. I also learned a great deal from her graduate classes in my first years at Cornell and then later from her mentorship. I hope I will continue to do so as our relationship continues after my departure from Cornell.

Harry Katz has also been very influential, as he encouraged me when I expressed my interest in studying the auto industry in the U.S. I learned a lot about the automobile industry from Professor Katz, and his help in putting me in contact with the Cornell ILR School's Buffalo Extension Office provided an amazing logistical network. Fouad Makki has also been tremendously helpful especially towards the end of my graduate studentship. His close, careful reading and support were very helpful. The Ministry of National Education in Turkey, Wenner-Gren Foundation, and Cornell University Graduate School have supported this research at various levels. I am indebted to their generosity.

My six years in the U.S. have been truly remarkable. I met so many great people in Buffalo and Ithaca. I want to thank to Veronica, Curtis, John, Megan, Richard, Nellie,

Lou Jean, and Ken in Buffalo. At Cornell I met some of the sharpest minds with great senses of humor, which I value tremendously. I'd like to thank Ashon, Mindi, Natrace, Roslyn, Amit, Gayatri, Rodrigo, Hyunok, Daniel, Jum, Nidhi, Can, Merced, Kyle, Defne, Mariana, Kathy, Tim, Divya, Max, Carrie, Omar, Andrew, Todd and Ryan. Will Day and Murat Kurt also deserve special thanks. Will has always amazed me with his remarkable sense of humor and intellectual capacity. He helped me immensely in articulating my ideas at the beginning of this project. Without him, I'd have taken a completely different and probably unpromising route. Murat and I supported each other through some hard times, and his constant support and friendship was vital.

I am also blessed by Ian's friendship. I have realized how much one can keep learning from a friend over the years. Sara has been a major influence with her unending energy and warmth. Outside Ithaca and Buffalo, I am spoiled by support from Nivart, Ergin, Secil, Firat, Evrim, Emre, Bayram, Nurcin, Asli, Bahar, Cem and Ozge. Bora has been a great source of inspiration since my late teens. He taught me how to think politically and creatively, and more importantly, the importance of making a difference in other people's lives. It is a hard task, and I have yet to prove myself.

I would like to express my deep gratitude to my family especially for their support towards the end of these six years. My mom and dad were always there when I needed them. My brother Esin has been influential in every phase of my life but I want to thank him in particular for what he has done in the last couple of years. His wife Gulsen and their son Ege have also been a tremendous source of support and generosity. Without them I'd be still struggling and would have a long way to go. Finally I want to thank Karem, whose appearance in my life has changed so much so fast. Without her presence, it would have been impossible to find the strength and motivation to finish this work.

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CHAPTER 1

INTRODUCTION

In April of 2015, Sergio Marchionne, the colorful and eccentric character of the automotive industry and the CEO of Fiat Chrysler Alliance (FCA), sparked a debate about the ill-fated nature of the industry. He called it a *capital junkie* that destroys value. According to him, the industry depends on tremendous capital investment with very little returns, which fail to justify the amount of investment. Companies are working on duplicate product development projects, which are often very expensive to begin with, and everybody loses money simultaneously. Extreme competition (a 4-5% profit margin is considered the norm in the industry; it is a little higher for premium carmakers such as BMW and Daimler) pushes every company off the cliff, and a €100 billion annual investment for product development across the industry is simply unsustainable. In his own words: [The] "capital consumption rate by OEMs [Original Equipment Manufacturers] is unacceptable—it is duplicative, does not deliver real value to consumers and it's pure economic waste." Marchionne's argument was that the auto industry's competitive structure was unsustainable and irrational.³

The

¹ The annual gross of the industry is estimated to be around \$2 trillion worldwide. See, Automotive News "Six Superstars Ponder the Future of an 'Irrational' Auto Industry," *Automotive News* August 3 2015.. €100 billion corresponds to a little more than 5% of this amount.

² For the full text, see, Sergio Marchione, Confessions of a Capital Junkie: An Insider Perspective on the Cure for the Industry's Value-destroying Addiction to Capital, (2015), http://www.autonews.com/Assets/pdf/presentations/SM_Fire_investor_presentation.pdf. p. 24.

³ The concept of "the destroyer of value" may be a little confusing. The industry obviously creates value in the classical sense of the word. What Marchionne refers to is the time to reinvest in enterprise value in product development in the form of capital investment and research and development (R&D). Compared to other industries, automakers have to reinvest in product development every 4.1 years. The next high cycle industry is the oil industry, with 7 years. The average of industries such as aerospace and chemicals is about 20 years. This means that capital and R&D investments in the auto industry are faced with the risk of becoming obsolete in a period of four years. Ibid., p. 7. This has a direct impact on returns on invested capital (ROIC). As of 2014, which represents the peak of a profit cycle in the auto industry, the ROIC in the auto industry was 7.8% compared to 19% in the pharmaceutical industry and 22% in retail.

To solve the problem, he suggests product development partnerships, reducing the number of platforms⁴ within companies, sharing more platforms between competitors, large-scale integrations and finally consolidation. Almost all of these possible routes have been tested in the last decades, and many alliances are still in effect.⁵ Yet, Marchionne finds them insufficient and calls for larger scale cooperation and consolidation. Not surprisingly, soon after his diagnosis was made public, he reached out to the General Motors (GM) and called for a merger, which was dismissed immediately and definitively by GM.⁶ According to the industry insiders though, Marchionne's search is ongoing, because the issues he raised are real. Problems run deep and have the potential to cause another industry wide crisis, since they are not unique to the FCA and have to be addressed at one point by every single manufacturer.⁷

The emphasis on the industry's deep running problems by a leading figure is important. However, in a document that debates the current ills and the potential future troubles of the industry, it is astonishing to see the absence of labor costs/relations as part of the problem. It is particularly puzzling when we consider the fact that Marchionne now leads a company which is an outcome of the bailout/bankruptcy that entailed the historic reorganization of its capital-labor

⁴ Platform refers to the primary load-bearing structural assembly of a motor vehicle, which determines its basic size; it is the structural base that supports the driveline and links the suspension components of the motor vehicle. For a dictionary of automotive terms, see: http://www.motorera.com/dictionary/

⁵ Renault-Nissan Alliance being the largest, there are numerous cooperative initiatives to reduce R&D costs. To name a few, GM and Honda are working on fuel cell technology together, while Audi, BMW and Mercedes recently formed a joint venture after buying Nokia's mapping service in order to work on autonomous driving technologies.

⁶ GM management had to deal with the aftershocks of this offer as Wall Street investors urged them to investigate the potential benefits of such a merger. GM management has been making a case against such a merger by highlighting its potentially destructive effects. At the top of the list are the financial troubles of the FCA, which are beyond repair.

⁷ Automotive News, a respected industry weekly, started an online debate addressing the issues raised by Marchionne. It is here that industry leaders—exclusively from the business world—reflected on Marchionne's comments and mostly agreed with his diagnosis. See the roundtable at: Automotive News "Six Superstars Ponder the Future of an 'Irrational' Auto Industry."

relations. Towards the end of the document he mentions this turning point in a passing comment: "Historical returns have been broadly below [the] cost of capital⁸, even after the restructuring of the US auto industry and NAFTA volumes at peak." This dissertation is about "the restructuring of the U.S. auto industry" that did not really cure the problems of the industry in the long run, but has absolutely changed forever the lives of many, particularly its hourly workforce—old and new—in the unionized sectors of the industry. In fact, the bailout was only about restructuring labor costs. This restructuring can be documented by examining changes to all that characterizes production in the plant, commonly termed "the shop floor." Consequently, this dissertation asks: how did the bailout of 2009 and its restructuring of labor costs manifest itself on the shop floor? This question may seem simple, but it opens up to a variety of other questions about the role of unions, changing labor process, the role of state/s, capital-labor relations, and finally, the spatial configuration of American capitalism.

To do that, I focus on GM's Tonawanda Powertrain plant, which presents an ideal medium to study the effects of the bailout as it has gone through almost all of the bailout imposed transformations. ¹⁰ Located just outside of Buffalo, NY, this plant came to the brink of terminal shutdown, bounced back with the bailout, completely retooled its machine floor and reorganized its assembly line, received hundreds of workers from other GM locations and finally was flooded

⁸ By historical returns, Marchionne refers to the bounce back in the American automotive industry that amounted to 17 million units per year, up from 9.5 million units per year during the height of the recession.

⁹ Marchione, Confessions of a Capital Junkie: An Insider Perspective on the Cure for the Industry's Value-destroying Addiction to Capital. p. 24, emphases mine.

¹⁰ General Motors' Tonawanda Powertrain is one of the company's 14 powertrain facilities in the U.S. and the only facility in New York State. The term "powertrain" refers to the combination of an engine and a transmission and occasionally includes a drive shaft and a drive axle. Along with stamping and vehicle assembly, powertrain constitutes one of the three key legs of automotive production. Tonawanda Powertrain was established in 1938, and its workers are represented by the UAW local 774. Once the largest engine facility, Tonawanda Powertrain makes engines (as of 2015) for Chevrolet's Malibu, Impala, Tahoe, Silverado, Corvette and Corvette Z06; Buick's Regal; Cadillac's ATS, CTS, CTS V and Escalade; and finally GMC's Sierra and Yukon.

with new hires starting in 2012. This plant also presents an ideal instance to assess the importance of the Rust Belt context in reorganizing labor. Troubled by long-term and large-scale economic issues, the politics of this geographical region not only enables but also legitimizes interventions at this scale.

This dissertation critically engages with two seminal ethnographic studies of the auto industry in the U.S.: Ely Chinoy's *Automobile Workers and the American Dream* and Ruth Milkman's *Farewell to the Factory*. Both of these studies distinguish themselves by putting workers' experience at the center of their narratives to explain major turning points in the history of automobile production in the U.S. Chinoy's seminal work, which was conducted in the late 1940s and published in 1955, questions the basic tenets of the postwar ideological environment and the "American Dream," which was one of its central ideological elements. Ruth Milkman, focusing on the transformation imposed by the political, economic and technological changes of the late 1970s and early 1980s, questioned the introduction of so-called "lean production" in the U.S. and revealed its effects on the shop floor. Both of these studies are outcomes of critical turning points in the automobile manufacturing in the U.S.: the postwar triumphalism of manufacturing in the 1950s and the first big crisis of that model in the 1980s. My approach in turn puts workers' experiences at the center of this study in order to understand the critical turning point that came with the 2008 economic crisis and the subsequent bailout.

Chinoy undertook his postwar study at a GM Oldsmobile assembly plant in Lansing, Michigan. At a time when the American Dream was the indisputable ideology regulating economic

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¹¹ Ely Chinoy, *Automobile Workers and the American Dream*, 2 ed. (Urbana: University of Illinois Press, 1992); Ruth Milkman, *Farewell to the Factory: Auto Workers in the Late Twentieth Century* (Berkeley: University of California Press, 1997).

life in the U.S., Chinoy exposed its real effects on the shop floor by focusing on the experiences of workers who were promised the most. Workers were extremely dissatisfied with the absence of promotion opportunities amidst increasing mechanization on the shop floor and a growing divide between labor and management. According to Chinoy, almost everyone considered leaving the factory either right at that moment or later on, whether skilled or unskilled. Most thought about starting their own businesses. Some were seeking office jobs or hoping to join the local police force. Despite such widespread dissatisfaction, many of them stayed in the job, since it still paid better than similar alternatives. "Labor in such a plant has become, in Marx's words, 'not the satisfaction of a need but only the means to satisfy the needs outside it." Those who stayed in those jobs hoped to improve upon their social and economic status and provide a better life for their kids if not for themselves. Despite seasonal layoffs, the automobile industry seemed relatively stable and had potential to grow, as the postwar economy in the U.S. was booming.

This growth indeed manifested itself in spite of occasional hiccups in the early 1950s and late 1960s. However, it was challenged structurally by the dual oil crises of the 1970s (1973 and 1979), which coalesced with rising international competition (mostly from Japan and Europe) both in terms of quality and production philosophy. The success of the "lean production model," which originated in Japan, posed a massive challenge to the mass production model that Chinoy addressed. Four decades after Chinoy, Ruth Milkman, who was greatly inspired by Chinoy, undertook a similar project in a completely different context. She studied a GM plant in Linden,

¹² Chinoy, Automobile Workers and the American Dream: pp. 82-83.

¹³ Ibid., p. 85.

¹⁴ Michael Moore presents one of the best visual examples of how this generational sacrifice occurred among automobile workers. In his brilliant *Roger and Me*, he takes us to a former auto worker neighborhood in Flint, which was completely abandoned at the time, with street names of Ivy League Schools such as Harvard, Yale, Princeton and Cornell. See, Michael Moore, "Roger & Me," (1989).

NJ in the 1980s and observed a distaste of work among workers, thanks to adversarial relations and the nature of job. In an industry scaling down its employment gradually, some of Milkman's interlocutors followed the first path Chinoy suggested, saying farewell to the factory by taking buyouts, while others remained at the plant. For those who stayed, the plant, which had also undergone massive technological reorganization, continued to be a disappointing place to work. New technologies also deepened skill polarization.

Milkman refers to workers who stayed despite systemic problems as prisoners of prosperity. They were "prisoners," because they stayed for the same reasons as Chinoy's workers: the work was not satisfying, but the pay was acceptable. Milkman's success, along with a few other studies such as those by Graham and Harrison, was to question the aura surrounding the lean production model radically advocated by works such as *the Machine that Changed the World*. By focusing on the experiences of workers, she allowed us to see how another production philosophy altered the production process significantly yet failed to address one significant aspect of it: job dissatisfaction and alienation. Her study also documented the multiplicity of reactions among workers to the lean production model. The excitement among some workers, especially lower seniority workers working on the assembly line, for more modular production process and potentially more cooperative labor-management relations was prevalent, and a fairly large portion of workers welcomed some of the changes. However, despite the promise of the lean production

¹⁵ Milkman, Farewell to the Factory: p. 27.

¹⁶ Prosperity here is a relative term. Workers at GM are not prosperous in a conventional sense of the word, yet they were paid more handsomely than workers in similar industries and the growing service sector at the time.

¹⁷ Laurie Graham, *On the Line at Subaru-Isuzu: The Japanese Model and the American Worker* (Ithaca: ILR Press, 1995); Bennett Harrison, *Lean and Mean* (New York: Basic Books, 1994).

¹⁸ Womack's book was probably the most influential manifesto for the lean production model. It came out in 1990 as an outcome of a long-term MIT study and became a classic. James P. Womack, Daniel T. Jones, and Daniel Ross, *The Machine that Changed the World* (New York: Free Press, 1990).

model, adversarial relations continued. Such persistence of adversarialism discouraged workers, especially those who were optimistic about it. Its basic tenets, such as employee participation and cooperative labor-management relations, did not unfold according to the "theory." Milkman's shop floor-centered study illustrated this complex interplay vividly and presented a grounded critique of a major transformation of the auto industry.

My work, reflecting on a completely different conjuncture, also privileges the perspective of workers and the shop floor. By doing so, it unveils two key processes that are otherwise invisible in studies on the industry: a major generational transition and massive technological reorganization. However my work also goes beyond the shop floor by incorporating a geographical perspective of Buffalo and the Rust Belt by paying particular attention to its economic, political, social and cultural atmosphere. As my ethnographic study shows, space plays a key role in the formation of labor markets, a point that is relatively absent in Chinoy and Milkman's studies. Space occupies a significant place in workers' identification with their environment while also justifying certain choices of local governance. Another key contribution of this work is to critically analyze the role of state(s) in this great transformation. Thanks to the bailout, the state's involvement in the restructuring of the auto industry was quite visible. However, the state's presence in the auto industry goes beyond that moment of visibility, as its intervention leaves behind long-term effects that are now treated as natural elements in production processes. As another departure from Chinoy's and Milkman's inspiring studies, I discuss the effects of state intervention in the auto industry from the perspective of workers, which is completely missing in the literature.

Finally, my study further differs from Chinoy's and Milkman's, because the industry itself has changed tremendously. Domestic automakers no longer hold the monopoly positions they

enjoyed during Chinoy's time. Unlike when Milkman conducted her study, the challenges posed by the competition are no longer limited to imports. Foreign automakers' production footprint is now as strong as that of "American" automakers, and the challenges of the industry are bigger than ever. The conjuncture I focus on is also different from the one Milkman discusses, because there is no longer a massive reduction of employment in the background. On the contrary, as I will show below, GM began hiring workers off the street, which further highlighted compensation differences between GM and the external labor market. After the bailout, "prisoners of prosperity" have begun to be called "traditional employees," and recent entrants to the plant are called "new hires," who were hired under a new compensation structure called the two-tier system. The introduction of these workers into the system forces us to observe another major change on the shop floor, with unprecedented implications for the U.S. auto industry. In spite of the influence of Chinoy's and Milkman's studies, studies of the 2008 crisis and its impact on the automobile industry so far have not directly engaged with the experience of workers, which helps to explain why these studies have offered a particularly optimistic picture of the transformation. ¹⁹ Below, I will try to map the contours of this historical moment and its impact on the labor process, working class identity and finally the idea and practice of solidarity.

1.1 Defining the Problem

Despite the lack of systematic interest on the shop floor, the auto industry in the U.S. is well-researched in many other respects. Three interrelated issues occupy a significant place in the literature: the evolution of production models and technologies; labor-management relations; and institutional transformation. This research has documented the advent of the mass production

¹⁹ In fact most of the literature on the auto industry has neglected to directly engage with worker experience, as I will explain below.

model, which began in the 1930s and was solidified after the World War II, as well as the collective bargaining system that was founded during the same period. This bargaining system faced its eventual crisis in the 1970s due to environmental factors, mainly rising from international competition and the oil crisis. Uurgens et al. add the collapse of the Bretton Woods system—and thus fluctuations in the exchange rates system—as another destabilizing factor: "The greater variability and volatility of the exchange rates necessitated strategic considerations to give the product offering and multinational production structures a higher potential for flexibility." 21

The collective bargaining framework in the US auto industry established unprecedented standards for workers, impacting labor markets throughout the US, which makes the undermining of union leverage relevant to labor markets in general. Thus, understanding the everyday dynamics of the struggle over the labor process on the shop floor is an important research agenda in itself. That being said, as Katz and Darbishire argue, it is no longer sufficient to summarize this research agenda as simply a conflict between capital and labor.²² At this juncture, where the balance

²⁰ Harry C. Katz, *Shifting Gears: Changing Labor Relations in the U.S. Automobile Industry* (Cambridge: MIT Press, 1985). pp. 9-10.

²¹ Ulrich Jürgens, *Breaking from Taylorism: Changing Forms of Work in the Automobile Industry* (Cambridge: Cambridge University Press, 1993). p. 23.

²² Harry C. Katz and Owen Darbishire, Converging Divergences: Worldwide Changes in Employment Systems (Ithaca: ILR Press, 2000). Marxist economic historian Robert Brenner goes a step further and argues that the balance between labor and capital has shifted once and for all in favor of capital. The vertical conflicts under capitalism today, which refer to the conflict between labor and capital, can no longer cause systemic crises, while the horizontal conflicts, which refer to the competition amongst capitalists, will cause systemic crises and are responsible for the economic crises and the recessions of the last few decades. The vulnerability comes from the anarchistic setting of capitalist production marked by extreme competition. Actors have no choice but to invest in new technologies to increase their efficiency in order to keep their profitability at a certain level. Brenner writes, "These require individual capitalists to cut costs in order to survive by introducing fixed capital embodying ever more efficient technology." However, investing in technology only complicates the initial problem, because this is often done "without reference to the reproductive requirements of other capitalists... The outcome in aggregate is (...) to bring about the unprecedented development of the productive forces. (...) This manifests itself in over-capacity and, in turn, reduced profitability." See, Robert Brenner, The Economics of Global Turbulence (London: Verso, 2006). p. xx. Brenner argues that this situation of over-capacity actually threatens the very existence of the companies. His point on the self-destructive nature of competition among capitalists is well-taken. In fact, it helps contextualize the "irrationalities of the auto industry" pointed out by Marchionne. However, its complete neglect of the importance of the experiences and everyday lives of workers is problematic. Capitalism as a system is not a mere sum of structural

between labor and capital has been shifted, and where capital, in the wake of decades of deindustrialization and the recession of 2008, now enjoys a negotiating power over labor such that hard work and long hours are made increasingly the norm of industrial wage labor, there is a need for a perspective informed by a) a social-theoretical and historical perspective on the political economy of neoliberal capitalism as it is expressed in specific spaces and times of industrial production complemented by b) an ethnographic perspective of the everyday life of labor and the production of working class consciousness within such transformed conditions of working class life. Neoliberal transformations of the conditions of wage labor run deep, as "the threat of job loss attributed to the pressures of global competition puts workers on the defensive, while the contraction of social welfare provisions further enforces individuals' dependence on the wage relation."²³

From the perspective of understanding the auto industry, analytical models would be far more comprehensive and therefore rigorous were they to directly engage with worker experience. Worker experience is relevant to understanding the development of production models and technology as well as labor-management relations and institutional change due to the influence and power of labor, which continues in spite of the decreasing leverage of unions, as well as the

forces. On the contrary it is produced and reproduced by individuals in a historical and spatial context. That said, I find Brenner's intervention and the debates built around the self-destructive, competitive forces of capitalism very helpful. Also see, "Property and Progress: Where Adam Smith Went Wrong," in *Marxist History-Writing for the Twenty-First Century*, ed. Chris Wickham (Oxford: Oxford University Press, 2007); "The Political Economy of the Rank-and-File Rebellion," in *Rebel Rank and File: Labor Militancy and Revolt from Below in the Long 1970s*, ed. Aaron Brenner, Robert Brenner, and Cal Winslow (London: Verso, 2010).

²³ Kathi Weeks, *The Problem with Work: Feminism, Marxism, Antiwork Politics, and Postwork Imaginaries* (Durham: Duke University Press, 2011). p. 69. Michael Denning develops the concept of "wage dependence" to describe the same processes of multiple pressures on labor and the insecurities it causes for the working classes. Michael Denning, "Wageless Life," *New Left Review*, no. 66 (2010). For a theoretical account of the concept of insecurity in the current moment of global capitalism, see, Shelley Feldman, Charles C. Geisler, and Gayatri A. Menon, *Accumulating Insecurity: Violence and Dispossession in the Making of Everyday Life* (Athens: University of Georgia Press, 2011).

observations and insights of workers about the labor process. The ethnographic evidence presented in later chapters will showcase some of these insights with regard to changes to the workplace and technological retooling.

The 2009 auto bailout took place in the aforementioned context of imbalance between capital and labor, which has led to an increased dependence on the wage relation by eliminating the private welfare mechanisms established by the negotiation environment between UAW and automakers. These elements of the private welfare system are known as "legacy costs" in the industry, which refer to relatively lucrative healthcare for active employees and retirees as well as pensions. Even though the "legacy costs" were only one of the elements/costs in a much larger and complex cost structure, which is problematized by business leaders such as Marchionne, they were the ones addressed by Team Auto, an *ad hoc* executive board given the authority to restructure the industry by the Obama Administration. Triumphant after the historic reorganization, both the Obama administration and the industry insiders celebrated the middle class of America saved. I will dispute this rescue story by contesting its conceptual framework and providing an insider story from the perspective of those workers "rescued." As I will show below, the middle class was not saved but reimagined under the conditions of what I call the

²⁴ Legacy here is a relative term, and it should be considered in relation to two things: 1) the compensation of new hires (entry-level workers) in the Detroit Three automakers, and 2) the conditions of autoworkers in transplants. The latter were taken as the norm for reorganizing labor relations in the Detroit Three.

²⁵ In fact during an interview with a former management employee, I was reminded that the price of steel is a more important cost item than the cost of labor. Before the 2015 negotiations, the labor costs of the Detroit Three were estimated to be 8% for Ford, 6 to 7% for GM, and 4% for the FCA. See, http://www.detroitnews.com/story/business/columnists/daniel-howes/2015/10/12/howes-rich-uaw-fca-deal-masks-long-term-risks/73850478/

²⁶ Bill Vlasic, Once Upon a Car: The Fall and Resurrection of America's Big Three Auto Makers--GM, Ford, and Chrysler (New York: William Morrow, 2011); Paul Ingrassia, Crash Course: The American Automobile Industry's Road from Glory to Disaster (New York: Random House, 2010); Alex Taylor, Sixty to Zero: An Inside Look at the Collapse of General Motors--and the Detroit Auto Industry (New Haven: Yale University Press, 2010).

reindustrialized U.S. This dissertation problematizes this process of reimagining and narrates it from the perspective of workers.

First, widespread use of the term "the U.S. auto industry" is misleading here since it was only the American owned companies, whose workers were represented by the UAW, that were restructured: GM and Chrysler. Ford was not bailed out by the government, but it was able to renegotiate its labor contract in 2011 to eliminate the main differences with the other two companies. This was possible within the connective bargaining framework in which the Detroit Three and the UAW agree on general principles such as wages, benefits and work rules. Ford benefited from the renegotiated contracts and adjusted its costs with its competitors in 2011 during the national negotiations. However, Cutcher-Gerschenfeld argues that Ford's preemptive strategy to fix its problems before the recession was key to its success. He argues that this was possible with wiser leadership and much better labor-management relations than the other two. UAW may have agreed to many concessions, however the transformation at Ford was not as profound as it was at GM and Chrysler. The main reason for this was the absence of a key third party—that is, the federal government—determining criteria and imposing conditions.²⁷

Secondly, not only were internationally owned manufacturers in the U.S. not restructured, but they were actually used as a point of reference for reorganizing the labor-capital relation in US companies by eliminating "legacy costs" and reorganizing the shop floor. In this way, the bailout was aimed at leveling the playing field between the union and non-union auto industry in the U.S. Team Auto established a parity clause during the negotiations that imposed the wage and benefit

²⁷ See, J. Cutcher-Gershenfeld, "Bargaining When the Future of an Industry Is at Stake: Lessons from UAW-Ford Collective Bargaining Negotiations," *Negotiation Journal* 27, no. 2 (2011); Joel Cutcher-Gershenfeld, Dan Brooks, and Martin Mulloy, *Inside the Ford-UAW transformation: pivotal events in valuing work and delivering results* (Cambridge: MIT Press, 2015).

structures in the non-union transplants as the new standard onto two of the three UAW-represented, American automakers. "Transplant parity" was a term first used by Bob Corker, a Republican senator from Tennessee, as a condition to release the transitionary TARP funding in 2008. The Bush Administration was not willing to undertake a large-scale bailout but was also unwilling to leave a bankrupt automotive industry to its successor, the Obama Administration. So the TARP funding was made available to keep the companies afloat until around March when the Obama administration was able to develop its own plan. Steven Rattner, the head of Team Auto, acknowledges this as one of the key principles inherited from the Bush era and says that they built on it. The intervention was not limited to compensation only; it also required structural changes in the field of employment practices, work rules, and other aspects of labor process. Altogether, UAW was forced to concede on multiple grounds to avoid potential liquidation, which was, according to many, the only other option available at the time. So

²⁸ Senator Corker was an adamant critic of the bailout and resisted any bridge fund for the automakers. However, the Bush administration provided the necessary funding despite his and popular resistance.

²⁹ See, Steven Rattner, *Overhaul: An Insider's Account of the Obama Administration's Emergency Rescue of the Auto Industry* (Boston: Houghton Mifflin Harcourt, 2010). pp. 37-42.

³⁰ GM was restructured in accordance with Chapter 11 of the Bankruptcy Code. Widely known as Chapter 11 in popular media, the law aims to reorganize businesses instead of forcing them to liquidate. Elizabeth Warren explains it as follows: "'Reorganization' refers to a change in the debt obligations of the business. (...) [R]eorganization is about how to spread around the pain for a business that cannot repay its debts in full. (...) [The] necessary reorganization is that the rights of various stakeholders are readjusted and the overall debt burden lowered so that it does not overwhelm the company's revenues." See, Elizabeth Warren, Chapter 11: Reorganizing American Business (New York: Wolters Kluwer, 2008). pp. 4-5. During GM's restructuring, some of the company's debt to financiers was written off, but the majority of restructuring involved the renegotiation of healthcare commitments. This raises the question of legal intervention. Why was it necessary to resolve matters legally? Warren explains: "Of course, there is no reason that a business could not work out a reorganization on its own, without the help of any court. Creditors can always agree to forgive debts or to rewrite the terms of a loan. In Chapter 11, however, dissenting creditors can be forced to go along with a deal worked out with a majority of creditors and according to the statutory terms. Even then, however, the effects of Chapter 11 are limited: No plan can be forced on a creditor unless it offers at least as much as that creditor would have received if the business had been liquidated. In this regard, the Chapter 11 process is quite modest. It facilitates the efficient reorganization of business when the parties are not able to reach an agreement on their own." See, ibid., p. 6.

Hence the effects of the crisis and the subsequent reorganization of the shop floor and the everyday lives of the workers have been profound across the facilities of the Detroit Three. Changing capital-labor relations was the only lasting impact of the bailout.³¹ This is why I conducted this research by investigating the elements of change on the floor and its impact on workers. Two main issues appeared formative during my fieldwork:

1) With the implementation of two-tier system and the influx of new workers for the first time in decades, we observe a massive generational transition.³² This is beyond a simple demographic transition in which young workers, who are hired as entry-level workers, replaced older ones, i.e. traditional workers. The massive gap between their compensation packages was not the only difference either.³³ There is a cultural change associated with it. Many of GM's traditional workers are lifers with little work experience outside GM. Except for the periods of layoffs, GM's retaining workers were relatively protected from the main trends of the labor market in the last three decades—i.e. wage stagnation, declining benefits, and job volatility. Thus, traditional hires saw the world in quite a different way than their younger peers, who arrived at GM after being subjected to the

³¹ Team Auto also tried to change the "managerial mentality" at GM, which had been run by "lifers" only. Lifers usually start at an entry-level position at the company and climb up in the corporate hierarchy and become CEOs. GM's CEO and CFO at the time of the bailout were Rick Wagoner and Fritz Henderson, both lifers who had never worked for another company. Rattner and his team found this model archaic and appointed an outsider CEO, Ed Whitacre Jr. He only stayed in the post for one year and was replaced by Dan Akerson, also an outsider. His tenure was short too. After three years on the job, he was replaced by lifer Mary Barra. Team Auto's intentions to change the corporate management model failed.

³² As I will explain later in detail, the generational transition took place thanks to the demographics of GM. GM has been going through a massive reduction of workforce since the 1980s. In this period, the company reduced its workforce in the U.S. from about 650,000 to 50,000. Most of this transition was secured via attrition and not by replacing retirees with active employees. This is why plants like Tonawanda Powertrain ended up with a relatively older and highly skewed workforce. The average age at Tonawanda before the influx of new hires was around 55.

³³ The compensation differences between traditional workers and new hires can add up to 75% in some circumstances. I will discuss this in more detail later on.

labor market conditions that have characterized the labor market for the last three decades. This affected their expectations and demands from work, as well as their relationship to their peers, management, and the union. The coexistence of these two generations, which is only temporary as the aging traditional workforce of GM is likely to disappear from the shop floor in the next five to ten years, gives us a unique chance to see the interplay between these radically different working class cultures on the shop floor. My work addresses this crucial aspect of the 2009 auto bailout, which has yet to be adequately studied.

2) A closer look at shop floor relations grants a view of another major transformation, which is also absent in the literature on the bailout: a complete reorganization of the labor process linked to technological retooling. Post-bailout, GM plants experienced a massive reorganization of work that can only be compared to the changes implemented in the 1980s, as a response to the double oil crises of the 1970s, in terms of changing production philosophies, declining market share and rising competition. The technological composition of the labor process has also been completely altered after the bailout. Spending almost \$20 billion, GM has retooled all 40 of its manufacturing facilities in the U.S. However, this was not a unilinear process affecting each department and each employee in these departments in the same way. In fact, it had almost opposite effects in different departments. The level of technology used on the machine floor rose significantly while the assembly line became more manual with an elimination of robots and other mechanized processes.³⁴ New technologies reduced the number of production workers on

³⁴ Like all other industries, the auto industry is rich with terms, acronyms and phrases, which can be confusing to the general reader. *Shop floor* refers to everything in the plant that is devoted to production, which includes most of the enclosed space in the plant except for the managerial offices adjacent to it. However "shop floor" also refers to the abstract space where the relations of production take place. *Machine floor* refers to the area where the basic parts of an engine, such as engine block, crank or head, are manufactured. This area mostly consists of high-tech machines,

the machine floor by as much as 60%. However, on the assembly line, post-bailout, the number of workers almost doubled. Coinciding with the changing generational dynamics, work reorganization in the production department has changed the dynamics of the industry for good.

Even more striking, the new technologies also had a diverse impact within the machine floor. Computerized CNC machines may have reduced the number of operators who run them on the machine floor, but they simultaneously increased the demand for maintenance workers, i.e. the skilled tradespersons, because while the new machinery is more complex and accurate, it is also less durable. Tradespersons became required to perform more complex tasks to fix problems more frequently. A similar transition in the 1980s caused an increase in the number of skilled tradespersons on the floor. Today, however, in the post-bailout context, this rising demand for tradespersons also comes with the pressure to downsize. Management aims to reduce the ratio of tradespersons within the hourly workforce from 25% to below 10%. How can we explain this dual pressure? I explain it with two factors: a) the gradual loss of their bargaining power and b) the federal intervention that favored and legitimized management friendly practices.³⁵

These changes manifested themselves in quite different forms and entailed two different sets of actors. When the two-tier system was negotiated by management and the union in 2007 there were

here

where raw material is processed and prepared for assembly. *Assembly line* is the area where these main parts are assembled into an engine, along with hundreds of other parts procured from suppliers and vendors. An average engine consists of about 450 pieces. The machine floor and the assembly line collectively are referred to as the *production department* in this dissertation. The *maintenance department*, another key term, refers to the skilled tradespersons who are in charge of installing, maintaining and fixing the machinery used on the shop floor. I will explain more about these key concepts in the chapters that follow.

³⁵ There was no influx of workers, no generational transition and no two-tier wage system in the maintenance department. Its problems are unique, and unlike the production side, which was under pressure before the bailout, changes in work rules and job classifications were outcomes of the bailout.

no lower tier employees. The closest firsthand experience the parties had was through negotiating similar changes with Delphi, GM's parts supplier that was spun off from GM in 1999.³⁶ Nonetheless, the first tier GM plants did not have lower tier workers as of 2007. The bargaining over the two-tier system was a management wager in terms of hiring future employees, though both management and the union were actually confident hires could be recruited. Many of the Detroit Three plants in North America are in contracted and distressed labor markets that are troubled by long-term unemployment, low wages and stagnant growth. Thus the wager was well founded and proven right, especially after the recession.

Starting in 2012, GM began filling its entry-level positions easily. Older generations met their new peers who were not only younger but also more experienced in other sectors (especially in the service sector). This new generation was willing to work for the wages traditional hires earned more than two decades ago without receiving any of the earned benefits. They encountered the dynamics of a union shop and the manufacturing sector in general for the first time in their lives. Celebrating an upgrade from their earlier careers, most of these workers left their jobs in the blink of an eye to start their new and "secure" careers at GM. The radical difference in perspectives between these generations and the ways they interact and separate themselves from each other on the floor provide meaningful clues to understanding the characteristics of working class culture in the organized manufacturing sector in the immediate post-bailout period. What made this external transformation possible was the opening of the shop floor to new employees off the street.

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³⁶ For the impact of the spinoff see, Sean P. McAlinden, The Meaning of the 2003 UAW-Automotive Pattern Agreement, (Ann Arbor: Center for Automotive Research, 2004),

http://www.cargroup.org/?module=Publications&event=View&pubID=49. For employment effects in the long run see, Eileen Appelbaum and Rosemary L. Batt, *Private Equity at Work: When Wall Street Manages Main Street* (New York: Russell Sage Foundation, 2014).

The second moment of transformation, i.e. the reorganization of the skilled trades, was internal. There were no tiers involved or any wage cuts for the current workforce. There was absolutely no flow of new hires, except for a few hiring drives to address the problems caused by the influx high-tech machinery. However, this restructuring was as crucial and profound as the one that transformed the production department. What makes it more important is the fact that it occurred in the maintenance department populated by the skilled tradespersons, who had been the most resilient against changes in the auto industry in the last thirty years.

Skilled tradespersons are a minority within the hourly workforce, but they hold a crucial position within the union, where they dominate the high ranks and the production process. The modifications pursued in the maintenance department were qualitatively different than those pursued in the production department, and thanks to the relative bargaining power of the tradespersons there were no large-scale changes before the bailout. The recession and the subsequent bailout was key to management's ability to exert flexible work rules on the floor. These flexible work rules included altering the definition of trades, work hours, and job assignments. Ironically, Steven Rattner, the head of Team Auto, does not even mention this moment in his memoir documenting the "inside story" of the industry bailout. It is a very industry-specific issue and had been on management's agenda for a long time. Even though Team Auto executives did not know the specifics of the issue, nonetheless they provided the necessary leverage for management to implement the changes.

Addressing these two moments of substantive transformation give us an opportunity to understand the shop floor dynamics of post-recession manufacturing in the U.S. On the one hand, with the flow of new workers into the union shop we have the chance to observe the interactions of what could be termed two cultures of work. The implications of the dialogue and non-dialogue

across tiers give us clues about not only the future of unionism and its relevance but also changing labor processes. On the other hand, there is also an opportunity to see a traditionally very strong subset of a unionized workforce, which actually led the movement since its inception,³⁷ respond to the changing conditions of work after the bailout. Without facing any generational change, this group conceded to major work rule changes, which weakened their position on the floor significantly.

Exploring these issues in the automotive industry, which is a highly scrutinized one, requires awareness of different approaches to the industry. Academics, industry specialists, policy makers, Wall Street analysts and journalists investigate the issues and trends in the industry on a constant basis.³⁸ Everything from its economic performance to national and international competition, from technological infrastructure to organizational structure, from production philosophies to most recently its scandals, the industry is under constant examination. Although it is almost always under the spotlight, it became a headliner and a center of attention during the 2008 recession and the subsequent bailout.

So far, studies approach the "rescue" operation as a fix offered by "the state" because auto industry management and the union were purportedly unable to supply the will, ability and the financial resources for necessary changes. In these studies two reasons are highlighted as key obstacles to the transformation of the industry without a federal bailout and overhaul: 1) a corporate culture of mismanagement and 2) the reluctance of the union to give up its anachronistic

³⁷ All the presidents of the UAW have been skilled tradespersons so far. They are also represented asymmetrically in the ranks of the union.

³⁸ During my research I followed two non-academic sources on a daily basis: 1) Automotive News, a leading weekly dedicated to the industry, with a website that is updated daily; 2) The Center for Automotive Research (CAR), an Ann Arbor, MI based think tank that publishes comprehensive reports on various issues in the industry.

gains ("legacy costs").³⁹ Team Auto, which is fetishized by its leader Stephen Rattner as an amalgamation of people from different political backgrounds, was assigned to fix the problems of an industry run "irrationally."⁴⁰ This amalgamation of diverse political backgrounds was meant to emphasize the technicality of the problem and to divert attention away from its political form and content. As a depoliticized and technical intervention, the government effort is justified and legitimated as a fix that cures irrationalities within a rationally functioning market. Many studies appeared after the bailout adopting this view.⁴¹

By assigning a very unique role to "the state" and identifying, with unanimous certainty, ways that "the market" should work, these studies offer a very particular narrative of the bailout and restructuring. Focusing on the gradual demise of the industry starting in the 1970s, they collectively argue that the Detroit Three operated under a paradigm that was long overdue for change, characterized by: generous post-retirement benefits, ancient and uncompetitive work practices, and finally resistance to flexible employment practices. Ironically, the crisis that the auto industry ran into coincided with arguably the most profound crisis of the free market, which is itself proof of the dysfunctionality of the idea of a rational market. Despite the irony, or perhaps thanks to it, we see little to no structural intervention in the way that financial businesses operate, ⁴²

³⁹ Austan D. Goolsbee and Alan B. Krueger, A Retrospective Look at Rescuing and Restructuring General Motors and Chrysler, (Cambridge: National Bureau of Economic Research, 2015).

⁴⁰ Rattner, in his memoir, refers to two issues as irrational: i) the reluctance of leadership to change its strategies despite massive financial losses; and ii) the absence of checks and balances for punishing management, which is unable to perform at the desired level. See, Rattner, *Overhaul*: p. 85.

⁴¹ Among many examples, the most important are: Ingrassia, *Crash Course*; Rattner, *Overhaul*; Taylor, *Sixty to Zero*; Vlasic, *Once Upon a Car: The Fall and Resurrection of America's Big Three Auto Makers--GM, Ford, and Chrysler*; Goolsbee and Krueger, *A Retrospective Look at Rescuing and Restructuring General Motors and Chrysler*.

⁴² The Dodd–Frank Wall Street Reform and Consumer Protection Act (briefly Dodd-Frank Act) was the only credible intervention in the financial world. Since its enactment in 2010, it has done little to reverse the trends and "habits" in Wall Street. In fact, it took three years for most of its key provisions to be implemented. For a brilliant analysis from a legal perspective, see, A. E. Wilmarth, "Turning a Blind Eye: Why Washington Keeps Giving in to

while the auto industry is completely restructured. Even more ironically, the auto industry is restructured by a team of Wall Street executives by eliminating "irregularities" and reorganizing the industry to accord with neoliberal principles such as eliminating job security and benefits while introducing more flexibility.

The UAW had already been in a defensive mode for the previous three decades, and now the union's fight for basic principles was deemed irrational and/or out of date as the industry moved in another direction, thanks to the norms set by transplants. ⁴³ While these changes were sometimes posed as innovations, they amounted to a mere alignment with a model of work that started to rise in the 1980s in the U.S., where employers offered no post-retirement benefits (neither a pension nor healthcare), did not accept any challenges to its monopoly over decision making processes on the shop floor and work rules, and offered little or no safety net. They also relied heavily on temporary workers to offset the pressures of a highly volatile industry. ⁴⁴ Only a few studies have dealt with the effect of this transformative period on workers themselves. ⁴⁵ This is particularly astonishing because a closer look at the changes on the shop floor clearly shows that not only the

Wall Street," *University of Cincinnati Law Review* 81, no. 4 (2013). More importantly, the neoliberal creed and absolute belief in the idea of a self-governing market was left unshaken. As Philip Mirowski argues, the doctrine itself is the biggest survivor of the crisis. As I will try to show below, the transformation that the auto industry has undergone illustrates the persistence of neoliberal principles very clearly. See, Philip Mirowski, *Never Let a Serious Crisis Go to Waste: How Neoliberalism Survived the Financial Meltdown* (London: Verso, 2012).

⁴³ The main transplants in the U.S. are Toyota Group (includes individual Toyota Plants and Subaru in Indiana), Honda, BMW, Mercedes Benz, Volkswagen, Hyundai Group and Nissan. Mitsubishi operated the last UAW represented plant in Normal, Illinois until the summer of 2015 when it permanently shut down its operations in the U.S. The reason why it was a union plant is not because of a successful unionization drive but because of a former joint venture between Mitsubishi and Chrysler.

⁴⁴ The rise in temporary and non-standard forms of work has been widely researched. For a few excellent studies that assess not only these forms but also their effect in the other sectors of the labor market, see, Erin Hatton, "Temporary Weapons: Employers' Use of Temps against Organized Labor," *ILR Review* 67, no. 1 (2014); *The Temp Economy: From Kelly Girls to Permatemps in Postwar America* (Philadelphia: Temple University Press, 2011).

⁴⁵ Graham, On the Line at Subaru-Isuzu; Terry L. Besser, Team Toyota: Transplanting the Toyota Culture to the Camry Plant in Kentucky (Albany: SUNY Press, 1996).

work but also the meanings attached to work and to the idea of a working class is being transformed significantly.

Against this background, my research is about the transformations to working conditions and working class subjectivity in the automotive industry of Rust Belt America, in the wake of the most severe economic downturn since the 1930s. The Tonawanda Powertrain plant is an ideal location to assess this complex interplay. In 2007, before the crisis, the plant employed around 1800 workers. After layoffs, buyouts and retirements, employment fell to 600 in 2008. An upturn began immediately after the bailout as the plant received a nearly one billion dollar investment. He Employment started bouncing back with the return of laid off employees, flow from other area plants, and the start of a slow flow of new hires in 2012. In March of the same year, Tonawanda Powertrain employed 910 workers (738 hourly, 172 salaried). As of September 2015, the plant employs 1564 hourly and 241 salaried employees. The bounce back to the original number, which is often shown as an indication of a strong recovery of the automotive industry, conceals deeper qualitative transformations of the conditions of labor and everyday relations on the shop floor. This brings us to the conceptual framework proposed in this dissertation: the reindustrialization of the U.S.

1.2. What is the Reindustrialization of the U.S.?

As a workplace the post-bailout auto plant is similar, but its animating dynamics—the particular contracts and conditions of the new generation of workers and the cross-generational relations

⁴⁶ GM Tonawanda Engine *GM Tonawanda Engine: A Celebration of 75 Years* (Tonawanda: HomeRun Creative Serveices, 2013).

⁴⁷ A total of 1805 workers.

http://media.gm.com/media/us/en/gm/company info/facilities/powertrain/tonawanda.html. The company's own publication argues that more than 1000 of these workers are new to Tonawanda Powertrain, but this does not mean that they are all new hires. As I will show below, there is a very large group of transfers from other GM plants, especially from a former Delphi plant in Lockport, NY.

between workers playing out on the shop floor—have been altered significantly. I call this novel situation the reindustrialization of the U.S.; a process that often targets previously deindustrialized spaces and capitalizes on the enforced "flexibility" of labor to implement a new model of industrialism founded on the excessive demand for limited jobs. 48 By reindustrialization, I mean to point to three main emergent features of American manufacturing. First, organized labor with good wages and benefits will no longer be the main actor in reindustrialized America since benefits are cut substantially, ⁴⁹ along with a further flexibilization of the workforce, which was hitherto resisted by unions. Second, corporate investments are channeled into regions where unemployment and underemployment is chronic and structural, a strategy that secures the political and ideological environment wherein local parties—local government, unions, media, and the workers themselves—are more willing to accept capital investment at any cost. This causes a new form of spatial awareness that constructs local identity around the idea of competitiveness. So, union locals compete with each other, while at a larger scale cities, counties and states compete with each other. This spatial awareness is a key aspect of the reindustrialization of the U.S., and its repercussions on the shop floor can easily be observed at Tonawanda Powertrain.

⁴⁸ James R. Hagerty and Alistair MacDonald, "As Unions Lose Their Grip, Indiana Lures Manufacturing Jobs," *The Wall Street Journal*, 21 March 2012; T. D. Rutherford and M. S. Gertlert, "Labour in 'Lean' Times: Geography, Scale and the National Trajectories of Workplace Change," *Transactions of the Institute of British Geographers* 27, no. 2 (2002); T. D. Rutherford and J. Holmes, ""We Simply Have to Do That Stuff for Our Survival": Labour, Firm Innovation and Cluster Governance in the Canadian Automotive Parts Industry," *Antipode* 39, no. 1 (2007); "Manufacturing Resiliency: Economic Restructuring and Automotive Manufacturing in the Great Lakes region," *Cambridge Journal of Regions Economy and Society* 7, no. 3 (2014); J. J. Sallaz, "Manufacturing Concessions: Attritionary Outsourcing at General Motor's Lordstown, USA Assembly Plant," *Work Employment and Society* 18, no. 4 (2004).

⁴⁹ Arne L. Kalleberg, *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s* (New York: Russell Sage Foundation, 2011).

Corporations are also eager to acquire public funds—tax exemptions, favorable land deals, energy discounts⁵⁰—and exploit them as much as possible.⁵¹ This generates a consensus on economic development, which characterizes the neoliberalism in the U.S. today.⁵² Third, employment in manufacturing forms only a small portion of urban employment; in other words, we no longer see companies like GM in Flint or Bethlehem Steel in Buffalo, which for decades functioned as the main employers in their respective urban economies. However, in spite of their lost scale, I will also show that these companies still enjoy a high status in the minds of workers, as I encountered several times during my interviews and observations.

The bailout, which cuts benefits and flattens the wage differential between union and non-union work places, is a clear manifestation of the will to fulfill the first two aspects of this transformation.⁵³ It also indicates a turning point for organized labor, as well as a profound change in work conditions for a segment of the laboring classes in Buffalo, and concomitantly a generational change in how workers conceptualize and narrate their working lives. Entailed in the bailout, in other words, are far-reaching transformations of the characteristics of wage labor

⁵⁰ Tonawanda Powertrain is located near the banks of the Niagara River and is very close to the Niagara Falls Power Grid. During an interview with the plant manager, Steve Finch, I was told that low cost electricity is one of Tonawanda Powertrain's main competitive costs, differentiating it from other plants in the GM network.

⁵¹ Neil Brenner, *New State Spaces: Urban Governance and the Rescaling of Statehood* (Oxford: Oxford University Press, 2004).

⁵² Buffalo's commitment to economic growth is best summarized in the Albany-sponsored Buffalo Billion Program. This program aims to revitalize the region with a variety of investment programs reflecting the consensus of a wide variety of actors, ranging from elected and appointed political figures to business leaders, from academics to union leaders. See, Western New York Regional Economic Development Council, The Buffalo Billion: Investment Development Plan, (Buffalo2013), http://uploads.oneregionforward.org/content/uploads/2013/06/Buffalo-Billion-Investment-Development-Plan.pdf.

⁵³ E. Siemiatycki, "Forced to Concede: Permanent Restructuring and Labour's Place in the North American Auto Industry," *Antipode* 44, no. 2 (2012).

particularly in terms of working class livelihoods and subjectivity, made visible in American economic geographies that are dependent on manufacturing.

1.3. Contextualizing the Reindustrialization of the U.S. in the Literature

Recent literature on work in the U.S. tends to focus either on the revitalization of the labor movement in the service and public sectors⁵⁴ or on issues of immigration.⁵⁵ The question of manufacturing, meanwhile, seems to be overlooked.⁵⁶ Ironically, it is excluded from analyses because of an apparent belief in its eventual decline in the U.S. Many scholars of U.S. industrial labor relations seem to take capital flight for granted, and thus often leave under-analyzed the important processes of reindustrialization occurring across the deindustrialized Rust Belt.⁵⁷ In other words, research on the transformation of urban factory-based social economies in the industrial North has exclusively focused on deindustrialization and its detrimental effect on communities.⁵⁸ This tale of inevitable decline, however, leaves unexplored the real and ongoing

⁵⁴ Ruth Milkman, *L.A. Story: Immigrant Workers and the Future of the U.S. Labor Movement* (New York: Russell Sage Foundation, 2006); Ruth Milkman, Joshua Bloom, and Victor Narro, *Working for Justice: The L.A. Model of Organizing and Advocacy* (Ithaca: ILR Press, 2010); Lowell Turner and Daniel B. Cornfield, eds., *Labor in the New Urban Battlegrounds: Local Solidarity in a Global Economy* (Ithaca: ILR Press, 2007).

⁵⁵ Ruth Gomberg-Muñoz, *Labor and Legality: An Ethnography of a Mexican Immigrant Network* (New York: Oxford University Press, 2011); Ruth Milkman and Ed Ott, *New Labor in New York: Precarious Workers and the Future of the Labor Movement* (Ithaca: ILR Press, 2014).

⁵⁶ Even in the context of Rust Belt, the focus was on organizing efforts in non-manufacturing sectors. See, Steven Henry Lopez, *Reorganizing the Rust Belt: An Inside Study of the American Labor Movement* (Berkeley: The University of California Press, 2004).

⁵⁷ Steven C. High and David W. Lewis, *Corporate Wasteland: The Landscape and Memory of Deindustrialization* (Ithaca: Cornell University Press, 2007); Tracy Elaine K'Meyer and Joy L. Hart, *I Saw it Coming: Worker Narratives of Plant Closings and Job Loss* (New York: Palgrave Macmillan, 2009); Sherry Lee Linkon and John Russo, *Steeltown U.S.A: Work and Memory in Youngstown* (Lawrance: University of Kansas Press, 2002).

⁵⁸ Jefferson Cowie and Joseph Heathcott, eds., *Beyond the Ruins: The Meanings of Deindustrialization* (Ithaca: ILR Press, 2003); Richard C. Longworth, *Caught in the Middle: America's Heartland in the Age of Globalism* (New York: Macmillan, 2008).

processes of reindustrialization. Indeed, such an apocalyptic deindustrialization myth arguably paves the way for reindustrialization under its current form.⁵⁹

Globalization's regnant forms of discourse tend to privilege a narrative of the inevitability of the transition to a "knowledge economy," thus degrading other forms of economic activity and complicating politics and policy on the local level. Cities like Buffalo, among others, have been captivated by this new urban development myth⁶⁰ that promotes new entrepreneurialism and high technology as a remedy in an environment wherein such cities are presumed to be unable to attract entrepreneurial capital.⁶¹ In fact, they do attract investment; not from new creative capitalists but from "old" industrial capital such as GM. Yet, forms of capital investment in cities within on the traditional Frost Belt in the 2010s entail a rather different urban politics. Such capital seeks the availability of a labor reserve, and public funds of any kind – namely incentives such as tax breaks but also public programs that provide training and other resources at the employer's disposal.⁶² More importantly, such forms of capital investment come with a constant threat of relocation.⁶³ Even though relocation is often understood as a complete abandonment of one site for another, it can also take the form of shifting production volumes from one location to another, and, in fact,

⁵⁹ James J. Connolly, *After the Factory: Reinventing America's Industrial Small Cities* (Lanham: Lexington Books, 2010).

⁶⁰ Richard L. Florida, *The Rise of the Creative Class: Revisited* (New York: Basic Books, 2012); *Who's Your City?: How the Creative Economy is Making where to Live the most Important Decision of Your Life* (New York: Basic Books, 2008).

⁶¹ David Harvey, Spaces of Global Capitalism (London: Verso, 2006).

⁶² Buffalo's post-recession "economic comeback" was even weaker than the weak recovery of the country. Among the city's main industries, manufacturing was the only one that posted above average growth. See, David Robinson, "Manufacturing Remains Surprisingly Muscular," *The Buffalo News*, September 21 2013.

⁶³ Harry C. Katz, "Afterword: Whither the American Labor Movement?," in *Rekindling the Movement: Labor's Quest for Relevance in the Twenty-first Century*, ed. Lowell Turner, Harry Charles Katz, and Richard W. Hurd (Ithaca: ILR Press, 2001).

this is the current norm in the industry today. Known as *whipsawing* in the automobile industry, it happens on a transnational scale, and it has direct impact on locations such as Tonawanda. ⁶⁴

My research addresses these interesting processes by building on critical literature on globalization. The constant threat of job loss has been a key characteristic of post-Fordism⁶⁵ and is increasingly taking over previously unionized sectors. It is important, however, to follow a method that addresses the problem of globalization without taking the intelligibility of the concept for granted. This is particularly important in the auto industry where images, technologies and capital move so quickly. Situating an industrial location/plant in its global context is only possible by taking "globality as an object of study [that] requires both distance and intimate engagement." I adopt an approach that treats the GM site as already trans-local. In this way, my work illuminates an analytical and ethnographic space of contemporary global capitalism as experienced within a specific site. 67

Situating this industrial location in its global and national context is crucial and informs my understanding of the relations on the floor. However, the relations on the floor also require a closer analysis. My findings suggest that a complete reassessment of our understanding of the labor

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⁶⁴ "Whipsawing" refers to the set of formal and informal managerial strategies employed to put different facilities within their network into competition with one another. It is often utilized by transnational companies with multiple facilities that are capable of similar tasks and are located in different jurisdictions. This allows management to extract more concessions from locals, destroying solidarity among the workforce. Post-bailout, it has become a major source of discontent within the UAW. For a brilliant analysis in the European context, see, Ian Greer and Marco Hauptmeier, "Management Whipsawing: The Staging of Labor Competition Under Globalization," *ILR Review* (2015).

⁶⁵ David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2005); Weeks, *The Problem with Work*.

⁶⁶ Anna Tsing, "The Global Situation," *Cultural Anthropology* 15, no. 3 (2000): p. 351.

⁶⁷ Michael Burawoy, *Global Ethnography: Forces, Connections, and Imaginations in a Postmodern World* (Berkeley: University of California Press, 2000); "Manufacturing the Global," *Ethnography* 2(2001).

process is necessary.⁶⁸ The trends on the shop floor illustrate that technological reorganization does not have a uniform impact on the labor process and workers. Likewise, a reductionist understanding of the deskilling and degrading of the work process is not enough to capture complexities on the floor.⁶⁹ Even though deskilling is real, my research at Tonawanda Powertrain shows that deskilling affects one segment of the workforce—production workers on the assembly line—significantly. At the same time technological changes have deepened the skill polarization among workers in general. In other words, these changes have imposed deskilling on one subsection of the workforce but have simultaneously increased the pressure on another subsection to reskill themselves on a continuous basis. Instead of a unilinear deskilling process, we observe a deepening skill polarization in manufacturing. Skill polarization does not divide the workforce into two groups of equal size though. The ratio of skilled workers within the workforce is declining.⁷⁰ Deskilling applies to the larger body of the workforce, and as my research shows, the demand for workers in the post bailout context is created within this larger body where compensation is significantly lower. This is consistent with the characteristics of reindustrialization of the U.S.

The deepening of skill polarization is a result of non-uniform trends in the composition of technology in manufacturing. Companies selectively apply new technologies in certain fields, while at the same time removing certain advanced and complicated technologies from others.

⁶⁸ Labor process theory was once very popular thanks to Braverman's seminal work. See, Harry Braverman, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century* (New York: Monthly Review Press, 1974). Later, interest in the subject waned as the concerns regarding the degradation of work were replaced by finding work in the first place. Recent studies on revitalizing analysis aim to expand the horizon by focusing on different sectors. See, Paul Thompson and Chris Smith, eds., *Working Life: Renewing Labour Process Analysis* (London: Palgrave Macmillan, 2010). In this study, I address this emphasis on access to work, however the qualitative changes of the labor process are also important because of their immediate impact on working class consciousness.

⁶⁹ Braverman, Labor and Monopoly Capital.

 $^{^{70}}$ As noted earlier GM aims to bring the ratio of tradespersons within the hourly workforce from 25% to below 10%.

Robots, for instance, which are harder to maintain and more expensive to operate, are replaced by manual labor on the assembly line, where jobs can be divided into smaller processes. Partially explained by the post-bailout influx of a cheaper workforce into the assembly line, this technological choice does not eliminate but rather increases the number of laborers who work on these jobs.⁷¹ However, this work is extremely alienating, and as one worker said: "It is designed for no joy."

On the opposite end of this polarization, there are skilled workers facing a completely different dilemma. High-tech machinery and completely computerized controls systems force them to reskill on a constant basis. Increasing the skill gap among the hourly workforce, this raises the issue of skills in reindustrializing America. Workers on the floor fight these pressures for reskilling and multiskilling as they simultaneously face the pressure of headcount reduction.⁷² In the literature as well as in policy circles, there is a dominant belief in the skills gap for next generation manufacturing.⁷³ My research shows that instead of a skills gap, what we see is an

⁷¹ It is almost a fetish to expect more technologies on the floor. A recent BCG report uses the increasing use of technologies to explain a possible migration of automotive production back to places it is consumed the most, i.e. Europe and the USA. I anticipate such return also, but as I argue above, technology is not the main reason for this migration. One has to look at production processes in a much more nuanced way. See, https://www.bcgperspectives.com/content/articles/lean-manufacturing-innovation-robots-redefine-competitiveness/

⁷² As briefly mentioned before, the skilled trades classification is facing a dual transformation: multiskilling and headcount reduction. GM management is trying to reduce the ratio of skilled workers to below 10%. The ratio peaked with 25% in 2011, and it was around 18% as of 2015 (about 9,600 out of roughly 53,000).

⁷³ ILR Review has published a special issue on the so-called skills-gap in March 2015. Peter Capelli's article presents a comprehensive critique of the conceptual framework and argues against a skills gap in the American labor market. On the contrary, he contends that overeducation remains the primary characteristic of the American labor market. See, Peter H. Cappelli, "Skill Gaps, Skill Shortages, and Skill Mismatches: Evidence and Arguments for the United States," *ILR Review* 68, no. 2 (2015). Capelli cites McKinsey & Co.'s 1998 study as a major source of debates and policies on skills. Ironically, New York State created a program to revitalize the economy of the Buffalo Metropolitan Area based on a 2011 survey and subsequent report by McKinsey & Co. The findings of the survey were quite similar to their 1998 study—that there will be a demographic transition in the near future and the region is not prepared for that transition skills-wise—and constituted the basis for a policy framework commonly known as the Buffalo Billion. As a set of development policies, one of the Buffalo Billion's main legs is workforce development. See, http://buffalobillion.ny.gov/ For the actual report, see, Council, *The Buffalo Billion: Investment Development Plan*.

extreme pressure on the workforce for multi-skilling. It simultaneously increases the demand from workers in terms of performance but also keeps the numbers under control. Instead of a gap, there is more pressure to introduce flexibility into the field of skilled trades.

Both of these transformations are closely related to the bargaining power of the union and the role of the state during the bailout. Skilled tradespersons have historically been successful in resisting the flexible work practices. A fetishized understanding of skills⁷⁴ is insufficient for understanding the dynamics of the labor market in the U.S. today. Unlike what some studies of the labor market and skills suggest, there is no surging demand for skilled workforce.⁷⁵ As my research shows, the demand is rising for jobs on the production side that require very little skills and training. In fact, post-bailout GM hired only entry-level production workers while employment in skilled trades was minimal. In other words, employment surges only in the fields where basic skills are sufficient and training is not required. More importantly, these entry-level jobs are where most of the wage and benefit losses have occurred.

⁷⁴ There are at least two types of skill/craftsmanship fetishes on the left. The first can be attributed to Richard Sennett, who argues for the possibility of a political community built around craft guilds. According to this fetish, the meanings associated with one's craft and the process of making something were wrongfully dismissed by thinkers like Marx and Arendt. They missed the political essence of the process of work and approached this process either as a space of exploitation or simply as a non-political realm. See, Richard Sennett, *The Craftsman* (New Haven: Yale University Press, 2008). A second fetish is formulated by Guy Standing, who replaces skills and craftsmanship with a larger and supposedly more inclusive concept of occupation. In the current moment of globalization, Standing argues, we can only define citizenship around occupation. See, Guy Standing, *Work after Globalization: Building Occupational Citizenship* (Northampton: Edward Elgar, 2009). Standing's anachronistic proposal seems to argue for a theoretically perfect neoliberal society, where members of a society are firstly defined by their labor/human capital. Foucault's critique of such fetishization of human capital long precedes these particular studies. Here Foucault argues that the emphasis on labor in the form of human capital bears a distinctly neoliberal characteristic. Neoliberals no longer define economy as a process but as an activity. It is an activity of a specific individual with certain innate capabilities and skill sets learned later in life. See, Michel Foucault, *The Birth of Biopolitics: Lectures at the College de France, 1978-79* (Basingstoke: Palgrave Macmillan, 2008).

⁷⁵ Weaver and Osterman also show that there is no problem of a skills gap; in the best-case scenario there is a skills mismatch in the labor market. See, Andrew Weaver and Paul Osterman, "Skills and Skill Gaps in Manufacturing," in *Production in the Innovation Economy*, ed. Richard Locke and Rachel Wellhausen (Cambridge: MIT Press, 2014).

The literature on the introduction of new technologies in the production process is quite divided. Classical figures such as Harry Braverman and Richard Edwards consider the introduction of such changes as part of the deskilling of the labor force that thus weakens labor and intensifies managerial control over labor. Both point to the asymmetrical relationship between labor and capital, as they perceive new technologies as a key aspect of workers losing control over the labor process. Braverman explains the push for investing in new technologies by underlining capitalist pressures on individual companies to cut costs in a competitive environment, while Edwards argues that the intensification of control over the labor process is more important than cost cutting. Others such as Noble go even further to argue that new technologies are not related to cost cutting at all; instead the main motive behind retooling is to increase control over workers, he argues. The process is more important to the process of the process is more important than cost cutting.

Braverman's account of deskilling, however, fails to contextualize technology, as it grants technology a trans-historical role that also leaves little room for workers' agency in the process. Michael Burawoy's early critique of Braverman still stands out as powerful. Instead of Braverman's reductionist and simplistic approach, Burawoy argues for a Gramscian framework where worker agency is treated as a key factor in the production process. This framework allows analysts to historicize technology and its impact on shop floor relations. Instead of attributing an ahistorical power to technological advancement, we are forced to contextualize the impact of new technologies in relation to reactions and resistance on the shop floor.⁷⁸ A simplistic approach to

⁷⁶ Braverman, *Labor and Monopoly Capital*; Richard Edwards, *Contested Terrain: The Transformation of the Workplace in the Twentieth Century* (New York: Basic Books, 1975).

⁷⁷ David Noble, *Forces of Production: A Social History of Industrial Automation* (New York: Alfred A. Knopf, 1984).

⁷⁸ See, Michael Burawoy, *Manufacturing Consent: Changes in the Labor Process under Monopoly Capitalism* (Chicago: University of Chicago Press, 1979); "The Anthropology of Industrial Work," *Annual Review of Anthropology* 8(1979).

the impact of new technologies can also be observed in recent literature on digital technologies such as that by Brynjolfsson and MacAfee, who make a case for technological advancements in the field that are almost entirely independent of social relations. Anticipating massive unemployment due to new technologies such as self-driving cars, 3D printing and advanced computing, they anticipate large sections of manual labor becoming entirely obsolete. ⁷⁹ Both old and recent research on the impact of new technologies present a much more complicated picture.

According to Gilles Saint-Paul, skilled and unskilled workers are differently affected by innovation; the latter loses the most, because innovation reduces the marginal productivity of the unskilled worker while increasing that of the skilled worker. Thus he argues, innovation, by decreasing marginal productivity, reduces the relevance of unskilled workers in the workplace. ⁸⁰ This argument holds that innovation necessarily reduces wages, even if there is a coexistence of new and old technology. Saint-Paul explains this with a Kuznets curve, arguing the following: In the short run, innovation and the skill formation it requires (i.e. the supply of skilled workers) deepens inequality until the old technology is abandoned. ⁸¹ In this model, unskilled workers may suffer from an absolute fall in wages, because the new technology outbids old technology for productive resources such as capital. However, the rise in inequality is likely to be transitory, as the new technology becomes easier to learn once it has spread throughout the economy. ⁸²

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⁷⁹ Erik Brynjolfsson and Andrew McAfee, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies* (New York: Norton, 2014).

⁸⁰ Gilles Saint-Paul, *Innovation and Inequality: How Does Technical Progress Affect Workers?* (Princeton: Princeton University Press, 2008). pp. 41-42.

⁸¹ Ibid., pp. 54-57.

⁸² Saint Paul proposes a life cycle argument in understanding technologies and how workers adopt to it over time. For a similar study of the life cycle of new technologies from the perspective of workers,, see, Patricia M. Flynn, *Facilitating Technological Change: The Human Resource Challenge* (Cambridge: Ballinger, 1988).

Saint-Paul assumes that it will be easier to attain the skills that new technologies require as these technologies become widespread. Unskilled laborers used to the previous technology will somehow adapt to the new one. However, this is a very poorly substantiated argument. In fact, it is not verified but just assumed. In that way, it recalls the technology life cycle models, which underline the same trend of recovery in the long run in spite of the negative effects in the short run. In other words, in the short-term inequality increases because of the deepening skill-gap and falling wages but in the long run, new technology becomes easier to learn and the inequality gap at the beginning starts disappearing as workers acquire the skills that new technology requires. Saint-Paul's assumption that workers would gain necessary skills over time is not sufficient to understand the complex effects of new technologies on workers. Analysts need to ask the following: Who will take more responsibility in training? My research shows that there is an interest in and gradual transition from on the job training to outsourcing training to external actors, such as states, vocational education institutions and private training enterprises. Locke et al. argue that in technology sectors "on the job training" began losing its allure as early as the 1960s as these firms have consciously departed from traditional human resource practices. The firms have not taken training within the company as one of their central commitments; on the contrary, training budgets were the first item to be cut in moments of crisis. Firms have very little commitment to the skill enhancement of their employees. The supply for vacant skilled positions or new skills comes from the university system.⁸³

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⁸³ See, Richard M Locke, Thomas A. Kochan, and Michael J. Piore, *Employment Relations in a Changing World Economy* (Cambridge: MIT Press, 1995). pp. 4-11. Authors observe similar trends internationally. In fact, in France, the departure from committed training is not limited to high technology sectors. On the contrary, there are two groups of companies which pay little attention to employee training: fairly small firms in traditional sectors with low levels of technology and modern firms who want to avoid training costs via employment from external markets. In these cases, the state often steps in and takes over the cost of training and the responsibility to supply workers of a particular skill. See, ibid., p. 217. As part of the Buffalo Billion program, the State of New York introduced a

Barry Wilkinson, in his studies on British automotive manufacturing, offers a much more nuanced framework. He argues that both cost-cutting (competitive pressures) and managerial desire to increase control over the labor process are forces at work in technological investments. However, the implementation of certain technologies in certain contexts requires a closer look at two interrelated processes. First, the inclination to foster technical change is a socially-mediated choice. So analysts should ask: what are the social forces involved in making this choice? Second, we need to understand the forms of political support in the whole process. 84 Wilkinson looks at the increased automation of the British manufacturing base and the transformation from numerical control systems (NC) or systems used by unskilled laborers to computer numerical control systems (CNC) and computer aided design (CAD). In his survey of manufacturers, where he looks at the firms that transitioned from NC to CNC, he observes that there is no single model of action but many. At a plating company that mostly employs unskilled, female and not unionized Asian and West Indian workers he observes a technological transformation/automation that displaces the older labor force substantively. However, this also increases risk to the company, since it eliminates the option of manual intervention at all stages if something goes wrong. An unintended consequence of this is that the new system puts an end to the existing labor turnover, which, practically, was supposed to be an option for the manager to keep wages down. Thus, Wilkinson

training initiative called Advance Buffalo. It is accompanied by a labor brokerage system based in the Department of Labor. This system aims to close the skills gap by bringing the businesses in need of certain skills and trained workers together. Since I argue against the existence of a skills gap in manufacturing, I have issues with the premise of these programs. However, it shows us clearly how local governments, especially in the Rust Belt context, have been willing to take over the cost of actual training from the shoulders of businesses. In an interview with a member of this initiative, I was told the following: "They are in the business of making, not training." This trend underlies the will of public authorities to take over these costs as on the job training ceases to be a key component of manufacturing.

⁸⁴ Barry Wilkinson, *The Shopfloor Politics of New Technology* (London: Heinemann, 1983). pp. 19-21.

argues that automation does not always necessarily increase flexibility in employment systems.⁸⁵ Wilkinson also discusses cases where we observe dissimilar trends, such as whole-scale deskilling at an optical company, a deepening skill gap at a machine tool producer, and the relocation of crafts persons from the shop floor to the office at a rubber molding company.

From a wider perspective though, Wilkinson argues that the systemic transformation posed by new technologies, in general, gives more power to management, since it increases control over the labor process and establishes a simpler hierarchy. However, there are other forces at work. First of all, he dismisses the idea of efficiency as the only reality. With reference to Noble, he argues that the design of a particular technology is also a political choice rather than an exclusively efficiency-related market force. The choices are highly technical even though the main point of reference is cost: "The choice, it was clear, was essentially a *social* one between shop floor control over production (MDI machine tools) or office control (conventional CNC)." According to Wilkinson, many firms are prone to anarchy in decision-making, and in such a situation, efficiency ideology, not the actual reality, shapes the decision makers' minds.⁸⁷

Wilkinson's nuanced framework is important to understand the shop floor politics of new technologies. Acknowledging the competitive forces as well as the managerial desire to increase control over labor process, my work shows that there is never a unilinear technological process of implementing new technologies. At Tonawanda, as I will show later, the amount of technology was reduced on the assembly line, while it was, simultaneously, dramatically increased on the machine floor. The former had a net positive impact on employment as the number of line workers

85 Ibid., chapter 4.

⁸⁶ Ibid., p. 89; italics original.

⁸⁷ Ibid., p. 93.

almost doubled even as the number of engines produced dropped significantly. This goes against the idea of introducing technologies to boost production capacity, productivity and efficiency. My work also shows that the effects of new technology were not uniform across the plant. On the machine floor, the level of technology increased dramatically, however, the implementation of this upgrade was met with certain resistance. The vulnerability of novel, high-tech machinery and the constant need for maintenance also engendered an unintentional consequence as it increased the need for skilled tradespersons on the floor. These processes present a much more complex picture of technological change and require a closer look at the shop floor and the experience of workers using machinery.

1.4. Methods

This research combines ethnographic methodology with textual and discursive analysis of the contracts between the GM and the UAW as well as local and national newspaper archives. I use an ethnographic research approach combining participant observation, oral history and archival materials to examine the consequences of economic crisis and government intervention from the perspective of the material and meaningful practices of workers. Textual and discursive analysis of the national agreements (contracts) between the union and management is key to understanding the historical evolution of the relationship between the parties. More importantly, it allows us to assess the extent, depth and characteristics of government intervention during the bailout.

Ethnography

The combination of shop floor and extra shop-floor dynamics make ethnography, as a method attuned to practice, an ideal method for studying this moment in the global transformation of industrial labor. Simply put, an ethnography is a study of a group of people in which the data are collected by some combination of participant observation and interviews. The ethnographer's main

objective is usually to describe and depict the perspective of the people studied and to situate those perspectives within a larger context. There are various forms of conducting ethnography in factories or plants. Some of the pioneering studies in the field were conducted by scholars who obtained access to the floor as a worker. This option was not available to me for a few reasons. First, practically speaking, jobs were unavailable at the plant. Tonawanda Powertrain hired as many as five hundred workers off the street after the bailout but by the time I started my research, it had already stopped hiring. The second reason is an ethical one. As the study moved forward, I chose not to deal with the potential dilemma associated with working at the plant and potentially taking somebody else's job.

Additionally job applicants don't get jobs immediately. As soon as I started my research, I learned that receiving a call from the third-party company administering GM's hourly hiring process could take as long as a year and a half.⁸⁹ Unlike the days when earlier ethnographies of factories were undertaken, manufacturing jobs of this sort are much harder to get, which makes it more difficult for the researcher to obtain access to the shop floor as a worker.⁹⁰

Securing access as a researcher to the shop floor was not easy, either. It took around six months, during which time I conducted various interviews with people from the plant outside the plant and paid regular visits to the union hall. Once I obtained the trust and permission of the union

⁸⁸ Graham, On the Line at Subaru-Isuzu; Michael Burawoy, Manufacturing Consent: Changes in the Labor Process under Monopoly Capitalism (Chicago: University of Chicago Press, 1979); Chinoy, Automobile Workers and the American Dream; Robert Linhart, The Assembly Line (Amherst: University of Massachusetts Press, 1981); Jean-Pierre Durand and Nicolas Hatzfeld, Living Labour: Life on the Line at Peugeot France (Basingstoke: Palgrave Macmillan, 2003).

⁸⁹ A year and a half was the longest wait period I heard about on the floor.

⁹⁰ There were a few more practical issues regarding access to the floor as a worker. First of all, to apply for a job at GM, one needs a referral from an active employee. And employees have only one referral ticket each. I didn't have a relationship with an active employee with sufficient trust and proximity. The only other way to apply for a job at GM is to be a veteran. Finally, I am not a U.S. citizen and for me to get a full time off-campus job was legally more complicated if not completely impossible. I will address some of these details in the third chapter in detail.

and management, I was allowed to make several visits to Plant 1 and Plant 5, two of the active plants in production at Tonawanda Powertrain.

It was critical to focus on the shop floor as a key field site for exploring the space where the dynamics of conflict and cooperation that ensue amongst workers—specifically between new hires and old workers—are actualized. A closer look at the composition of the workforce soon after I obtained access to the floor enabled me to realize there were more than just two groups of workers. I identified seven groups on the production side alone. The maintenance side did not belong to my original locus of research but the transformation it underwent appeared equally important, and I thus extended my research accordingly. Shop floor observations have proven to be very important for understanding not only the generational change transforming the composition of the workforce but also for recognizing the reorganization of work, the changing composition of technology, and the diverse effects of such changes on different groups of people.

To identify these multilayered processes, I employed a range of research methods participant observation, individual in-depth interviews and group interviews. These different methods allowed me to snowball into further ethnographic relations. Through participant observation, I paid special attention to interactions between the new hires and senior workers as well as interactions within these groups. The latter became more important once I found out that the seniority-based job and shift assignment procedure creates certain clusters in certain shifts and jobs. I also paid attention to differences between the corporeal practices of labor across generations and differing perceptions of work.

The most important benefit of the ethnographic method for this research was to observe the transformed meanings of work, the different cultural forms through which these different generations of labor conceptualize and articulate their work experience. The gap between the seven groups in terms of economic returns and benefits was crucial to identify, but I also observed these differences going well beyond the economic returns that shape their perspectives of the union, job security, relationships with management and relationships with peers outside the plant. Even though the new hires were much younger on average, they had a greater variety of work experience while most of the traditional hires are lifers, who have limited firsthand experience of work life outside GM. This marked a major difference in perceptions of work at the plant. Constant references by new hires to their lives before GM stood in contrast to the nostalgia of traditional hires remembering the past. I was often reminded by the new hires to be realistic and compare their current conditions to "what's available" outside the plant. These different spatial and temporal references suggest a completely different orientation in working class cultures.

While interviews and observations on the shop floor are crucial for understanding the labor process, it also entailed some constraints. Most importantly these interviews were almost always conducted while the interlocutor is on the line working. Some workers did not mind me interviewing them while they worked as they could then show me how easy their tasks are and how they can allow one's mind to focus on other things. Nonetheless, since I didn't want to interrupt them for long periods, I often cut shop floor interviews short. In some cases, team leaders graciously helped me and relieved the workers on the line so that I could talk to workers in the rest area or on the team bench. Another constraint was the fact that researchers are not allowed to use recording devices inside the plant. Therefore, I also conducted individual interviews with workers, managers and unionists outside of work. These interviews focused on understanding individual and family histories of work, with a specific focus on the ways in which workers situate themselves vis-à-vis other workers, management and within the communities in which they live. My beyond-

the-shop-floor interviews focused on older workers' responses to the bailout, new hires' perceptions of work conditions, and relations between two generations of workers.

I formed my sample using two sources. First I used my shop floor connections and asked some workers if they'd be willing to meet me outside the plant for a longer interview. This gave me access to workers from different generations. I also relied on my contacts at the union to connect me with more workers. This worked in three different ways. First, I used personal referrals to get more interviews. Second, I attended a few union meetings where I was allowed to introduce myself, describe my project, and leave my contact information. I met with some new workers after these meetings, and some contacted me later via phone or email. Third, thanks to the courtesy of the union leadership, I published a brief ad in the union monthly, an exclusive paper informing union members about the state of the union, local, business, and the community. I received a number of phone calls from that channel as well. I conducted in-depth, semi-structured interviews with the workers I met outside of work. These interviews were often held in a social space —a restaurant, or a coffee shop—and sometimes in their homes. I sought the comfort of the workers in order to discuss open-ended questions pertaining to their experiences on the shop floor as well as their attitudes toward the bailout and toward the form that restructuring is taking in Buffalo.

I also conducted a variety of interviews with important local figures, current and former public officials, union leaders and academics, involved in the issues of economic development and labor. These interviews focused on Buffalo's economic problems and policies developed to address these issues. Another set of interviews were conducted in the greater Detroit area with more union leaders, hourly workers, industry specialists and former management personnel. These in-depth, semi-structured interviews were crucial for understanding the significance of Tonawanda Powertrain among GM plants given its geographical distance from the dense network of GM

production in Southeastern Michigan, as well as its vulnerabilities within the corporate hierarchy. I also used the connections that I developed during my research to reach out to GM figures and auto industry experts in Detroit.

Textual and Discursive Analysis of the Contracts

In order to better contextualize worker experiences, I integrate ethnographic data with a detailed textual and discursive analysis of the contracts and other secondary documents negotiated between the UAW and GM. These documents included detailed and sizeable contracts, now negotiated every four years. The 2011 National Agreement between the UAW and GM is 754 pages and covers everything from job assignments to layoff procedures, from pay rates to grievance procedures, from work hours to holidays, from worker improvement programs to health and safety procedures. It is meticulously prepared and constitutes the medium by which hourly and salaried workers operate. Contracts are important for four reasons in the context of this research.

First, they are legally binding documents listing the rules, regulations, rights and penalties that apply to every hourly worker on the floor. They also provide a handbook for management determining the parameters of their relationships with the hourly workforce. Thus, national agreements and local contracts together provide the legal and practical framework of operation and are an everyday point of reference on the floor. Secondly, contracts loosely connect the Detroit Three in a bargaining framework. 92 This allows analysts and observers to make generalizations

⁹¹ The lifetime of a contract varies, and I will discuss this in the second chapter.

⁹² As Katz argues, this connective framework has been weakening since the 1980s as the differences between companies increase over time. However, major issues such as healthcare, pension and basic work rules are still negotiated within this connective framework, which is also called "pattern bargaining." See, Harry C. Katz, "Recent Developments in US Auto Labor Relations: The Decline of the Big Three and the United Automotive Workers," in *Globalization and Employment Relations in the Auto Assembly Industry: A Study of Seven Countries*, ed. Roger Blanpain (Austin: Wolters Kluwer, 2008).

about the unionized automobile industry in the U.S. and to make meaningful comparisons with non-unionized manufacturers. Thirdly, they are excellent historical documents, not only recording the evolution of the negotiations between management and the union but also offering a unique opportunity to identify the priorities and characteristics of the government intervention in 2009. Changes imposed in 2009 were not only substantive covering compensation and work rules, but also rhetorical, which is why it is important to also look at discursive changes.

Fourthly, we need to emphasize the very existence of a contract and a collective bargaining framework. The Detroit Three's competitors within the U.S., i.e. transplants, are very careful in keeping unions out and thus denying any collective bargaining framework that would curtail management's ability to exert full control over its workforce and monopolize the decision making processes. A contract and a collective bargaining framework simply counters total dominance in the Detroit Three, where management still holds the rights to hire and fire but these processes, especially the latter, are very clearly structured in a fashion that would leave little room for deviation. Job descriptions and job assignments are also contractually determined. Throughout my research, I have been repeatedly reminded of the importance of the mere existence of a contract by workers. They did so not by just saying it but also by demonstrating how they think within such a framework. Its content, as well as the bureaucratic structure in entails, will be addressed in the following chapter.

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⁹³ There are three exceptions to this: Mazda's Flat Rock, Michigan plant, which was a joint venture with Ford; Mitsubishi's Normal, Illinois plant, which was a joint venture with Chrysler and which closed in late 2015; and finally, Toyota and GM's joint venture NUMMI in California, which was also closed in 2010 after GM pulled out of the partnership in 2009 during the bailout. The reason why there was union representation in these plants was because they were joint ventures with local manufacturers. In other words, they were hybrid plants instead of fully foreign-owned transplants.

1.5. Chapter Outline

In three chapters, I will discuss in detail the dual transformation: the generational transition and the technological reshuffle. The first chapter will feature a detailed analysis of the evolution of the bargaining environment between the UAW and GM over three decades. I will focus exclusively on the documents since 2003. A detailed analysis of the changing principles and main axis of negotiation and conflict will be followed by a section on primary principles that remained unchanged. In the third and final section of the chapter, I will summarize my findings and then discuss the limits of a contractual analysis. Contracts do offer a legal and institutional framework, yet they are insufficient to understand the social relations on the floor. The technological reshuffle was not even in the contracts, yet it is one of the major changes that came with the bailout. This discussion will lead us to the ethnographic chapters, Chapter 3 and 4, where I discuss the workers' perspective of the dual transformation.

The third chapter will focus on the generational transition that redefines the production department. Analysis of the influx of new hires and the unique co-existence of the old and new worlds of work allows us to reflect on the different perspectives of these generations. Documenting different perspectives on tiers, job security, union, competition, relationships with the management and work is a great entry-point for understanding the characteristics of reindustrializing America. Presenting findings from ethnographic research, this chapter will provide rich details on the simultaneity of a fading, old model of work vis-à-vis an emerging one from the perspectives of workers.

The fourth chapter will focus on the second element of the dual transformation: the technological reshuffle. Changing technological preferences impact the production side by reducing the amount of technology on the line and increasing it on the machine floor. This affected

both employment numbers and the type of work performed. However, the effects on the maintenance side have been much greater. The leap in the type of technologies used on the machine floor changed the face of skilled trades completely. A retooling process that can only be compared to the one in the 1980s in terms of scale, this technological reorganization has completely opposite effects on tradespersons. This chapter will start with a brief history of skilled trades inside an automobile plant and then document the experiences of workers in relation to changing technologies and labor process. The fifth and final chapter will summarize research findings and reflect on the near future of the industry. A brief commentary on the 2015 negotiations, which is the first serious turning point after the bailout, will allow for speculation on the culture of the floor and its impact on the negotiation processes.

CHAPTER 2

THE AUTO INDUSTRY THROUGH THE CONTRACTS

In the context of unionized workplaces in the US auto industry, an ethnographic study of worker's experience, observations and insights cannot proceed without an analysis of contracts. This is because the tenets established in contracts are constantly referred to by workers themselves. These contracts directly shape even very basic modes of doing work, they outline the limits of worker benefits, and they afford workers the grounds for negotiating conflict. Contracts are also key documents in understanding the wider historical context of the auto industry as well as the evolution of the relationship between management and the union; they allow us to see the main contours of the collective bargaining process as well as the key concerns of both parties over time. In the present study, contracts are additionally important for understanding another key dimension: the actions of state as a new participant in the labor process. An actor that is not normally a party in the negotiation process, the federal government played a key role during the 2009 bailout in restructuring the industry. A closer look at the contracts, therefore, allows us to understand the crucial role of state(s) in reindustrializing America. Focusing on contracts from a long historical perspective will also allow us to understand the dynamic power struggle between parties management and the union—before and after state's involvement in 2009. Despite their importance in understanding this context, contracts also fall short of explaining the entire process of reindustrialization. Two of the key effects of the bailout—the generational transition and massive technological reorganization—cannot be grasped through a mere analysis of the contracts; these changes cannot be fully understood without attending to workers' reactions. In other words,

this chapter will also explain and justify the need for an ethnographic methodology to assess the transformation.

The first contract between the UAW and GM was signed on February 11, 1937, and it was only one page long. ⁹⁴ Over time, national agreements turned into massive documents covering even the smallest details regarding issues on and off the floor. The 2011 National Agreement is more than 750 pages and it covers issues ranging from wages to work rules, from the training details of skilled tradespersons to vacation procedures and holiday arrangements, from unemployment benefits to grievance procedures. ⁹⁵ This document sets the boundaries, terms and conditions of the relationship between the management and the hourly workforce. It also establishes a connection, albeit weakly, with two other manufacturers whose hourly workforce is also represented by the UAW: Ford and FCA. ⁹⁶

These documents are valuable sources that allow us to understand the evolution of the relationship between the parties. Changing matters of interest, newly emerging priorities, and priorities that disappear over time become crystal clear when viewed in a long, historical framework. Last but not the least, we are also presented an opportunity to see the priorities of the federal government in the 2009 Modifications to the National Agreement and the 2011 National Agreement. Team Auto was effective in both negotiations at different capacities. The taskforce

⁹⁴ This document looked more like a memorandum of understanding and basically operated as recognition of the union. A copy of the document can be seen here: http://www.trimpesculpture.com/press/FirstUAW GM LaborAgreement1937.htm

⁹⁵ In addition to national agreements, there are also supplements regulating other matters such as benefits, profit sharing structure etc. There are also local agreements, which are not supposed to be renewed every four years, and they contain detailed information about local issues, wage formulas and other related issues such as outsourcing. There is no mandate to renew these arguments, because if need be, parties can negotiate over issues as they appear. The results of these negotiations are called shelf agreements.

⁹⁶ Collective agreements within the collective bargaining framework strongly resembled each other until the 1980s. See, Katz, *Shifting Gears*. However, main bargaining items such as pension, healthcare and other job security measures are still considered pattern items.

actually set the parameters during the first negotiation and determined new ones for the second negotiation. Therefore, an analysis of these contracts over time will give us a unique opportunity to a) assess the trajectory of the relationship between management and labor, and b) the role and impact of the government intervention in 2009.

At the end of this chapter, I will make four arguments. First, there has been a dual transformation in the automobile industry with two different focuses. Production and maintenance departments underwent two different and in some respects opposite transformations. For workers on the production side, the reorganization of the labor process was not a major issue as the lean production model was already fully implemented in the mid-1990s. Compensation, on the other hand, was at the center of the negotiations in the same time period. In 2007, management enforced various new rules and regulations to regulate a two-tier system. Projecting a pay and benefits divide between the pre-2007 hires and post-2007 hires, it sought an adjustment to its fixed costs.

The maintenance department has undergone a completely different transformation. Wage cuts were not targeted during the bailout negotiations, ⁹⁷ while benefits were a mystery to many. Restructuring in the maintenance department was about redefining work rules, reducing headcount, and increasing flexibility by challenging the historic lines of demarcation between the trades. ⁹⁸ Another important difference between the two departments was the different role of government intervention. Many major changes in the production department, including the two-tier system, were negotiated in 2007, i.e., before the bailout. It was not as comprehensive and the implementation was limited due to the hardship companies experienced at the time, but it was

⁹⁷ Similar to the traditional workers on the production side, maintenance workers were only subjected to pay freeze, but there was no lower tier wage setup for the maintenance department.

⁹⁸ Lines of demarcation simply refers to the rules and regulations separating one tradesperson's jobs and responsibilities from another's.

negotiated before the bailout. Changes in the maintenance department, however were only possible with the bailout for the reasons I will explain later in this chapter and in chapter 4.

My second argument is that the bailout entailed a shift away from the job security framework established in the 1980s in response to downsizing and plant closures. ⁹⁹ The model agreed on in 1984 assigns management as the only actor responsible for alleviating the effects of downsizing, technological change and outsourcing. With a separate fund devoted to this cause, known as the JOBS Bank, ¹⁰⁰ workers were compensated during the time period after they are laid off. Post-bankruptcy, job security was aligned with workers' and locals' ability to insource new jobs via remaining or becoming competitive. The JOBS Bank was dismantled, and Appendix K, the section that regulates job security related matters, was completely rewritten. The rewritten text opened up a lot of room for *interpretation* by locals. This room for interpretation created a massive grey area where locals were encouraged to boost their competitiveness by pursuing a range of choices, such as allowing hires of more temporary workers for longer periods of time or changing the levels of outsourcing. This had a direct impact on the meanings of solidarity among the working class in this industry. Contracts give us a very clear picture of this transition.

Thirdly, I argue that cost reduction was not only about bringing the two-tier system to the floor; it also entailed the introduction of temporary employees on a permanent basis. Formerly a taboo for the UAW, temporary workers added another dimension to the complexities on the shop floor. As a common practice in transplants, the introduction of "permatemps" cast doubt upon the

⁹⁹ This job security framework was different than the one established in the postwar era. The post-1984 framework addresses the changes imposed by the crises of the 1970s such as, outsourcing, technological upgrades etc.

¹⁰⁰ The auto industry is famous for its acronyms. JOBS Bank stands for Job Opportunity Bank-Security Bank.

legitimacy of the union and raised questions regarding the differences between union and nonunion shops.

My fourth argument is that some of the major changes in the compensation structure, employment practices and work processes would be impossible without direct government intervention. Some demands pushed forward by management prior to the bankruptcy were never realized thanks to resistance by the union, either by the leadership or by the rank and file. The intervention by *the* state, however, was instrumental in not only executing these changes but also in expanding some of them. The result was that while the bailout provided financial assistance to pull the companies out of the crisis, it also completely restructured their cost structure, employment practices and shop floor policies to accord with non-union transplants. The union, which defended its position with respect to many of these key provisions, ultimately conceded in order to avoid complete liquidation. As part of the bailout mandate, the union was also denied of the right to strike during the 2011 negotiations. Instead, parties were forced to accept a binding arbitration clause.

I will try to make these points in two main sections below. First, I will discuss the changes that were important and changed the face of industry over the years. The academic and mainstream literature has so far focused solely on the institutionalization of the two-tier system. Even though I acknowledge its importance, discussing it in detail below, I will show that there were other, equally important contractual changes in job rules and employment practices that had a direct

¹⁰¹ The liquidation threat was not limited to GM and Chrysler. Car manufacturers are at the center of complex and massive supplier networks on the production side, and an equally large-scale and complex web of retailers and service providers on the consumption side. It was feared that the liquidation of two sizeable actors would cause a ripple effect that could take not only Ford down but also an entire supplier network. Steven Rattner cites this as a major source of worry for the Obama Administration. See, Rattner, *Overhaul*: pp. 52-53. The ripple effect was also the reason why then Ford CEO Alan Mullaly joined the CEOs of GM and Chrysler and the president of UAW to testify in Washington, arguing for a government bailout in 2008.

impact on the shop floor and shop floor culture. Following the section on the two-tier system, I discuss the shift away from the job security framework, the introduction of temporary workers on a permanent basis, and the transformation of the skilled trades.

2.1. What Changed?

In the last ten formative years of the auto industry, five issues were at the center of negotiations: compensation (wages and benefits), job security, flexible employment and the skilled trades. Four key documents will be scrutinized in detail to track these issues: the 2003 National Agreement, the 2007 National Agreement, the 2009 Modifications to the 2007 National Agreement, and the 2011 National Agreement. For the purposes of simplicity these documents will be abbreviated as follows respectively: 2003 NA, 2007 NA, 2009 M, and 2011 NA. 102

The main characteristics of these contracts can be summarized as follows. The 2003 NA is usually called *the last contract as we know it*. The issues that made their way onto the agenda of parties in 2007 and during the bailout were not granted any room in this earlier agreement. At best, the agreement indirectly addressed future issues of contention such as, outsourcing and work rules. The agreement was forged after a relatively profitable decade of the 1990s, thanks to the SUV boom in the U.S. 103 Record losses in the early 2000s 104 were associated with other anomalies such as the tech bust and 9/11. As a result, none of the major issues characterizing the contracts that

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¹⁰² In this text, I occasionally refer to prior national agreements or local agreements. Because they are not referenced as often, I do not abbreviate these documents.

¹⁰³ The SUV boom had a huge positive impact on Tonawanda Powertrain. A retiree named Wilson, who left GM in the mid-2000s, recalls that period as a "blessing" as the plant was overwhelmed by the product order. In the midst of such expansion, Wilson says, people did not have much time to improve work conditions. Wilson thinks that this was the case for the engines too. In fact, the same thing that boosted the economy of the plant also brought it to the brink of collapse. Wilson says: "Inefficiency was the name back in those days. They were big horsepower but they were not fuel efficient. (...) They were trying (...) but they really weren't."

¹⁰⁴ In 2006, Ford posted record losses totaling \$12.6 billion. In 2009, GM's second quarter loss was around \$15.5 billion. See, Rattner, *Overhaul*: pp. 16-17.

came after—wages, benefits, work rules, temporary employment, and outsourcing—can be seen in the 2003 NA.¹⁰⁵

The 2007 NA not only established a two-tier system but also mandated a gradual transition that would transfer retiree healthcare commitments from the company to a newly established VEBA. ¹⁰⁶ Even though it was the first national agreement to acknowledge the two-tier system, it had little effect, since the company was not hiring at the time. Its symbolic impact eclipsed its material impact. The fact that the UAW conceded to this demand violated one of its founding principles, and this was more important than whether anybody was hired under these conditions. ¹⁰⁷

The 2007 NA and its provisions are taken as a starting point for the restructuring of the industry. However the 2009 M, the outcome of the bailout, went much further than previous NAs. The terms of transition to VEBA were changed and the cash contributions to the system during the transition were eliminated and replaced by company stocks. This made VEBA, thus retiree healthcare, more vulnerable to the stock market performance of the carmakers, escalating uncertainties. The 2009 M also suspended the cost of living allowance (COLA) as well as the JOBS Bank, two landmark gains of the automobile industry in the postwar period. The latter is a protective shield for downsizing and unemployment caused by new technologies and outsourcing,

¹⁰⁵ The 2003 NA in first tier GM plants may not have been very comprehensive, however a war between management and labor was underway elsewhere: at Delphi, GM's parts supplier. The transition that Delphi went through at the time was seen as a precursor to what first tier GM plants would go through soon after. This was the case even among business circles and was proven right in the next contract. See, David Welch, "Go Bankrupt, Then Go Overseas: For Delphi, Chapter 11 is a Globalization Gambit. If It Works, Rivals May Copy It," *Business Week*, April 24 2006.

¹⁰⁶ VEBA stands for Voluntary Employee Beneficiary Association. It is a generic term and refers to a board created to oversee healthcare funds for a particular group. Collectively VEBA at the Big Three is referred to as UAW Retiree Medical Benefits Trust. For more details, see, http://www.uawtrust.org/Home/Home/sb.cn

¹⁰⁷ The sudden and massive leap from the 2003 NA, a relatively conservative document, to the 2007 NA, a very ambitious document, would be surprising to many. However, what GM basically did was to replicate the concessions it acquired from the Delphi spinoff in 2004. I will come back to this point below.

while the former partially protected workers' wages from the stagnation that affected working classes in the last 30 years. ¹⁰⁸ It also suspended most of the worker improvement programs until the 2011 negotiations. It introduced a new category of employees called the "flex employees," and most importantly, it mandated a massive transformation of the skilled trades. The 2011 NA built on the flexible regime provided by the 2009 M by expanding the two-tier provisions, and completely removing the JOBS Bank and COLA. The definition of temporary work/er is clarified, and the changes in the maintenance department are completed. The 2011 NA documents the transformation and the current state of unionized workers. In five sections below, I will discuss changes over time in the key areas of wages and benefits, flexible employment, job security, and the skilled trades.

Wages and Benefits I

UAW represented workers have traditionally enjoyed higher wages than workers in manufacturing in general. However, that is not the case within the auto industry. When transplants started investing in the U.S. in the mid-1980s, they preferred to match the wages offered by the Detroit Three and to follow wage increases in new contracts almost cent by cent. One of the reasons for this was to keep unions out via offering the wages they demand. ¹⁰⁹ Thus, wages were not the main difference between transplants and unionized plants. In the long run, the real difference between the two in terms of compensation appeared in the field of benefits. In particular, defined pension and post-retirement healthcare were two things that were not offered by any transplant in the U.S.

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¹⁰⁸ Wage stagnation in the neoliberal era in the U.S. is highly researched. For some great examples, see, Teresa A. Sullivan, Elizabeth Warren, and Jay Lawrence Westbrook, *The Fragile Middle Class: Americans in Debt* (New Haven: Yale University Press, 2000); Katherine S. Newman, *Laid off, Laid Low: Political and Economic Consequences of Employment Insecurity* (New York: Columbia University Press, 2008); *Chutes and Ladders: Navigating the Low-wage Labor Market* (New York: Russell Sage Foundation, 2006).

¹⁰⁹ McAlinden, *The Meaning of the 2003 UAW-Automotive Pattern Agreement*.

The healthcare package offered by transplants for their active workers was not as comprehensive as the one offered by the Detroit Three, and it required higher contributions from workers in terms of copays and fees. Following the norms of the labor market at the time, i.e. the 1980s, these companies never made long-term commitments akin to the ones in the Detroit Three. Generally referred to as the legacy costs, these benefits were at the center of the bailout restructuring.

Yet, an apparent similarity between wages between these two types of plants disguises structural differences and complexity. One of UAW's founding principles is to pay equal wages for equal work. Regardless of the seniority of the employee, workers in the same classification receive the same wage. When the UAW conceded to the two-tier demand of management in 2007, it acknowledged a split between the two generations of workers and hence violated one of its own founding principles.¹¹¹ While the two-tier system was pushed forward by management to eliminate the competitive gap between the Detroit Three and the transplants, this ultimately created a hybrid employment structure instead of a system similar to the transplants.

In transplants regular workers in the same classification are not paid the same. Instead, they start at a certain scale, which increases over time until they reach the cap. Any pay increase after that point is only possible if the cap itself rises. However, the real and dramatic wage gap in transplants is not between the new hires and those who hit the cap. Rather, it is between permanent

¹¹⁰ Offering higher wages instead of post-retirement benefits has been a key compensation policy of the high-tech boom starting in the 1980s. The rationale for this was not just a financial one, removing any long-term financial commitments to the workforce. This industry had much higher turnover and the workforce was culturally encouraged to be mobile and to navigate between companies. Another key policy was the utilization of temporary workers on a permanent basis. Major companies like Microsoft pioneered the implementation of the "permatemps." For a brilliant ethnography of the high-tech boom, see, Stephen R. Barley and Gideon Kunda, *Gurus, Hired Guns, and Warm Bodies: Itinerant Experts in a Knowledge Economy* (Princeton: Princeton University Press, 2004).

¹¹¹ A two-tier has been used occasionally in the past for transitional periods. In all of these instances, lower tier workers are allowed to catchup with the higher tier in wages and benefits. The deal reached in 2007 denies both. During the 2015 negotiations, the possibility of catching up with traditional wages within a certain time period was brought to the table, yet the status of benefits remained the same.

employees and temporary employees.¹¹² Temporary employees can be hired through a temp agency¹¹³ or an independent contractor. Even though in many cases these workers do work on a permanent basis, they do not benefit from any of the advantages regular workers enjoy.¹¹⁴ At Nissan for instance, "temps" are paid between \$10 and \$18 per hour as opposed to \$22 to \$28 per hour for permanent employees. The gap between their benefits is even larger.¹¹⁵ In contrast, despite the big gaps between tiers at unionized plants, both tiers were still part of the union and were thus permanent. This continues to be true, in spite of the current practice of bringing in temporary workers indefinitely.

That being said, even though it is not as structurally divisive, the two-tier system does create a split between traditional hires and new hires, aka entry-level workers. Entry-level workers were divided into three classifications, where the third group, Group C workers, were offered the lowest starting wage of \$14 per hour. ¹¹⁶ This was actually half of the traditional wage of \$28 per

¹¹² Every transplant has a different vocabulary for this dichotomy. At Nissan, permanent workers are called technicians, while temps are called associates.

¹¹³ Giant temp agencies like Kelly Services and Manpower Inc. do not only supply service industries but manufacturing as well. For the development of the temp economy, see Erin Hatton. For the rising role of temporary workers in manufacturing see, Y. Ono and D. Sullivan, "Manufacturing Plants' Use of Temporary Workers: An Analysis Using Census Microdata," *Industrial Relations: A Journal of Economy and Society*, no. 52 (2013). Ono and Sullivan show that temporary workers are mainly utilized for responding to fluctuating market demand, and for avoiding the cost of layoffs of regular workers.

¹¹⁴ There aren't many academic studies on transplants. But there is some high quality journalistic work as well as quasi-academic works. For an impressive example, see, Lydia DePillis, "This is What a Job in the U.S.'s New Manufacturing Industry Looks Like," *Washington Post*, March 9 2014. Such works give us a glimpse of what is happening in these plants, yet more detailed and thorough studies are required to assess the wide-scale impact of these arrangements.

¹¹⁵ See, ibid. The ratio of temps to regular workers varies from plant to plant, but in some cases such as Mercedes Alabama, the ratio is almost 1 to 1. The Center for Automotive Research (CAR) estimates a 10 to 20% ratio of temporary employees at Toyota and up to 40% at Nissan. See, http://www.autonews.com/article/20151013/OEM01/151019968/fiat-chrysler-could-double-use-of-temp-workers-under-new-uaw-contract-report-says There is a serious need for research on employment and management practices of transplants.

¹¹⁶ 2007 NA, page 310.

hour. More importantly, the gap between the tiers was not projected to close by the end of the contract. A quite complex wage increase formula in the 2007 NA projects incremental pay raises of no greater than 3.75% every 26 weeks. ¹¹⁷ The fact that this was put on paper in 2007 is important because it shows how far the union was pushed back even before the emergency terms imposed by the bailout. ¹¹⁸

The 2009 M did not mandate major changes to the basic wage formula of the two-tier system. However, performance bonus payments were suspended, which suggested the companies faced serious financial straits and shows workers the depth of the problem. 119 Performance bonus payments and profit sharing schemes were first introduced in the 1984 national agreement. Management pushed forward such arrangements to move away from guaranteed wage increases and to share the risks of market fluctuations with workers. Instead of promising a 3% wage increase in every new contract, which was the norm before 1984, the company offered profit sharing, performance bonuses or a signing bonus as one-time payments. Bonuses and profit sharing checks would be high as long as the company performed well; however if the company underperforms and/or posts no or low profits, it would have a direct impact on workers' income. 120 The 2009 M

¹¹⁷ This very complex formula accounts for variables like average hourly earnings, some BLS values for the manufacturing sector etc. See, 2007 NA, page 281. The formula was replaced by a very simple one with a clear progression of wages for every year in the 2011 NA. Since no workers were employed under the lifetime of the 2007 NA, this formula was never in use anyway.

¹¹⁸ Ron Gettelfinger, the then president of the UAW, is cited by Rattner as saying in 2006: "The challenges we face aren't the kind that can be ridden out. They're structural challenges, and they require new and farsighted solutions." See, Rattner, *Overhaul*: p. 96. Rattner's quotes have no references. If Gettelfinger said this, the context of his statement is quite vague. Rattner uses it to praise Gettelfinger's "farsighted approach," which impressed him. Gettelfinger hired Lazard, a Wall Street firm which happens to be Rattner's old firm, to address these challenges and devise a long-term plan. Rattner praises Gettelfinger's "solution oriented" approach. It is important to highlight that this solution was a Wall Street solution.

^{119 2009} M, page 45.

¹²⁰ This transition was so big, it forced the Canadian leg of the UAW to split and form Canadian Auto Workers (CAW) in 1985. Canadian labor leaders were reluctant to share the risks of the market that they had very little

suspended all bonuses and profit sharing until 2011. Similar suspensions could not be made for guaranteed wages.¹²¹

Though the suspension of bonus payments was tremendous, the most dramatic change in the 2009 M was the suspension of COLA. Introduced in 1948 to protect wages against inflation and a rising cost of living, ¹²² it accounted for almost half of the gains in the post war-era. ¹²³ The 2009 M suspended COLA, and it did not come back in 2011. This had a major impact on traditional employees but not as much on new hires as COLA coverage for entry level workers were already removed in 2007. As an adjustment measure to protect wages against inflation, it was a part of the contractual framework since 1948. It was not a matter of negotiation even during the restructuring of the industry in the 1980s, however it was abandoned during the restructuring.

We see the signs of change regarding COLA in 2007 as the entry-level memorandum mandated the exclusion of new hires from the program. ¹²⁴ In retrospect, it is hard to say if the company was hoping to phase out COLA with traditional employees' attrition. Just as the UAW considered the two-tier system a transitionary measure instead of a permanent model, they may have also viewed adjustments to COLA as a temporary concession to alleviate the effects of the crisis. Nonetheless, in 2007, for the first time since its installment in 1948, COLA was on the table

control over. The process can be seen in this excellent documentary, Sturla Gunnarsson and Robert Collison, "Final Offer," (National Film Board of Canada, 1985).

¹²¹ As we will see later, profit sharing and other similar lump-sum payments play a key role during the 2015 negotiations. For instance, during the ratification process of the tentative agreement between the UAW and FCA. Some dissident workers organized through social media and demanded COLA back and critiqued the dependence on bonus payments.

¹²² Katz, *Shifting Gears*: p. 2.

¹²³ McAlinden underscores its importance as follows: "The total UAW wage rate, with COLA, increased at an annual average of 5.5 percent during 1960-2003, (...) and cumulative COLA amounted to \$14.04/hour during 1960-2002, or over half the total increase in the UAW wage." McAlinden, *The Meaning of the 2003 UAW-Automotive Pattern Agreement*. p. 9.

¹²⁴ 2007 NA, page 80.

and applied differently for different groups of workers. I should again emphasize that this is a speculative debate, because GM did not hire a single entry-level employee under the terms and conditions of the 2007 NA.

The potential for ongoing debate around the status of COLA in the 2007 NA was completely dismantled in the 2009 M, which suspended it for everybody. ¹²⁵ As a landmark gain for the UAW and a legacy of the Reuther era, ¹²⁶ COLA was finally removed permanently from the contract in 2011, making workers vulnerable against inflation. ¹²⁷ With COLA removed, the only wage-related issue from the perspective of management was the progression scale for new hires. The 2011 NA replaced the complex wage formula of the 2007 NA with a simple one. Accordingly, Group B new hires start at \$15.78 and reach the ceiling at \$19.28. ¹²⁸

Therefore, the two-tier system introduced in 2007 marks a rupture from the old policy of equal pay for equal work. After the lapse of COLA, the pay gap between traditional employees and future employees was as high as 50%. However the effects of this agreement were limited as the company hired no new workers under the terms and conditions of this contract, and it had no

¹²⁵ 2009 M, pp. 16-25 and 46.

¹²⁶ The Reuther brothers take credit for the implementation of COLA, but the idea originally belonged to the socialist faction within the UAW. In fact, Walter Reuther was opposed to the idea at the beginning, since he theoretically believed that an inflation adjustment could also mean wage reductions in case of negative inflation. He later adopted the idea and in fact used it against rivals within the union. See, Sol Dollinger and Genora Johnson Dollinger, *Not Automatic: Women and the Left in the Forging of the Auto Workers' Union* (New York: Monthly Review Press, 2000).

¹²⁷ The Fed's low interest rate policy to revitalize the economy has been in effect for almost ten years now. Inflation has been close to zero for an extended period of time now. This has alleviated the effects of the loss of COLA significantly. In fact, a group of workers from the FCA organized an online campaign during the 2015 negotiations. They demanded the reinstatement of COLA instead of signing bonuses and other one-time payments. The International responded to that demand by pointing out differences in earnings had COLA been in effect between 2009 and 2015. COLA returns would have been almost tripled by the bonuses. However, this may not be the best time period to assess the positive effects of COLA, simply because of the monetary policy of the Fed and the rate of inflation in the U.S.

¹²⁸ 2011 NA, pp. 275-276. Traditional hires have not received a wage increase during the lifetime of this agreement, which has caused tensions on the floor, an issue I will discuss in the third and fourth chapters.

effect on the traditional employees in terms of wages. Thus the bailout marks the real manifestation of the rupture, as it not only made it possible to hire new workers, but it also extended the concessions the company began to extract in 2007. The effects of the bailout in terms of compensation were not limited to the wages though. In fact, the bailout a higher degree of structural changes in the field of benefits, as the next section demonstrates.

Wages and Benefits II

The changes in benefits faced a similar trajectory to that of wages and were closely related to the demographic trends of the workforce. The number of hourly employees in the Detroit Three reached its maximum point in 1978, followed by a steady decline. 129 In the face of declining employment, the UAW chose to bargain harder to protect the benefits of its membership, especially the pension of its future retirees. The "30 and out" pattern¹³⁰ was in place and the UAW was able to gain significant raises for its retirees between 1984 and 2007. 131 Since GM had not had any hiring campaigns since the 1980s, a period during which it moved workers from one location to another after plant shutdowns and downsizing, the focus of the union leadership was to contain and protect the healthcare and pension coverage of the current workforce until 2005.

In terms of shifting the policy of benefits, the first big change in the post-1980 negotiation environment came with the spinoffs of the Big Three's suppliers: Delphi and Visteon. Suppliers

¹²⁹ GM employed as many as 618,365 workers in 1979 compared to 53,000 in 2015 in the U.S. See, footnote 149 for more details.

¹³⁰ The term "30 and out" refers to the retirement threshold reached after thirty years of active work, which was implemented in 1973. The rank and file originally demanded the threshold to be set at 25 years of active work, but they eventually agreed on 30 years. See, Roger Lowenstein, While America Aged: How Pension Debts Ruined General Motors, Stopped the NYC Subways, Bankrupted San Diego, and Loom as the Next Financial Crisis (New York: Penguin, 2008). p. 40. For a detailed analysis of its impact on retirement choices, see, Melissa A Hardy, Lawrence E Hazelrigg, and Jill S Quadagno, Ending a Career in the Auto Industry: 30 and Out (New York: Plenum Press, 1996).

¹³¹ For the period until 2003 see, McAlinden, *The Meaning of the 2003 UAW-Automotive Pattern Agreement*. p. 9. The increases for pensions range between 26% and 13% between these years.

are key to maintaining the continuity of production. GM, Ford and Chrysler preferred controlling their main suppliers fully until the late 1990s. UAW was also organized in these second-tier manufacturers and the conditions of work were not dissimilar. However, rising competition and diminishing profits pushed automakers to reorganize the labor contracts of the suppliers and eventually to allow these subsidiaries to spinoff as independent companies. Renault-Nissan's "legendary" CEO Carlos Ghosn, for instance, is known for increasing pressure on the suppliers and widening the gap between them and the OEMs. Among corporate circles, this is known as the reorganization of the supply chain. This was not only made possible by imposing concessions on the contracts but also by introducing new technologies that increased the synchronization of production processes.¹³²

Reorganizing supply chains was a standard corporate policy not only in the auto industry but in the entire manufacturing sector. ¹³³ GM followed the pattern in the 1990s, allowing its major suppliers, including American Axle and Delphi, to spinoff. The spinoff of Delphi was not smooth, however, as GM was still in charge of Delphi operations and its workforce was still organized by the UAW. In 2004, parties negotiated the first contract with provisions similar to the 2007 contract at GM. Delphi and the UAW reached a seven-year deal to pay new hires permanently lower wages and benefits. ¹³⁴ This caused reactions at both Delphi and GM. ¹³⁵

 $^{^{132}}$ Michel Freyssenet, ed. The Second Automobile Revolution: Trajectories of the World Carmakers in the 21st Century (Basingstoke: New York, 2009), p. 104.

¹³³ General Electric and its CEO Jack Welch are well-known proponents of this trend.

¹³⁴ Tetsuji Kawamura, ed. *Hybrid Factories in the United States: The Japanese-Style Management and Production Systems under the Global Economy* (Oxford: Oxford University Press, 2011), p. 109.

¹³⁵ Gregg Shotwell, *Autoworkers under the Gun: A Shop-Floor View of the end of the American Dream* (Chicago: Haymarket Books, 2011).

In the same year, UAW went back to renegotiate its retiree healthcare costs in Tier 1 facilities. These negotiations in a blueprint to transition to a Voluntary Employee Benefits Association (VEBA), which takes the post-retirement healthcare commitments from the shoulders of the company and transfers them to an independent fund run by an independent board. The transition to a VEBA was planned to be completed by January 2010. GM and other carmakers committed to making cash transfers to the fund during the five year long transitionary period. This was Detroit Three's first great tackle of the "legacy costs," and it applied both to current employees and retirees.

The two-tier system implemented in the 2007 NA did not entail any new provisions regarding VEBA. However, healthcare through VEBA was only given to traditional employees and current retirees. Entry-level workers were denied any post-retirement healthcare benefits. The two-tier system did not only deny any post-retirement healthcare coverage for new employees, it also raised the cost of healthcare for active workers. Compared to traditional employees who do not have any copays or fees, new hires pay are subjected to copays and fees. ¹³⁶

Neither the 2005 renegotiations nor the 2007 NA addresses the pension or suggested any solutions to this long-term commitment of GM. In fact, this was not on the table during the bailout renegotiations either. In his book, Steven Rattner shares an anecdote where pensions were suggested as a main problem during the talks, but as soon as these words were uttered Ron Gettelfinger, then president of the UAW, threatened to leave the table should pensions become part of the agenda. Rattner and Team Auto did not bring this issue up again. ¹³⁷

¹³⁶ See, the 2007 NA, Entry Level Benefit Agreement.

¹³⁷ Rattner, Overhaul.

The implications for entry-level workers, who were denied any defined pension to begin with, were completely different. Instead entry-level workers were only offered a 401(k) plan, where the company pledged to match up to 6.4%. Once again, the deal was reached with a view towards the ability to hire who had yet to step foot inside a plant. UAW conceded for lower tier benefits to protect the pension of its traditional workforce. This strategy was widely criticized by many, most ironically by Steven Rattner, who accused the UAW of selling out its future employees for the comfort of its current employees. ¹³⁸ UAW's strategy was actually consistent those of the last three decades, during which time it focused on job security and protecting benefits for its existing workforce and for retirees. However, during this period, GM's employment numbers were in steady decline. Post-bailout, this has become a major issue as the companies began hiring new employees off the street, which rendered the strategies utilized thus far insufficient.

Furthermore, UAW's main focus of protecting its traditional workforce first has more recently been undermined as the 2011 NA saw zero raise in pensions for the first time in UAW history. Additionally, the transition to VEBA was completely restructured during the bailout. Thus, in the 2009 M, steady cash contributions from the companies was altered so that VEBA was given a onetime allocation of \$2.5 billion from the government as well as a 17.5% share of the new GM. The 2011 NA had no key provisions on benefits other than the zero raise for the pension fund.)

¹³⁸ Ibid.

¹³⁹ For more details see, the 2009 M.

 $^{^{140}}$ UAW basically gave up the scheme of guaranteed cash transfers to VEBA and instead agreed to own 17.5% of the new GM.

What is the significance of these changes to wage and benefits from an industry point of view? As Arne Kalleberg argues: "The United States stands out among the world's major economies in its distribution of key benefits through employers as part of the employment relationship rather than as a right of citizenship through social legislation." ¹⁴¹ GM was one of the largest of such employers ¹⁴² and because of its unionized workforce, it was behind other companies in transitioning to a market based model that began to take off in the 1980s. ¹⁴³ 401(k) plans, which were introduced in 1980 but picked up quickly and replaced defined benefit plans in the American retirement market, are now the norm for GM's entry-level employees. GM was able to accord its healthcare and pension system with the rest of the economy during this key period of crisis and restructuring. ¹⁴⁴ In a period of roughly ten years, GM was able to restructure its retreat from the realm of benefits. In a union shop, this is harder to accomplish, which is why the two-tier system played a key role. Instead of pursing cuts across the board, management negotiated for tiers to secure a gradual transition.

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¹⁴¹ Kalleberg, *Good Jobs*, *Bad Jobs*: p. 123.

¹⁴² In fact, because of its massive healthcare fund, GM was often mocked for being in the healthcare business and making cars on the side.

¹⁴³ Two brilliant studies explore the marketization of healthcare in the U.S. The first one pays attention to the critical role of the insurance companies, while the second one looks closely at doctors and lobbyists. See, Jennifer Klein, For All These Rights: Business, Labor, and the Shaping of America's Public-Private Welfare State (Princeton University Press, 2003); Colin Gordon, Dead on Arrival: The Politics of Health Care in Twentieth-Century America (Princeton: Princeton University Press, 2003). For another brilliant analysis focusing on the rise of 401(k)s and how they replaced defined pensions, see, Alicia H. Munnell and Annika Sunden, Coming Up Short: The Challenge of 401(k) Plans (Washington, D.C.: Brookings Institution Press, 2004).

¹⁴⁴ Munnell and Sunden give a brilliant account of transitioning from defined benefit plans to defined contribution plans. They also address the vulnerability of defined contribution plans because of not only their dependence on market volatility but also the reluctance of a younger workforce to participate in such programs earlier in their careers. See *Coming Up Short: The Challenge of 401(k) Plans*. A similar problem was seen in the participation rate of young generations' in the Affordable Health Care programs. Younger workers often opt out of such private welfare mechanisms, while pushing back their retirement age, which makes them vulnerable to potential health problems.

Overall, the wage and benefit gap between the two can add up to 70% difference of compensation. As enormous as it is, these are not the only changes that altered the dynamics of the floor in the last ten years. Changes in the job security framework represent another important shift, which we are discussed in the next section.

Job Security

UAW never confined itself to the negotiation of wages and benefits only. On the contrary, many argue that the issue of job security was a more immediate concern and its importance only increased after 1980 when downsizing became the priority of management. ¹⁴⁶ One such strategy to obtain job security was to contractually force the management to hire new workers to replace retirees. In the 1996 agreement, the ratio was one for two. This rule was respected by Ford and

¹⁴⁵ See CAR report for a comparison: McAlinden, *The Meaning of the 2003 UAW-Automotive Pattern Agreement*.

¹⁴⁶ GM's global footprint increased simultaneously in the same era. Production in Mexico began in 1981 with the first plant in Ramos Arizpe (which includes a sister powertrain facility of Tonawanda Powertrain) along with new investments in Brazil and Argentina starting in the mid-1990s. A plant in Vietnam was opened in 1993. Opel, a fully owned subsidiary of GM, expanded its operations in Eastern Europe after the end of the Cold War like many other German carmakers. Opel's focus was Hungary. GM is a major actor in South Korea as well since it overtook Daewoo's production capacity after the 1997 Asian crisis. GM started its joint venture in China (Shanghai General Motors Ltd.) in 1997 and began production in 1999. Chinese law mandates a minimum of 50% Chinese partnership for foreign automakers at the OEM level. There is no such restriction on suppliers. In other words foreign companies can fully own and operate parts manufacturers. GM is now the market leader in China with about 3 million units produced and sold. The trajectory of GM's global footprint is an issue. Current policy decisions show us that the company is planning to expand its operations in Mexico. Mexico's labor regime, proximity, and key advantages stemming from the trade deals it is part of such as NAFTA and TPP make it the ideal place to invest. About the 80% of Mexico's car production is for export to the U.S. only. So Mexico has a unique position within GM's global footprint. China is not expected to grow as much, which has so far grown spectacularly. China is also a different market because 95% of the cars made in China are sold in China. In an extremely globally connected economy, Chinese OEM market surprisingly shows the characteristics of a closed economy. Everywhere else, GM is planning to either keep its production at its current levels or stall production permanently. Brazilian GM plants (there are three at the moment) are under a constant threat of plant closure. GM recently shut down its St. Petersburg plant in Russia, which it opened in 2009. GM's European strategy is constantly changing as well, which keeps its European leg Opel under constant pressure. The European market is huge with its roughly 18 million-a-year capacity, however it is also flooded with major competitors. Because GM's share is only about 1.1 million units a year (around 6.4 percent as of 2015), it is hard to sustain and justify its presence in the region. All of these global developments have a direct impact on job security issues in the U.S. All numbers are compiled from www.statista.com. For a specific analyses of the U.S., see H. G. de Gier, Paradise lost revisited: GM & the UAW in historical perspective, Working paper series in management (Nijmegen: Nijmegen School of Management, Institute for Management Research, Radboud University, 2010).

Chrysler but ignored by GM almost completely, which resulted in many strikes in various GM locations during the second half of the 1990s. 147 These strikes pushed the UAW to bargain for another model in 1999, which is generally known as the benchmark minimums (BMM). Determining a very complex set of benchmarks for each locals, this model mandated that management hire new workers once certain benchmarks were reached. 148 None of these employment security measures prevented GM from reducing its employment from an historic peak in 1979 at 618,365 to 150,000 in 1999, and 125,000 in 2003. The number as of 2015 is 53,000. 149

Many of these job security measures were later integrated with an umbrella program called JOBS Bank, a program introduced to the contract in 1984¹⁵⁰ that aimed to provide an additional safety net against the layoffs resulting from outsourcing and new technologies. The purpose of JOBS Bank is explained in Appendix K, a 41-page, detailed memorandum responding to a very urgent question: how will the workers, who are affected from downsizing caused by outsourcing, technological retooling and other managerial choices, be handled?

¹⁴⁷ McAlinden, *The Meaning of the 2003 UAW-Automotive Pattern Agreement*. p. 23.

¹⁴⁸ Ibid.

¹⁴⁹ GM's employment globally fell in the same period thanks to the reorganization of work and labor-saving technologies. So the reduction of the workforce in the U.S. does not correspond to an equal increase abroad. GM employed around 216,000 worldwide as of 2014 (http://www.statista.com/statistics/239843/employees-of-general-motors/). This includes the hourly and salaried employees combined. Approximately 25% of this number is the hourly workforce in the U.S., which indicates strong presence of GM in the U.S. However, GM's worldwide employment at the time was 853,000 compared to 216,000 today. In other words, 72% of GM's global workforce was located in the U.S. in comparison to 25% today. Along with the staggering decline in numbers, we also observe a dramatic shift in the geography of GM's workforce. Also see, http://www.cbsnews.com/news/general-motors-timeline/

¹⁵⁰ Until 1999, the lifetime of the contracts between the UAW and GM was three years. 1984 agreement is an outlier though. It came out of a need to renegotiate the controversial 1982 agreement. Problems stemming from plant closures, job reorganization and other issues such as the profit sharing schemes brought parties back to the table a year before the expiration of the 1982 contract.

The cornerstone of the JOBS Program is a commitment that: No employee with one or more years of seniority will be laid off as a result of the introduction of technology, outsourcing or negotiated productivity improvements.¹⁵¹

This document clarifies technology and outsourcing as follows:

Technology for the purposes of this document only is defined as any change in product, methods, processes or the means of manufacturing introduced by management at a location which reduces job content of existing work at that location." (...) Outsourcing (...) means the Corporation's sourcing to non-General Motors Companies in the U.S. or Canada. 152

As I will show later in the third and fourth chapters, there are no workers with seniority in Tonawanda who were not laid off during the turmoil in the early 1980s. ¹⁵³ Appendix K and the JOBS Bank established in accordance with it (basically a fund) provided a safety net for employees when it was most needed. I consider Appendix K to be a progressive settlement between the management and the union especially given the circumstances in it was negotiated. Workers needed 52 weeks to qualify for the program and the bank had a budget of \$1 billion in 1984. The extent and scope of the program was a bargaining matter in every single national agreement. In 1990, workers only needed 36 weeks to qualify for the overage while the funding for the bank soared to \$4 billion. In 1993, the amount in the bank was \$4.3 billion. ¹⁵⁴ The guiding principles of providing an additional safety net against the layoffs resulting from outsourcing and new technologies, remained the same during this period. ¹⁵⁵

When the JOBS Bank was first implemented in 1984, the emphasis was on operational effectiveness and job security. In the 2003 NA, we see more emphasis on the competitiveness of

¹⁵¹ 1984 National Agreement, p. 185

¹⁵² 1984 National Agreement, pp. 185-186.

¹⁵³ Some stayed out of work longer than when they were employed (as many as five years), so when they returned to work their corporate seniority dates were readjusted.

¹⁵⁴ McAlinden, *The Meaning of the 2003 UAW-Automotive Pattern Agreement*. p. 9.

¹⁵⁵ Appendix K and the JOBS Bank were not intended to cover layoffs resulting from fluctuations in sales.

the company while at the same time the emphasis on layoffs due to new technologies and outsourcing disappeared. A new parameter called Secured Employment Levels, another benchmark like the ones I discussed above, altered workers' eligibility to the JOBS Bank. The funding for the bank was reduced to \$2.107 billion, and in 2007, JOBS Bank coverage was eliminated for entry-level employees. Whether there was a view toward workers becoming eligible as they transitioned to Tier 1 is not clear, though management expressed such an interest in 2007. It also expanded the coverage at that time to all kinds of layoffs instead of very particular ones, while funding for the bank was increased slightly to \$2.211 billion.

Thus, as of 2007, the JOBS Bank provided an additional safety to those who suffered from uncertainties of the industry in spite of diversions from its original purpose and changes to its coverage structure. A relatively well-funded program was helping workers temporarily during transition periods, giving additional coverage other than unemployment benefits. The bailout altered this irreparably.

The JOBS Bank was first suspended in 2009, and was completely restricted in 2011 to express the new philosophy of job security. With its new title *Memorandum of Understanding: Creating and Preserving Jobs in GM*, Appendix K in the 2011 NA, says the following:

The Company¹⁵⁶ and the Union are both committed to creating and preserving jobs for both current and future. General Motors employees. The Parties also recognize that such job creation and preservation can only be realized within a work environment which promotes operational effectiveness, continuous improvement and competitiveness. (...) To this end, during the 2011 National Negotiations, the Parties discussed at great length the fact that such a commitment to job creation and preservation will require ongoing, close cooperation. An excellent example of such close cooperation was set during negotiations by the establishment of several joint working teams which were dedicated to the task of identifying, evaluating and recommending opportunities for growing UAW-GM jobs at competitive cost levels. The successful output of these work teams served as demonstration that the Parties can have frank and constructive discussions relative to

¹⁵⁶ Underlined sections in the contract represent newly added text. The reason why "Company" is underlined is due to a name change after the bailout, from General Motors Corporation to General Motors Company. This was a legal matter to differentiate the Old GM from the New GM and has no other significance.

preserving and creating jobs and that in doing so, arrive at mutually beneficial resolutions which improve the Company's financial performance as well as add UAW jobs to the work force.

The Parties overwhelmingly support establishing a framework and process that will see this type of joint effort to continue on an ongoing basis during the term of the 2011 Agreement. This framework and process will encompass activities at both the National and Local levels and will involve the appropriate Management and Union personnel required to assess and act upon identified opportunities. The parties support the idea that a strong manufacturing base is essential not only to maintaining a healthy Company and healthy Union, but is essential to the United States economy overall. ¹⁵⁷

I have cited such a long section of the appendix in order to underline the intentional ambiguity of the document. It resembles a student paper that has no point or direction, and concludes with an extremely vague comment on the health of the American economy. Unlike Appendix K in previous contracts, which was straightforward and detailed, this document replaces a safety net with an elusive emphasis on joint efforts. It removes the fund permanently. Job security (or the creation and preservation of jobs in GM, as it is called in the contract) is redefined as a joint effort that responds to the competitive pressures of the market. 158

The JOBS Bank's highly bureaucratic structure had one major unintended consequence. GM's facilities were scattered around the country at the time of its installment. The dense network in Southeastern Michigan was accompanied by diasporic plants in other states such as New York,

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¹⁵⁷ Underlined sections in the national contracts denote newly added sections.

¹⁵⁸ The emphasis on joint efforts in this document is quite misleading. The Quality Network approach, which puts was an outcome of a similar concern over the quality of production in the 1980s, puts a lot of emphasis on joint efforts. It was more than just rhetoric. Locals were required to address quality issues collectively and create several positions administered jointly. With appointed personnel from both management and the union, these positions were in charge of identifying, and resolving issues of quality and other production related problems. However this approach is on the decline. In many locals quality network positions are either completely vacant or function with a union appointee only. Quality Network is not disappearing without a replacement though. On the contrary, it is progressively being replaced by another production philosophy called GMS (General Motors Global Manufacturing System). Every car manufacturer has a production philosophy akin to this. At Chrysler it is called World Class Manufacturing, and at Ford it is called Ford Production System Basically all of them are variations of the Toyota Production Model. The duplicate tasks are identified even in the contracts. For an example see Document 148, and Attachment E to Document 40. Both of these documents acknowledged the overlaps and suggest a gradual transition to GMS. This transition is important because GMS, like all other versions of the Toyota Production Model, leaves very little room for joint efforts as management is not willing to share or discuss the decision making process. Constant input from the employee is key but this process is completely under the control of management.

Texas, California, Kentucky, etc.¹⁵⁹ As GM scaled down its production in the U.S., it closed numerous plants. Thanks to the costs associated with relocating workers from permanently shut down facilities to existing ones, the corporation chose not to shut down its diasporic facilities. This was due to the absence of nearby plants for relocation, which would put workers in the JOBS Bank almost automatically. Relocation to a distant facility was not only costly to the company—as much as \$15,000 for a temporary workers and \$30,000 for regular workers—but also undesirable for workers themselves. It was more feasible and less costly for the company to shut down plants in the Southeastern Michigan cluster, meaning lots of relocations in that geographic area. During my research I encountered a worker who was working at his seventh GM location in Michigan. ¹⁶⁰ As a result, GM's diasporic plants, Tonawanda Powertrain being one of them, were able to survive the great wave of plant closures. ¹⁶¹

The JOBS Bank in general provided a framework where workers were given certain options to choose from for a temporary period of time. In 2007, the entry-level wage and benefit agreement denied new hires from accessing it. In 2009, it was suspended, along with COLA and other work improvement programs. In 2011, it was removed permanently and replaced with a very vague document on improving competitiveness through joint efforts. This is important, because it marks a shift from corporate responsibility for job security toward individual responsibility for

¹⁵⁹ The term diasporic refers to plants far from GM's dense Southeastern Michigan network. The auto industry around the world still relies on clusters rather than individual plants far from certain networks. The main reason for this is the complex system of sourcing different parts on a very tight time schedule. OEMs need to be in proximity to their suppliers to sustain a production model based on minimum stocks and maximum efficiency.

¹⁶⁰ These workers are usually referred to as GM gypsies. As a result of plant closures in the Southeastern Michigan area, recently Region 1A merged with Region 1, which means Flint area does not have enough members to support its own region.

¹⁶¹ Tonawanda Powertrain hired no new hourly employees in the production side between 1996 and 2006, retirees were replaced with workers from other plants. The largest group was Delphi transplants from nearby plants, mainly Lockport, during the Delphi spin off in 1999. These workers came to Tonawanda around 2000.

remaining and/or becoming competitive at the local level. The elimination of the prior model, which was structurally solidified with the bailout, contributed to the insecurity imposed by market conditions. After changes in the compensation structure, this constitutes the second element of the changing bargaining structure. This also relates to the next section, as one of the crucial elements of competitiveness was to promote temporary work on the floor. Next we will look at the evolution of temporary work in UAW contracts.

Flexible Employment: Temporary Work/ers

UAW never allowed the penetration of temporary workers on a large scale, though it is the norm in transplants. There was always a concern about outsourcing, but none of the Detroit Three was able to bring temporary workers to the floor on a long-term basis like their competitors in the industry. Outsourcing was an important bargaining item, but it was often about temporary jobs such as installing machinery and fixing equipment. Those who were hired for production work on the floor, on the other hand, were transitioned to permanent status in a timely manner. In other words, permanent temporary work did not exist. Before 2009, temporary work was not a classification, but it became so in 2009. The paragraph below, from the 2009 M, justifies this shift as follows:

Competitive data was reviewed to understand the practices in effect at other companies. Discussion centered on implementation of a plan that will provide a balance between traditional and entry level employees with a variable workforce composed of flexible (flex) employees and vacation replacement employees. (...) The following agreement establishes a new category of employees called 'Flex Employees.' ¹⁶³

¹⁶² For instance, the 2007 NA that introduced the two-tier system acknowledges temporary work, and as part of the negotiations it entailed converting 2,800 temporary employees to Tier 1 status. See, the 2007 NA, Page 211.

¹⁶³ 2009 M, p. 81

The 2009 M suspends Section 8 of Appendix A covering temporary workers and was completely rewritten in 2011. A flex employee is only allowed to work on Monday, Friday and weekends; typically to solve the problem of absenteeism. The 2011 NA also rewrites the section on temporary work, adding temporary workers as a classification. These are not to be confused with entry-level workers, who are permanent. Flex employees do not accrue seniority, cannot benefit from union protection and are not subject to the same work rules. As a new category institutionalized after the bailout, this shows management's push for further flexibilization on the shop floor. The 2011 NA defines the workforce composition as follows: "GM Assembly, Stamping and Powertrain operations will utilize a production 'need to run' workforce comprised of the following: Traditional, Entry Level, Flex Employees, Vacation Replacements and other employees hire for Temporary Work. 164* The addition of flex employees and other employees for temporary work to the workforce composition allows the company to utilize non-standard employment models. In other words, the Detroit Three aimed to have the flexibility its competitors enjoyed since their arrival to the U.S.

However, the bailout was unable to implement the level of flexibility that is enjoyed by transplants to the UAW represented plants, nor did the 2011 NA grant such flexibility. The mere existence of a collective bargaining process pushed parties to develop a joint framework to determine the penetration of temporary workers on the shop floor. In other words, management was forced to consult the union. Section 11 of the same Appendix A, which is titled "Request for Employees," states the following:

After discussion with the local union and advanced notification to the International Union, UAW, outlining the reasons for the hiring and anticipated timeframe of employment, Management may hire Flex employees and vacation replacements. A change in flex employee's work schedule from

¹⁶⁴ 2011 NA, page 191.

a part-time to full-time assignment of a known duration to support a new product launch, fluctuations due to transition in the workforce (...) or temporary volume increases will require joint agreement. 165

The union is part of the process, because contractually any long term employment of a temporary employee requires joint approval of the union and management. The language in the 2011 NA is different than in the 2009 M; although it puts more emphasis on flexibility and competitiveness, it also establishes a mechanism of dual approval, which restricts the employment of temporary workers on a large scale. In fact, as we will see later in the third chapter, at its peak, Tonawanda Powertrain had 150 temporary employees, which roughly constituted less than 10% of its hourly workforce.

The evolution of temporary work at GM is important for two reasons. First, it represents the introduction of one of the most central features of a neoliberal labor regime to the shop floor. Even though compared to transplants, which rely on temporary workers for up to 50% of their workforce, the penetration of temporary work is quite limited, it nonetheless means a threshold was crossed, in keeping with an international trend. Formerly a taboo, "permatemps" now form part of everyday life at UAW shops. Second, the union still plays a key role in controlling the volume of such workers to the floor. The dual approval process is a key contractual obstacle to flooding the floor with temporary workers. However, two other developments show the limits of the current balance in first tier plants. First, GM management is aggressively hiring more temporary workers in its second tier GMCH plants. The Lockport plant's workforce, for instance, currently comprises about 30% of temporary workers. As the evolution of the two-tier system showed us, management may pursue similar adjustments in its first tier facilities as well. Second,

¹⁶⁵ 2011 NA. 195-196.

FCA requested a higher cap for its temporary workers in 2015, which it was unable to attain. However, these two examples show that management at the Detroit Three is interested in introducing more flexibility to the shop floor if and whenever possible. The next section discusses the skilled trades.

Skilled Trades

The transformation of the maintenance department stands apart from the sections above, as it was less about compensation and more about work rules, job assignments and headcount reduction. It was also mostly imposed by the bailout. Policies such as the two-tier system and the transition to VEBA in healthcare were in the pre-bankruptcy 2007 agreement, but the provisions regulating the skilled trades were either non-existent or only appeared as a set of suggestions without implementation. Thus, shedding light on the transformation of the trades gives us a unique opportunity to see the priorities and characteristics of the government intervention. In this section, we shall focus on these changes. But first, I will briefly explain who skilled tradespersons are, what they do, and how they are different than others on the shop floor.

Who are the Tradespersons?

Tonawanda Powertrain has around 280 skilled tradespersons as of 2015. Out of 1,500 hourly workers, they constitute 18% of the workforce. They are a specific subset of the hourly workforce in an auto plant. They are in charge of maintenance and clearly demarcated from the production workers on the assembly line and the machine floor. They are not directly involved in production but instead are responsible for the maintenance of the machinery used in production. Often referred to as the firemen on the floor, tradespersons are on call during their shifts and perform their duties if needed. Since factories have a large number of machines with a wide variety working on a constant basis, skilled tradespersons' services are often needed and vital to

maintaining the continuity of production. They have their own separate space with personalized desks, drawers and tool kits next to the production area, but they are not required to remain in this space. Quite the opposite, they are highly mobile and allowed to wander the floor as they wish as long as they are not on active duty.

They are also clearly differentiated from the engineers and supervisors. An engineer is not expected or allowed to go ahead and perform a skilled tradesperson's job, however they have the authority to give directives. In fact, an engineer could ask a tradesperson to perform a certain task the tradesperson disagrees with, yet engineers cannot perform these jobs. The distinction between the two is not only marked by job definitions, responsibilities and approaches to work but also by their contractual status: skilled trades are hourly workers and are thus members of the union, whereas engineers are salaried and are thus considered management.

Skilled tradespersons are also clearly differentiated among themselves. Generally known as the "lines of demarcation," skilled trades classifications have been in effect for decades and the tradespersons have not only been very sensitive and vocal about the importance of the lines of demarcation but also very careful about not crossing them. This is often considered one of the legacies of the craft union tradition, and rather than disappearing over time with the rise of industrial unionism in the 1930s, it was consolidated and solidified over the years.

All three of these separations—the demarcation from the production workers, the demarcation from the engineers, and the lines of demarcation among themselves—were considered obstacles that prevented management from implementing more flexibility into the maintenance department. These problems were addressed in the two contracts before the bailout, but in a very weak way. The 2009 M and the 2011 NA, however, tell a different story. The attack of these agreements on lines of demarcation is a principal reason why UAW members consider

the 2008 recession and the subsequent bailout/bankruptcy to qualify as such a rupture with the past.

There are few characteristics of demographics and status within the union that distinguish the trades from other groups on the floor, and these are important for understanding the sociology of the group and their critical role in the negotiations. Skilled trades are heavily white and male, and their average age is significantly higher than the rest of the workers—hourly or salaried. 166 Even though these issues are often acknowledged and criticized, both by the management and the union the race and gender gap has always existed and has never been bridged despite efforts to do so. To many, the trades are designed to remain this way, and over time, skilled trades have become one of the most exclusive and exclusionary structures of the labor market across industries. 167

The gender imbalance is acknowledged by the 1984 National Agreement, which calls for recruiting more women and people of color to apprenticeship programs. 168 This was a critical moment with real potential to change union demographics, because the skilled trades population was on the rise due to the introduction of more technologies. 169 However, it barely changed it at all. At Tonawanda, women are especially underrepresented while people of color are better represented. The number of women in skilled trades is less than five while there are about 20 African-Americans in the trades. This leaves today's trades department as still predominantly white and male.

¹⁶⁶ In my research at Tonawanda Powertrain, the average age of tradespersons was around 55. Tradespersons with seniority of over 35 years of service were not anomalies, and there were only a few under 30 years old, with not more than 20 under 40 years of age. Tonawanda Powertrain had around 280 skilled tradespersons as of June 2015.

¹⁶⁷ Michael J. Piore and Charles F. Sabel, *The Second Industrial Divide: Possibilities for Prosperity* (New York: Basic Books, 1984); Stanley Aronowitz and William DiFazio, The Jobless Future (Minneapolis: University of Minnesota Press, 2010).

¹⁶⁸ 1984 National Agreement, pp. 174-175.

¹⁶⁹ Milkman, Farewell to the Factory.

Ann Francis, a retired pipefitter from GM's Oldsmobile Plant in Lansing, MI, wrote a dissertation thesis on women's status in the auto industry, exploring the long history of gender imbalance in the auto industry. Aptly called "the journeys of the uninvited," Francis, who became a trainer later on in her career, critiques the structural resistance to the introduction of more women in skilled trades despite the fact that national agreements acknowledge this as a problem as early as the 1973 National Agreement. Appendix H from 1973 refers to the disproportionate gender ratio as a major problem. Surprisingly, this language was removed during the 2009 bailout. Starting from the 2011 agreement, Appendix H is no longer part of the agreement. This cannot be due to the elimination of the problem as the skilled trades department is still predominantly male dominated. 171

The second feature that distinguishes the tradespersons from others is their privileged role and relative control over contract negotiations. By "privilege" I mean the disproportionate representation of tradespersons within the ranks of the union and their free time on the floor. In contrast to production workers who are stuck in their stations, tradespersons are mobile and spend more time communicating with others. Therefore, ever since the start of the union, the UAW has always been led by the skilled tradespersons, both at the local and national levels – a structure that has remained nearly intact despite significant changes in the industry over time.

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¹⁷⁰ Ann Francis, "Journeys of the Uninvited: A Feminist Oral History of Skilled Tradeswomen in the Auto Industry" (The Fielding Institute, 2000).

¹⁷¹ Despite UAW's sensitivity on the subject in previous contracts (see the 1973 and 1984 national agreements), there were no particular provisions on women during the bailout negotiations or afterwards. GM, which is run by a woman, CEO Mary Barra, has a relatively better public image, as its union counterpart is also headed by a woman, UAW's president of GM operations Cindy Estrada. This representativeness on top is not well reflected on the floor. However, GM's increasing ratio of women on the assembly line may indicate a changing trend. This will also depend on the dynamics of labor market in these locales.

What I mean by control, on the other hand, has more to do with their contractual privileges. Skilled tradespersons ratify the national agreement separately. ¹⁷² Even though they only represent about 20% of the workforce (this ratio fluctuates significantly over time and I will discuss this in detail below) they can strike a contract down, which carries their concerns to the top of the agenda during negotiations. This right is an offspring of the period of major unrest on the floor in the 1950s and 1960s and was granted in 1966. ¹⁷³ It had a lasting impact on negotiations and as a practice that is still in use, it continues to play a major role in the process and outcomes of negotiations.

Thirdly, skilled tradespersons make more money than other hourly workers. There are two main reasons for their higher earnings. First, their hourly wage is higher—\$3 to \$5 an hour more than production workers depending on the skill classification—and second, they are offered more overtime opportunities because the job they perform is so crucial to ongoing production. In order to avoid any downtime, which is often considered a cardinal sin in an auto plant, their services are even requested over weekends when production has slowed down (as opposed to being shut off).

¹⁷² The extent of skilled tradespersons' power to reject a contract has always been a matter of debate. According to the mainstream interpretation, tradespersons are technically only allowed to negotiate skilled trades-related issues separately, and when they reject a contract based on non-skilled trades related matters, the International reserves the power to overrule it. There are three instances in the history of collective bargaining for such cases, two of which are recent: 1973 Ford, 2011 Chrysler and 2015 GM. In all three cases, tradespersons rejected the national contract, however the International overruled their rejection and ratified the contracts. The two most recent cases indicated friction within union leadership and the membership. For a brief analysis of these cases, see: http://www.detroitnews.com/story/business/autos/general-motors/2015/11/10/gm-uaw-skilled-trades-workers/75551360/ As the article shows, there is no clear consensus in every case over whether the International is allowed to push the deal when the tradesmen have rejected it for reasons that also apply to workers on the production side. A retired tradesman cited in the article says: "I understand that our constitution reads a certain way, and I really do think that people will never win this argument like this. (...) If they want this not to happen again, they've got to get in and change the constitution."

¹⁷³ UAW historian John Barnard argues that this decision further solidified tradespersons' position as a privileged minority on the floor. See, John Barnard, *American Vanguard: The United Auto Workers during the Reuther Years*, 1935-1970 (Detroit: Wayne State University Press, 2004). p. 369. Also see, Kevin Boyle, *The UAW and the Heyday of American Liberalism*, 1945-1968 (Ithaca: Cornell University Press, 1995). p. 97.

With higher overtime pays, in some cases, skilled tradespersons can make as much as \$100,000 a year. ¹⁷⁴ Even though a two-tiered system for the skilled trades was never on the table, skilled trades overtime compensation was brought to the table and stirred a heated debate on the floor. ¹⁷⁵

Last but not the least, we should emphasize the *promise* of the skilled trades. Transitioning from being unskilled to skilled matters a lot to workers. Even though the ancient skilled-unskilled dichotomy is challenged by both the management and the union, it still persists, which makes the switch a valuable one in itself. However the promotion goes beyond a mere linguistic change. GM, along with the two other Detroit Three companies, Ford and Chrysler, has quite thorough apprenticeship programs, which often run parallel to the state apprenticeship programs. Such programs often functioned as gatekeeping practices, which preserved skilled trades' extremely white and male demographics for decades. It was also a major way of controlling the supply of tradespersons and thus, employment levels. However such programs also provide a ladder for workers in production to move up in the hierarchy without leaving the plant, while providing job security and union membership. In addition to higher pay, better job security, and more chances to be active in the union, skilled trades also appealed to the workers, because it got them off the assembly line, which is considered repetitious, boring, degrading and alienating while offering no room for self-improvement. To learn a trade with certifications recognized throughout the state—

¹⁷⁴ Throughout my interviews, I heard so many different figures about how much a worker could make should s/he take all the overtime opportunities available. Some of these figures go as high as a quarter million a year. Such figures seem extremely unlikely and almost impossible. \$100,000 is a more realistic figure. What I consider more important is the meaning of such talk on the floor. It tells us a lot about the way skilled trades are seen by others on the floor, i.e. as a lucrative subset of workers making *easy* money. Respect and contempt among production workers were often mixed when it came to the status of the skilled trades.

¹⁷⁵ Skilled trades also enjoy higher job security, but I will discuss this later in detail.

and throughout the nation in most cases—is also beneficial outside the plant in case of a permanent layoff and/or plant shutdown.

The characteristics listed above have all been addressed in the last fifteen years in the contracts, especially the issues blocking the introduction of more flexibility to the skilled trades classification. Starting from the 2003 contract, we see a constant effort to reorganize work in the field of trades, but the two key national agreements before the bailout, i.e. the 2003 and 2007 NAs, were at best weakly defined and weakly implemented. The 2009 M, on the other hand, introduced substantive and rhetorical changes, with provisions allowing instant implementation. The 2011 NA builds on this framework and solidifies the changes. Ironically, perhaps not surprisingly, neither of these documents addresses the gender or race gap in the trades. The focus is exclusively on the flexibilization of employment practices acquired by management.

Despite the lack of teeth, the 2007 NA lays out the main contours of the bargaining clearly, and I will use it as a template in the rest of this section. Issues raised can be summarized in six items:

- i) There are too many skilled trades classifications and they need to be reduced.
- ii) There are too many lines of demarcation between classifications and they need to be consolidated.
- iii) Training and apprenticeship programs need to be reorganized.
- iv) Minor maintenance jobs need to be relegated to production workers (through a Production-Maintenance Partnership, from now on PMP); this would eliminate some of the low-end skilled trades jobs.
- v) Overtime should be rearranged with what's called Alternative Work Schedules.
- vi) The "team concept" should be implemented.

Below I will discuss these six elements of transformation in three sections.

The Reduction and Consolidation of Trades, and the Introduction of the Team Concept

Management has been attempting to eliminate skilled trades classifications for decades. A letter dated April 20, 1955, penned by UAW's headquarters in Detroit, known as the Solidarity House, informs locals about the "elimination of 'bastard' skilled trades classifications." The letter says:

The National General Motors Negotiating Committee recommended to the National Council held in Detroit during the month of January, that one of the demands to be made on the Corporation should be to eliminate 'bastard' classifications in skilled trades. (...) That recommendation was approved by the National Council and accordingly, the demand for such elimination was made to the corporation. (...) This demand made it necessary that an exhaustive study be made of all skilled trades classifications in General Motors. As a result of this study, it was determined that there were 79 classifications in General Motors which covered work and could be considered as legitimate skilled trades classifications. 177

In fact, 79 legitimate skilled trades classifications is astonishing in comparison to the number imposed/desired by the management today, which is two: electrical and mechanical. Some of these 79 trades have been eliminated with the changing composition of technology while others such as the blacksmith were eliminated with GM's withdrawal from the metal forge and foundry business in its effort to focus on the core elements of auto production. Others, such as the bricklayer, are deemed non-core over time and outsourced to outside vendors in an in-need basis, while others are simply consolidated. For instance, instead of two different welder classifications for tool and die and maintenance and construction, there is now just one welder classification. This transformation speaks to two things: the changing nature of production and competition, and the changing nature

¹⁷⁶ Emphasis in original.

¹⁷⁷ Emphasis in original, italics added.

¹⁷⁸ The GM Tonawanda system also included a forge division, one within the complex and one in the city of Buffalo. With the American Axle spinoff in 1993, these facilities are separated from GM and later closed permanently, as American Axle relocated its entire production to Mexico. As of 2015, GM operates two forge facilities on a quite reduced capacity.

of the union's bargaining power. Before the bailout there were fourteen apprenticeable skilled trades classifications across GM.

The large number of classifications and the need for reduction was always a negotiation item, but until 2003, management failed to press its agenda. In fact, as the section from Document 112 in the 2003 NA shows us, the management even then took a defensive rather than an offensive position:

With regard to the skilled trades classification structure, the *Union expressed concern* over apprenticeable skilled trades classifications being consolidated. In this regard, *the Corporation observed that it will not dictate consolidation of apprenticeable skilled trades classifications to its plants*. The Corporation advised, however, that they intend to rely on the apprenticeable skilled trades classifications as the basis for our skilled classification structure moving forward. (...)With regard to work rules and past practice, the Corporation stated that many plants feel hampered in their efforts to enhance competitiveness in today's environment by *historically restrictive practices which originated at a time when competition was less threatening*. (...) Therefore, the National parties concur that local Management and local Unions *will be strongly encouraged* to review existing work rules and practices, especially in the area of Lines of Demarcation, to insure that only those necessary to protect the safety of employees, the integrity of the skilled trades, and the efficiency of operation in today's competitive environment are carried forward. ¹⁷⁹

Above, management starts by addressing the union's concerns about the consolidation of the classifications. After making sure that it will not dictate such consolidation, the document advises local and national committees working together to propose plans to increase competitiveness. Then, the corporation points to "restrictive work practices" and the need to change them as they were implemented at a time where there was no or little competition. Finally, the corporation "strongly encourages" local unions and management to review the existing work rules and improve them. The Lines of Demarcation Committees were established in plants across the company, but since the document had no executive power, recommendations for any large scale changes were

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¹⁷⁹ Ibid., p. 465. In the contract language, the underlined words indicate that they are added to the contract. Italics are mine.

rarely implemented. There were no particular changes in the field of skilled trades classifications with respect to this document.

Both the language and the content get more direct in the next national agreement, 2007 NA. The first paragraph is rewritten as the following:

The parties share a mutual desire to have the most competitive, highly trained, and flexible workforce in the industry. Therefore, the parties strongly encourage each location to review their current classification structure for the purpose of obtaining *world class benchmarks*. In this regard, the Union was advised that it is the Corporation's intent to continue to rely on apprenticeable skilled trades classifications as the basis for our skilled classification structure moving forward.¹⁸⁰

"World class benchmarks" are the only significant addition here. As it will become the norm after the bailout, these benchmarks refer to the skilled trades classification model in transplants, particularly that of Toyota. With regard to the work rules, the corporation more boldly underlines the competitive pressures and adds: "In recent years, the Corporation has experienced unprecedented competitive pressures and financial losses that have required the parties to address uncompetitive work practices." The emphasis on "uncompetitive work practices," which had never found a place in the national agreement before with respect to the skilled trades, directly calls the trades out and justifies the demand for substantive change in the next paragraph:

Therefore, the National Parties concur that local Management and local Unions will be *strongly encouraged* to review existing work rules and practices, specifically in the area of Lines of Demarcation, to eliminate situations that cause unnecessary delays or inefficiencies. The local parties should utilize their Lines of Demarcation Committees to actively pursue the formation of self-managed skilled trades teams, which could consist of multiple trades with overlapping work responsibilities in an effort to maximize efficiency and reduce the need to subcontract. Without restrictions on how the teams would interact, adherence to all applicable safety requirements must be observed. ¹⁸¹

This addition acknowledges the "team" system for the first time for trades. A key aspect of the lean production system, there is a very clear understanding of the ways in which the team model

¹⁸⁰ Ibid., p. 598, italics are mine.

¹⁸¹ Ibid., italics are mine.

functions on the assembly line or on the machine floor. However, in the field of skilled trades, which is technically composed of specialists of different jobs and tasks, the possible positive impact of assembling teams was highly vague. Despite its reach and large-scale ambitions, even in this document, where there is persistent effort to underline "uncompetitive work practices," there was no mandate to implement such changes on the floor. The 2007 NA still "strongly encourages" the parties instead of dictating a list of changes.

Another important addition to the 2007 NA was Document 159, entitled "Exiting Non-Strategic Skilled Trades Work." This document, for the first time, defined some skilled trades jobs as strategic and others as non-strategic. Reminiscent of the Toyota model, which draws a clear distinction between core and non-core work, GM kept its core (strategic) skilled trades work at home while outsourcing non-core (non-strategic) jobs to outside vendors. This document, still lacking the teeth to do so, is the first of its kind to detail the blueprint that management had in its mind and which constituted the basis of the 2009 renegotiations.

The document also defines ten non-strategic areas: construction, painting/glazing, carpentry, building envelope maintenance, specialty maintenance, certified welder maintenance, high voltage electrical distribution, building mechanical, building electrical and crane hoist repair/inspection. The rationale was to define any activity that is not directly related to production as non-strategic. The elimination of the number of trades from as many as 79 in 1955 to two today mostly required the elimination of non-production related jobs. Most of these job classifications are seen archaic and legacies of an era where there was no challenge of competition thanks to the market dominance of the Detroit Three. However, this transformation took a long time, thanks to

¹⁸² Page 683.

the leverage skilled tradespersons had within union leadership. Thus, even in 2007, the document only *strongly encourages* parties to discuss these issues.

Document 159 in the 2007 NA also draws an interesting blueprint for the transition. With regard to these non-strategic work functions as defined above, the document states:

"The preceding work functions will continue to be performed by existing bargaining unit employees until one of the following events occur:

- Transfer to another location
- Normal attrition
- Re-training to another trade
- Targeted SAP [Special Attrition Program]

As the workload requirements exceed the remaining resources, the work will be exited and not subject to the subcontracting provisions of GM-UAW National Agreement."¹⁸³

The corporation did not have the leverage to implement these changes right away and instead envisioned a gradual transition with the measures listed above. However, these measures had limited impact because transfers to other locations have always been complicated, and except for voluntary requests, they always occur under circumstances such as layoffs and permanent plant shutdowns. Hence, it is unrealistic to expect transfers to have serious short-term effects on exiting non-strategic work. The same applies to normal attrition, which basically means retirement and in some rare cases resignations.

Re-training to another trade has only become an alternative after the bailout. Besides, only workers who are worried about seniority are open to re-training. Older workforce members, who are the majority in GM's skilled trades classifications, have not shown any interest in these programs. SAPs (Special Attrition Programs, a fancy name for incentivizing resignations and retirement) are the only measures with a short- and medium-term effect. The 2007 NA had an

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extensive buyout program regulated under Appendix K. In Tonawanda Local, more than 300 people benefited from the program in 2008 and less than a fourth of them were in the trades.

Eliminating trades – via consolidation and elimination – and blurring the lines of demarcation between trades were two important elements of the pre-bailout bargaining scene. Many of these ideas found considerable space in the 2007 NA, while they were emphasized less before. Despite acknowledging these points, the 2007 NA did not have executive power in this realm. The existence of these points as warnings shows the perspective of the management and how they "define" the problem. The lack of executive power to do so, on the other hand, shows the situational power of the union despite a concessionary bargaining framework. The union, especially because of the asymmetrical representation of the skilled tradespersons' interests, stood against the pressures to implement structural changes even though they agreed to put them on paper.

This has changed during the bailout. With the executive power of the federal government and the liquidation hanging over their head, the union conceded to most of these changes to be implemented immediately. A simple but very dramatic change in the language of Document 112 proposes the following:

The parties *direct* each location to implement the provisions of Document 112 including:

- 1. Achieve a world class classification structure (apprenticeable classifications)
- 2. Implement approved training plans, which may extend beyond January 1, 2010.
- 3. Eliminate restrictive work rules and practices, specifically in the area of Lines of Demarcation
- 4. Form self-managed skilled trade teams, which will consist of multiple skilled trades with overlapping work responsibilities in an effort to maximize efficiency. 184

The first three items in this list were already in the 2007 NA, however there was no mandatory clause or road map attached. The fourth item, on the other hand, was first included

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¹⁸⁴ 2009 A, p. 30, italics are mine.

during these renegotiations. The idea of teams in the skilled trades akin to the ones in production was a novelty and a major leap from the earlier vague statements about team concepts. In spite of its emphasis on directing locals to implement changes, this document lacks a roadmap as well as a detailed to do list, which is often a main characteristic of a national contract.

These issues were later addressed in May during part two of the 2009 renegotiations, ¹⁸⁵ and the items were elaborated further. The new document defines five skilled trades classifications (with two others in plants with specialized tool and die operations). These classifications were not identified separately in the February agreement. Similarly the lines of demarcation and the consolidation of trades, which were the other important elements of Document 112, do not exist in the February agreement. The May agreement, on the other hand, encompasses a separate memorandum with much more thorough modifications: After a similar introductory paragraph justifying the change, one of the memorandums regarding the skilled trades says the following:

> Therefore in an effort to obtain the most flexible and efficient operating practices within our current workforce, the National Parties agree that all of our [facilities] (...) skilled trades classification structure can include the following classifications: electrician, pipefitter, machine repair, millwright/welder, and toolmaker (all manufacturing facilities) and tool & die (...). The parties clearly recognize the complexity and magnitude of the process necessary to restructure the manufacturing skilled trades workforce. To facilitate this transition, the National Parties agree that each manufacturing location will form multi-functional skilled trades teams for maintenance that are consistent with Documents #40 & #112 of the GM-UAW National Agreement. These teams will have members from different skilled trades backgrounds that will perform work across what had previously been existing lines of demarcation between them. 186

The focus above is on the formation of multi-functional skilled trades teams and limiting the number of skilled trades classifications. As noted earlier, the team concept for skilled trades is

¹⁸⁵ There are two rounds of negotiations during the long bailout process. The first round was in February of 2009. The results of this round were not seen as sufficient by the Obama Administration, and parties were sent back to a second round of negotiations. Management was able to extract more concessions from the union in May, and in exchange, management promised to commit production in the U.S. instead of shipping jobs to other countries, mainly to Mexico. The 2009 M includes statements and clauses from both documents and allows us to see the main elements of negotiations.

¹⁸⁶ 2009 A, p. 72, italics are mine.

a more challenging idea than it is for production, because the tradespersons are experts of different fields. Composing a team of different experts does not necessarily increase the functionality of the teams as they need to perform their tasks separately anyways. However, the "multi-skilled working group," as it is defined by Document 138 in the 2011 NA, does not simply refer to a group of different skill tradespersons coming together; instead, it aims to transform individual skilled tradespersons into multi-skilled individuals, forcing them to retrain.

It is astonishing to see that the first document to acknowledge the team system for skilled trades classifications actually goes a step further by fully implementing lean principles. Unlike the pre-bailout agreements, which often sought a gradual and incremental transition, this document pursued a structural transformation all at once. The same determination can be seen in reorganizing classifications and the implementation of new rules for the lines of demarcation. Unlike the brief and vague February document, the agreement in May proposes a detailed list and urges parties to implement them "ASAP upon ratification." The desired flexibility at the worker level is planned to be achieved through cross training, and this brings us to the critical training problem and the apprenticeship programs at GM.

Training and Apprenticeship Programs

GM, like Ford and Chrysler, has in-house apprenticeship programs, which constitute the main avenue of recruitment into the skilled trades. ¹⁸⁸ In-house programs were also seen as a major

¹⁸⁷ Ibid., p. 75.

¹⁸⁸ Research on Japanese transplants shows us that transplants are not interested in developing such programs. Their limited training programs had a specific design to increase worker's dependence on the company: "[T]he TMM goal of training workers in multiple skills that develop only half of what certified electricians, plumbers, and other skilled tradespeople learn to qualify for certification demonstrates that the ideal of a multiskilled worker in Toyota's management policy is a misnomer and points to the greater accuracy of the term multifunctioned worker (...). Much of the skills development falling into the technical training is company-specific skills training that reduces the worker's future or potential mobility because those skills are not transferable to other plants and companies. (...) Sadly the critical importance of the American apprenticeship model for the UAW has all but forgotten." See,

source of control over job security, since tradespersons have a say over recruitment processes and numbers. ¹⁸⁹ This made the recruitment process of workers to the apprenticeship programs a major element of negotiation. Besides, some trades were more in demand while others either became obsolete or lost their importance within the new organization of work on the floor. Thus, a layoff in one location did not automatically mean employment in another plant since not all classifications are high in demand. Document 63 addresses these two key issues. With respect to the first, the 2003 NA commits to recruiting a minimum of 2,250 apprentices and a maximum of 2,800. ¹⁹⁰ With respect to the second point, the contract proposes retraining programs for the laid off skilled tradespersons who cannot be hired in their current trades. Retraining, which is mentioned with respect to the "non-strategic" trades above, would later become a major issue after the bailout. But in the 2003 NA, the sole purpose of retraining is to reabsorb the laid off tradespersons. ¹⁹¹ The 2007 NA makes a more modest commitment of 1,500 apprentices during the lifetime of the agreement. The statement on retraining stays the same. This number drops to 1,300 in the 2011 NA.

William C. Green and Ernest J. Yanarella, eds., *North American Auto Unions in Crisis: Lean Production as Contested Terrain* (Albany: State University of New York Press, 1996), p. 155.

¹⁸⁹ In the environment of downsizing and plant closures, the need for tradespersons was often met by the relocated tradespersons, or as widely known as GM gypsies. I once interviewed Matt, a tradesman from a plant in Southeastern Michigan, who was currently at his seventh plant. The state of Michigan, thanks to the large number of plants to begin with, was affected from permanent plant closures more than other places. Despite his constant move from one closing plant to another, Matt never left the state of Michigan. I haven't encountered skilled tradespersons with so many transfers in Tonawanda.

¹⁹⁰ 2003 NA, Document 63.

¹⁹¹ "Furthermore, where changes in the type of operation, volume, product life cycle, or other reasons, have caused an excess number of Journeymen/women in a particular Skilled Trade/classification and placement in their trade/classification is not possible, the parties will pursue, where feasible and practical, the retraining of Journeymen/women to qualify them in another apprenticeable Skilled Trade in either their home plant or another GM facility, consistent with established Employee Placement Procedures. Such retraining could be done within or outside the GM-UAW Apprenticeship Program. In any event, any such retraining programs must be approved by the GM-UAW Skilled Trades and Apprentice Committee." Ibid.

The recruitment fell gradually over time. But this did not make the programs obsolete, because training in locals was not limited to training apprentices. After the bailout, the main function of these programs evolved into forming "multi-skilled working groups." The cross training that is necessary to train multi-skilled individuals in these groups was defined as follows:

Skilled team leaders and members will first undergo the *required cross training* necessary to enable them to perform all overlapping work assignments within their individual capability safely, *with no lines of demarcation*, and develop into a *highly flexible and more capable skilled workforce*. It is recognized that much of the initial required training will be acquired by 'on the job' training, in addition all other required related training will be provided. *The objective is to create an organization of skilled team leaders and team members who come from various skilled trades backgrounds and are developed into a truly multi-skilled working group.*¹⁹³

The commitment to retraining and cross training is solidified in the 2011 NA. To do that, Document 112 is completely rewritten instead of mere editing the 2007 NA.

The training programs' new focus, from recruiting new apprentices on the floor to retraining and cross training the existing workforce, marked a major shift. GM pursued flexibility and multi-functionality instead of training experts in one field. GM also diverted from offering certificate programs recognized state-wide. Such certificates increase worker's autonomy and reduce their dependence on the company. Under the new model, workers, who are trained in multiple skill categories, rarely fulfill all the requirements for certification in individual trades. Some of these skill training programs take as long as 5 years, which makes combining two or more skill programs and getting certified in all of these skills very hard. The model imposed after the bailout requires workers to be knowledgeable enough to perform tasks in other skill fields but not knowledgeable enough to qualify for certification.

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¹⁹² In some extreme cases, skilled tradespersons are also expected to perform production duties while they are not working as a tradesperson.

¹⁹³ 2009 A, p. 72, italics are mine.

PMP, AWS and other clauses on flexibility.

Skilled trades' demarcation from other production workers was almost always absolute. It was never challenged by the production workers nor was there any systematic effort on management's behalf to create gray areas between production and maintenance. In the 2003 NA, for instance, there is no clause on such partnerships nor are there any letters indicating intent to do so in the near future. However in the 2007 NA, we see the introduction of a completely new practice called "Production Maintenance Partnership" under the newly added Document No. 157. The document states the scale and depth of the intervention as well as the justification for it as follows:

During the current Negotiations, the Skilled Trades Subcommittee held extensive discussions over a wide range of issues surrounding the benefits associated with the implementation of Quality Network's Production Maintenance Partnership (PMP) system consistent with Lean Manufacturing principles that standardize work tasks. The key elements of the PMP system are:

- Production Operators use tools identified by standardized work to address out-of-standard conditions or perform repetitive activities to sustain production (such as cleaning, minor maintenance, or material tasks).
- Production Operators/Team Members/Leaders are first point-of-response to deal with out-ofstandard conditions with machinery and equipment including quality, material, or maintenance.

(...)

- Maintain proper fluid and lubrication levels in the operator's immediate workstation machinery.
- Clearing of loose debris within fixtures and equipment (e.g., Weld slag, machine chips)
- Inspection and tightening of loose, non-critical components not directly related to locating pins, blocks, and shims.
- Inspection and tightening of loose, leaking coolant, air, and dispensed product fittings.

PMP basically assigns the minor maintenance jobs to production workers. In other words, it takes some of the maintenance jobs away from the skilled tradespersons permanently and reclassifies them as production jobs. This document is the first of its kind at the national level that reshuffles the work on the floor by identifying some of the *out-of-standard conditions* as the responsibility

¹⁹⁴ 2007 NA, pp 679-681.

of production workers. Production workers are not compensated for the additional work they are expected to perform, nor do the skilled tradespersons lose any pay. Management claims the purpose here is to increase efficiency on the floor by eliminating the time needed for skilled tradespersons to arrive to the problem area and perform their tasks. Management also claims that the standardization of work on the assembly line and the machine floor simplified the work process to the point that basic maintenance tasks could be performed by the production workers, who are fairly familiar with the process as they stand by the machinery they operate at all times.

The "partnership" in the title of the document is a little misleading since there is no partnership during the process except for the initial training process. However, even that training does not require any skilled trades input. As for performing the jobs, once the training is completed, production workers are on their own, and they are not supervised by the skilled tradespersons while they perform their tasks. The main effect of this 'partnership' is to reduce the need for the skilled tradespersons on the floor via eliminating some of the jobs they perform. Even though it does not have any immediate effect on employment, it is designed to change the number of tradespersons hired and/or replaced in the long run. Hence PMP can be seen as an arrangement to tackle 'the issue of high numbers' of the skilled tradespersons. With the relegation of some of their jobs to production workers, management aims to reduce the number of its 'over-paid' older workforce and replace them with lower paid entry-level workers in the long run. Kristin Dziczek from the Center for Automotive Research (CAR) estimates that this simple act saves GM \$57,000 a year per replacement. 195

¹⁹⁵ Cited in Detroit Free Press, April 8, 2013:

http://archive.freep.com/article/20130407/BUSINESS01/304070274/GM-looks-to-trim-number-of-skilled-tradesworkers

Alternative Work Schedules for Skilled Trades Maintenance Operations (AWS from now on), which also first appeared in the 2007 NA, targets another aspect of the "problem" with trades in the auto industry: higher wages thanks to overtime pay. Document 158 regulates the AWS and redefines the overtime for the skilled tradespersons. As we noted earlier, abundant opportunities and lucrative overtime pay are two of the main reasons for a potential six-figure income for tradespersons in the auto industry. Most of it is possible with the Saturday and Sunday shifts, when workers can get paid time and a half or double time. Management, in order to avoid paying time and a half on Saturdays and double time on Sundays, redefined overtime. Under the new arrangement, tradespersons only qualify for overtime once they complete their first 40 hours of straight time. Accordingly, management can redefine the workweek and weekends based on need, keeping tradespersons within the 40-hour limit, even when they work over the weekend. This allows management save a significant amount of money. The document puts it bluntly:

During the current negotiations, the parties had extensive discussion regarding the need to *reduce cost and eliminate the competitive gap with the transplants*. As such, alternative work schedules for maintenance operations were a topic of discussion. Best competitors use alternative crews and/or schedules to maintain and provide access to equipment during *normal nonproduction days such as weekends*. It is recognized that in order for General Motors to reduce costs and become competitive, the parties must embrace and implement significant changes in current work practices. As a result of these discussions, the parties agree that alternative schedules for maintenance crews that allow work schedules of 40 hours that include Saturday and Sunday work for straight time pay may be considered. *To this end, the parties have agreed to encourage local plants to develop alternative work schedules unique to their location*. In the event an alternative work schedule is agreed upon, the local parties will work together to develop a process for implementation. It is understood that these alternative work schedules are subject to the approval of the Corporation and the International Union. ¹⁹⁶

The language of this document was notably different than the one regulating PMP. PMP was very detailed and designed to be implemented immediately, whereas AWS resembled the documents in the 2003 NA that discussed the lines of demarcation and consolidation of trades. Rather than

¹⁹⁶ 2007 NA, p. 682, italics are mine.

requiring an immediate implementation, it identified a problem and encourages parties to reflect on it. This difference can be explained in a number of ways. First, PMP's immediate effects on wages were very limited and in fact almost non-existent. There were no immediate job losses and/or layoffs associated with it. It was expected to have medium- and long-term effects on employment numbers, as it lowered demand for skilled tradespersons. Also, as will be shown in the fourth chapter, the perception of PMP was varied on the floor. Some tradespersons saw it as a threat to their job security while others embraced it, as it saved them from doing less important work.

AWS, on the other hand, posed a major and very immediate challenge to the skilled tradespersons' paycheck. As soon as it was implemented it deprived tradespersons of a main source of income. Thus, in this document, we only see an encouragement of local parties to work on developing alternative work plans. However, it is very important, as it shows how management diagnoses the root cause of the problem and offers a remedy to cure it. Besides, it laid the foundation for the negotiations during the bailout and subsequent restructuring. The 2009 M directs locals to implement AWS "asap" upon ratification, and in 2011, it became a permanent item of the contract

A closer look at the contracts allows us to see changes in four major areas: compensation, job security, temporary work/ers, and the work reorganization in the field of skilled trades. The two-tier system is first experimented at Delphi in 2004. Its "success" made it a legitimate bargaining item in 2007. Meanwhile, in 2005, UAW agreed to a gradual transition to a VEBA in order to manage retiree healthcare. The 2007 NA completed the transition to the two-tier system legally, but because of the financial condition of the company and the country at the time, it was not implemented on the floor.

The evolution of job security programs follows a similar trajectory. Despite changes in its scope and purpose, the JOBS Bank survived until 2007. In line with the two-tier system, the 2007 NA denied new hires' coverage by the program. This was seen as insufficient by Team Auto and it was suspended in 2009 and finally removed completely in 2011. Appendix K remained in the contract but was completely rewritten to document the extent of the change. The notion of job security was subordinated to the competitiveness of locals. Without any security net funding, job security was redefined as the alignment of the interests of the company with that of its workers.

Temporary work/ers, one of the main competitive assets of the transplants, was used to some extent prior to the bailout. However, with the 2009 renegotiations, a new category of temporary employee was created and a window for employing temporary workers on a permanent basis was opened. Finally, the work rules in the field of skilled trades were completely redefined.

All of the four elements were on the table prior to the bailout, and management made significant progress in regards to the first two in 2007, however implementation was delayed and concrete results were not obtained until after the bailout. The main changes regarding the last two, on the other hand, came with the bailout.

2.2. What Remained the Same? Collective Bargaining Framework and the Priority of Seniority

The collective bargaining process is the biggest difference between the UAW-represented shops and transplants. Despite rising disparities between and intensifying competition among locals, the collective bargaining process still connects them vis-à-vis the employer. Constitutional

benchmarks for the ratification of contracts enable the voice of the rank and file to be heard. This was proven to be very critical once again during the 2015 negotiations at Chrysler. 197

No matter how weak it may be, the pattern bargaining framework connects the Detroit Three and provides a larger medium for negotiation within the union. The idea of a healthcare cooperative for active workers in 2015, for instance, was proposed by the UAW within this connective framework. ¹⁹⁸ This common ground is important, because as some of the rare studies on transplants show there are not even standards across plants within the same corporate umbrella. Nissan USA, for instance, does not offer a standard wage and benefits policy to its workers in Mississippi and Tennessee. ¹⁹⁹ Even though the network of solidarity was damaged severely with the implementations of the 2007 NA, 2009 M and the 2011 NA, the existence of a collective bargaining framework and a set of bureaucratic procedures in process have the power to affect the trajectory of the industry.

This is particularly important today as a massive generational transformation is changing the demographics and culture of the industry. Ironically, for the first time since the 1980s the industry is experiencing an influx of new workers thanks to the bailout. GM, which has been the most conservative in hiring entry-level employees, already has 20% of its workforce in the lower tier. This ratio is about 28% at Ford, while it is almost 50% at Chrysler. Much younger in average age and extremely diverse, this group also has a different perspective of the world outside GM.

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¹⁹⁷ The union leadership struck a deal with FCA management, however rank and file rejected it decisively in a ratio of 2 to 1. The negotiation process for the all three carmakers was extremely tough, and I will discuss these in the final chapter.

¹⁹⁸ The healthcare coop idea of Dennis Williams was rejected decisively by the membership.

¹⁹⁹ According to a report by Derrick Johnson and Lance Compa, wage differentials between two Nissan plants can go up to \$9 per hour. Derrick Johnson and Lance Compa, Choosing Rights: Nissan in Canton, Mississippi, and Workers' Freedom of Association under International Human Rights Standards, (2013), http://dobetternissan.org/wp-content/uploads/2013/10/Compa-SUMMARY ENGLISH.pdf. p. 5.

Many of the "legacy workers," who currently work at GM, on the contrary, have no first-hand experience of the labor market in Buffalo. These two groups have a different grasp of the collective bargaining process.

Another difference is veteran workers' experience of the last thirty years in the union. Because of downsizing, plant closings and concessions, in the last couple of decades, UAW has been characterized by concessions and very little radicalism. The animating dynamics of the contract environment is different today. New workers are coming to an already downsized industry. GM USA employs about 53,000 workers today as opposed to 618,365 in 1979²⁰¹ and it does not have any immediate plans to close more plants in the U.S. The industry has posted record sales and profits due to the pickup of the market in general and the lucrative SUV market in particular. That said, the industry is still ridden by severe competitive pressures and the destabilizing effects of Mexico's growing auto manufacturing sector. On the other hand, the influx of new workers into a collective bargaining framework at this juncture bears huge potential for changing the balance between labor and management.

A collective bargaining framework was not the only vital element that survived the bankruptcy. Seniority is another. Seniority in a union shop basically refers to the priority of tenure. It is used to determine the order of layoffs (last hired and first laid off), job assignments and shift preferences. In other words, the higher one's seniority, the more job security one enjoys. GM has

²⁰⁰ The only strike with larger significance is the 1998 Flint Strike. See, Maria F. Gritsch, "A Strike Against Globalization: Unionized Auto Workers' Capacity to Resist" (PhD Dissertation, UCLA, 2006).

²⁰¹ See, footnote 149 for detailed numbers.

²⁰² I will talk about the image of Mexico in workers' minds later in the third chapter.

a clustered seniority structure due to the lack of hiring in the 1990s. Morton, a production employee, explains it as follows:

Seniority is everything at a union shop. If there is a layoff, I have about six, seven hundred people below me. It had to be a total plant shut down layoff in order for me to get laid off, to be affected. But [in the early 90s], General Motors wasn't actually hiring a lot. So if you look at the big picture, every plant has a seniority board, you'd be looking at seniority from top to lowest. I'm always in the middle, but for a long time I was the guy at the bottom.

The status of the worker increases alongside seniority, and the existence and sanctity of seniority has a direct impact on shop floor culture. New hires came to a work environment where every major decision was made by seniority and seniority only. Since seniority determines job allocations, the world of workers was divided spatially and temporally. High seniority workers usually opt for the best available jobs, such as the operator jobs on the machine floor or truck driving. There is a clear job hierarchy on the floor. Assembly line jobs are on the bottom of almost everybody's preferred assignment list. Therefore seniority-based choices separate traditional workers and new hires from each other in many ways.

The very existence of a contract and a collective bargaining framework was proven crucial during the UAW-FCA negotiations in 2015. The tentative agreement reached by the leadership was announced as a major win in a collective press conference. Constitutionally the agreement has to be ratified by the membership, and the leadership and the FCA were shocked by the rejection of the deal by a huge margin of two to one. This unexpected yet completely legal and legitimate event showed the importance of the collective bargaining process, which does not exist in transplants. Seniority, on the other hand, has mixed impacts on the floor. It is divisive spatially and temporally, which limits communication across tiers. On the other hand, it prevents competitive forces from dominating the floor, because job assignments or shift preferences have nothing to do with one's performance. Seniority cuts through all other performance-related

elements and limits the penetration of managerial policies to boost competitiveness among workers. Thus, it automatically creates a sense of group if not community belonging.

2.3 Conclusions: The Limits of a Contract

A closer look at the contracts shows that in the last ten years, management and the union bargained over four main issues while reacting to the competitive forces imposed by the market. These are compensation, job security, temporary work and skilled trades. In all four realms, management was able to extract major concessions even before the bailout except for the reorganization of skilled trades. Despite its limitations, the two-tier system was introduced in 2007. There were significant advancements on management's behalf such as limiting the scope of the JOBS Bank. And finally, GM always had some level of temporary workers. In the field of skilled trades, however, pre-bailout documents did nothing but acknowledging a problem.

National agreements, their supplements and local agreements set the parameters of the relationship between the union and management, imposed a language, and most importantly established a legal framework for negotiations. However, an analysis based on contracts and other published documents about the performance of the company would be insufficient to understand the complexity of the floor. The contracts only mandate certain changes, but the ways in which these play out on the floor has been dependent on many different factors. My shop floor observations and interviews show that the two-tier system reflected much more than just a contractual set of differences. These are important for understanding the formation of a new working class culture on the floor, as the old one is disappearing. The interaction between the two gives us a unique opportunity to reflect on the transition and to identify the contours of the new working classes in reindustrializing America.

Another major novelty after the bailout was the technological reorganization of production. A completely retooled machine floor and redesigned assembly line has dramatically changed the production process. More importantly, this was the case across the board, effecting all forty remaining GM plants in the U.S. Tonawanda Powertrain is one of these plants, and the technological changes were the result of an almost \$1 billion dollar investment. This technological reorganization manifested itself differently on the assembly line and the machine floor. The latter was completely retooled by new technologies while the former has become more manual. Computerized CNC machines flooded the machine floor and reduced the number of operators, while the number of workers on the assembly line almost doubled. The influx of high-tech machinery may have reduced the number of production workers, but it increased the amount of work required by the skilled tradespersons exponentially. This vital transformation and its effects on the floor cannot be assessed by a contractual analysis. In the next two chapters, I focus on the shop floor.

CHAPTER 3

INSIDE AN AUTOMOBILE PLANT 1: GENERATIONAL TRANSITION IN THE PRODUCTION FIELD

In order to adequately address the dramatic changes warranted by the 2009 bailout upon the production side of Tonawanda Powertrain, I will begin by discussing some of the geographical dimensions of Rust Belt reindustrialization as highlighted by labor markets in Buffalo. This is especially important for understanding the production side of the plant, as the bailout created a context in which GM can decrease its reliance upon skilled trades and draw upon the reserves of unskilled labor found in this area. Unlike Chinoy and Milkman's studies, where space itself did not play a particularly important role, in my analysis space appears as a key factor in understanding this historical moment I call "reindustrialization." As my ethnographic findings show, Rust Belt geography plays a major role in the restructuring of the auto industry and the formation of new imperatives around work. This role is not only due to the economic decline in the area but also the cultural atmosphere of that decline, which strongly shapes how workers think about themselves and about work, especially among the entry-level workers that flooded the floor after the 2009 bailout. Because the conditions of work and the spatial context in which they is embedded are inseparable, a cultural geographic analysis allows for a more thorough understanding of the dynamics of reindustrialization., Such analysis compliments an ethnographic method focusing on workers' experiences of Rust Belt reindustrialization.

Before I moved to Buffalo in 2012, I tried to learn as much as possible about the city. To do so, I not only surveyed academic studies, policy briefs and newspapers, I also read fiction, non-fiction and memoirs and watched movies and TV shows featuring Buffalo. Not long into this

endeavor, a pattern emerged. Buffalo as a city carried a strong presence in most of these works, but it was almost always in negative terms. It was a place of irony and often a non-place where nothing happens. Characters who wanted to accomplish something, no matter how small the task, needed to leave the city for real places. ²⁰³ It was a trap for young people and leaving was the only option for attaining a meaningful life. Old people could do nothing but die there. ²⁰⁴ The local football team, the Buffalo Bills, suffered four consecutive Super Bowl losses in the 1990s, and the consistently underachieving record of the hockey team, the Buffalo Sabres, did not help change this aura either. As local author and a former politician Bruce Fisher suggests, Buffalo is often abused by comedians for its despair. ²⁰⁵

Even those who dedicated themselves to promoting the city acknowledged this despair: "We're a stoic people and the champions of waiting it out, whether it's for the Super Bowl, the Stanley Cup, or spring."²⁰⁶ Waiting may be the destiny of locals, while for outsiders, the city has meant something far more transitory. As Pedersen points out sharply: "Our city somehow became a stopping point rather than a staying place for a number of people on their way to better things."²⁰⁷ Buffalo came to represent one pretty consistent image, probably best represented by Charles Baxter's novel *The Soul Thief*: "The city, as a local wit has said, gives off the phosphorescence of decay. Buffalo runs on spare parts. Zoning is a joke; residential housing finds itself next to machine shops and factories for windshield wipers, and, given even the mildest wind, the mephitic air smells

²⁰³ Malcolm Venville, "Henry's Crime: A Movie," (2010); Greg Ames, *Buffalo Lockjaw: A Novel* (Hachette Books, 2009).

²⁰⁴ Vincent Gallo, "Buffalo '66: A Movie," (1998); Tamara Jenkins, "The Savages: A Movie," (2007); Ames, *Buffalo Lockjaw: A Novel*.

²⁰⁵ Bruce Fisher, *Borderland: Essays from the US-Canadian Divide* (Albany: SUNY Press, 2012).

²⁰⁶ Laura Pedersen, *Buffalo Gal: A Memoir* (Golden: Fulcrum Publishing, 2008). p.16.

²⁰⁷ Ibid., p. 170.

of burnt wiring and sweat. What is apparent everywhere here is the noble shabbiness of industrial decline. (...) [T]he architecture here is unusually fin de something, though not siècle, certainly not that."²⁰⁸ Decay is Buffalo's nickname.

Similar anguish characterizes academic work on Buffalo, too. Michelle Fine and Lois Weis compare Buffalo and Jersey City and assess the gendered impact of deindustrialization on three racial groups: white working classes, urban black poor and Latino poor. In a comment that encapsulates the deep running problems that impact all three groups, an African-American reports: "Buffalo's fucked. Buffalo is real fucked up. The public school system is fucked. The judicial system is fucked. Oh boy, is it fucked. Everything here, basically in Buffalo, is fucked. And if you ain't already got it [money, jobs, resources] you ain't going to get it. (...) The only way a person here can make it, if you ain't into nursing, if you ain't into computers, if you don't own your own business, you know, if you ain't already working for a big corporation, big companies, or stuff like that, you ain't got a chance."

This decline is almost consistently attributed to industrial decline,²¹⁰ local mismanagement and a lack of leadership.²¹¹ Racial segregation was the most visible outcome, with not much hope in sight for change.²¹² Even after the recession, when the region started seeing some signs of

²⁰⁸ Charles Baxter, *The Soul Thief: A Novel* (New York: Vintage, 2009). p. 7.

²⁰⁹ Michelle Fine and Lois Weis, *The Unknown City: The Lives of Poor and Working-Class Young Adults* (Boston: Beacon Press, 1998). pp. 28-29.

²¹⁰ Mark Goldman, *City on the Edge: Buffalo, New York, 1900 - Present* (Amherst: Prometheus Books, 2007); *High Hopes: The Rise and Decline of Buffalo, New York* (Albany: SUNY Press, 1983).

²¹¹ Diana Dillaway, *Power Failure: Politics, Patronage, And the Economic Future of Buffalo, New York* (Amherst: Prometheus Books, 2006).

²¹² Lois Weis, *Class Reunion: The Remaking of the American White Working Class* (London: Routledge, 2004); Neil Kraus, *Race, Neighborhoods, and Community Power: Buffalo Politics, 1934-1997* (Albany: SUNY Press, 2000).

recovery, the reasons why Buffalo performed better seemed different than the rest of the country.

Richard Deitz, the Federal Reserve Bank economist based in Buffalo, explains it as follows:

We entered the recession a little later than average and we lost fewer jobs. (...) A lot of this has to do with the fact that we didn't have the housing boom and bust. (...) So if you look at how fast we've been growing relative to how fast the rest of the country has been growing in recent months, we haven't been growing as strongly. But that's in part reflecting that we didn't decline as much during the downturn. (...) [G]oing back historically, over the past couple of decades, we haven't tended to perform as well as the rest of the country during good times. That pattern is probably reemerging. ²¹³

In other words, Buffalo did not get hurt by the Recession as much, because it did not enjoy the expansion prior to it. Deitz argues that the recovery in the region is slow but steady, and it is fueled by health and education sectors. The government sector holds the second position in the region's economy after manufacturing. Manufacturing remains strong and is in fact the only engine of growth. As David Robinson says: "The next time someone tells you that manufacturing isn't a big deal anymore in the Buffalo Niagara region, don't believe it." Manufacturing's share in the Buffalo Niagara economy fell from 23% in 2001 to 19% in 2013, however it accounted for virtually all the growth in the region, even though that growth was only one third of the national average. 215

These three features (the prevalent image of absence of opportunity; relative immunity from the Recession due to the long term decline that predated it; and the resilience yet weak presence of manufacturing) demonstrate the particular qualities that set Rust Belt labor markets apart from others. With the third lowest living wage for a single adult in New York State (\$10.11 compared to \$14.30 in Kings County), the Buffalo metropolitan area offers an ideal environment

²¹³ Richard Deitz, "Rebounding from the Great Recession: An Interview with Richard Deitz," *The Buffalo News*, August 3 2013.

²¹⁴ Robinson, "Manufacturing Remains Surprisingly Muscular."

²¹⁵ Ibid.

for the imposed conditions of reindustrialization that I observed in the unionized manufacturing sector. The great transformation subsequent to the bailout happened in Tonawanda Powertrain with this spatial context in the background. The two-tier system, which meant the influx of new hires off the street, was possible due to the economic and cultural climate in the city.

When the two-tier system was first implemented in the 2007 NA, the effects were naturally unknown to management and the union, ²¹⁶ because there were no entry-level workers in the system. More importantly, there was no expectation that hiring would resume in the near future. ²¹⁷ Instead of hiring entry-level workers, management was still working on reducing the number of its relatively older and much more expensive "legacy" workforce. It would later open up room to hire entry-level workers under the terms and conditions of the new contract. In order to do this, they sought to offer incentive packages to those on top of the seniority list. This was mostly done with a program called Special Attrition Program, which offered a variety of incentive packages to the workers based on their years of service in the system.

Many workers took these buyout offers, but a sizable population stayed. The ones at the bottom of the seniority list had to be laid off during the recession. At its peak, Tonawanda Powertrain laid off 415 employees as of January 2009 (109 skilled trades, 306 production). ²¹⁸ Yet,

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²¹⁶ Importantly, the ways in which the introduction of tiers to the floor would manifest itself was unknown since this was a novel experience for both parties, especially at this scale. The two-tier system—and in some cases three-tier for a brief time in Spring Hill, Tennessee—was used in the past by management. But in all these cases, lower-tier workers were projected to catch up to higher tier wages within the lifetime of the agreement. More importantly there was never a gap between the benefits of the workers of different tiers. For earlier two-tier experiments in various GM locations, see, James Martin and Thomas D Heetderks, *Two-tier Compensation Structures: Their Impact on Unions, Employers, and Employees* (Kalamazoo: W.E. Upjohn Institute for Employment Research, 1990).

²¹⁷ As part of the agreement, temporary employees at the time were made permanent and lower tier, but this was a very small group, and it did not affect all locals across the board.

²¹⁸ These numbers are compiled from the weekly and monthly periodicals published by the union local and management. Electronic versions of some of them can be found at the union local's website: http://region9.uaw.org/local774/

GM locals didn't begin seeing an influx of new hires until early 2012. ²¹⁹ A tremendous amount of change occurred, from the perspective of workers, during these five years when the industry was transformed. As discussed in the previous chapter, the two-tier system was only one piece of the larger picture of this transformation. As soon as I walked into the Tonawanda Powertrain, I realized that the divide between workers was deeper than was identified in the contracts. Despite the *two*-tiers implied in the contract, Tonawanda Powertrain had many groupings. I identified seven, clearly distinct groups not just because of their contractual status but also because of their perception of work, the union, and management. Workers' prior experience and expectations are distinguishably different from each other as well.

This chapter will offer a brief explanation of how these seven groups perceive their respective statuses on the floor. I will argue that a massive generational transition makes it possible to have such diverse groups without any tensions pervading the floor. Having significantly different work experiences (before GM and at GM) and expectations, these groups represent different moments and axes of working class cultures in the auto industry in the U.S. The discrepancy between their experiences and expectations also shape their relationships with management, their ideas about unions, and how they understand issues like job security. These issues are addressed in the first three sections on this chapter. By the chapter's end, I intend that the reader will have a rich and detailed sense of the generations, the changing labor process, and the different meanings of the labor process for workers. This portrayal will allow me to make the following argument: The generational transition, which made a transformation of this scale

²¹⁹ The process was administered according to Appendix A in the 2009 M. According to this document, entry-level new hires come in after recalls, rehires, area rehires (from closed plants and other GM and Delphi plants) and extended area rehires. Each one of these categories, especially extended area rehires, includes seven different categories. For details, see 2009 M, p. 80.

possible, marks a transition from one working class cultural formation to another as different groups have different cultural leanings.

3.1. Tiers on the Floor

There are seven groups in the production department among the hourly workforce. Three of them are part of the traditional hires (which are also known as the higher tier, first tier, or legacy workers) while two of them belong in the lower tier (which are also known as entry-level or new hires). The remaining two are i) temporary workers, who are theoretically eligible to switch to a permanent position, and ii) temporary workers, who are not eligible to do so.

The first group, referred to as "the Civil War veterans" by a worker of a younger generation, consisted of workers with 30 or more years of seniority. Most of them, if not all, were *motorheads*, which means they began their career at Tonawanda Powertrain and have not left. There were a few transplants²²⁰ within this group, but most of these transplants came from nearby GM facilities such as American Axle or Harrison Radiator.²²¹ Workers in this group were not laid off during the recession; in fact, they have only very distant memories of layoffs in the crisis years of the 1980s.²²² Within the union, this group not only consisted of members who were among the oldest

²²⁰ Transplant here means a transferred worker from another GM plant. Earlier I used the same term to refer to non-American auto manufacturers in the U.S. Both terms are commonly used in the industry and ought not to be confused with one another.

American Axle transplants of this generation came to Tonawanda around 1994 following the spinoff of this former subsidiary. Workers were given a one-time opportunity to flow back to another GM facility. American Axle eventually shut down all of its plants in the area and relocated its production to Mexico after a very controversial showdown with the workers. See, *After UAW workers reject contract offer, American Axle says it will close New York plant*: http://www.crainsdetroit.com/article/20110818/FREE/110819899/after-uaw-workers-reject-contract-offer-american-axle-says-it-will Harrison Radiator has a different and more complicated story. I talk more about this later in the chapter.

²²² This group of workers has not experienced a major layoff since the 1980s other than a few days or weeks during product changeovers. The length of a layoff depends on two things: the worker's entry date, i.e. seniority, and job classification. The higher the seniority one has, the less time one stays out of work. Similarly, skilled trades workers are less likely to get laid off for longer periods. The range of the length of unemployment among this group was simply amazing when compared to other workers. Some tradespersons were laid off for only a few weeks while some production workers who started towards the end of the decade stayed out of work for as long as five years.

but also the most highly represented, as they held most of the union's elected and appointed positions. These were thus not passive onlookers of the labor process but were rather key witnesses who have participated in some of the main decision making processes.

The second group also belonged to the higher tier, but they are generally younger. The group was mixed in terms of their background, but it consisted of a lot of transplants from the Harrison Radiator plant in Lockport, NY.²²³ These workers usually hold a seniority entry date between 1995 and 1999. Since the company did not hire new employees until well after the bankruptcy, this group was at the bottom of the seniority list and was thus vulnerable and subject to layoffs throughout the 2000s. Their memory of the recession is also significantly different, as many of them were laid off, sometimes for as long as four years. The vulnerability and experience of seasonal and prolonged layoffs impacted the perception of not only the younger generations coming in but also the older generations, who "refuse to" leave, as one younger worker put it succinctly.

The third sub-group of the traditional hires category arrived at Tonawanda after the bankruptcy. This is a sizable group at just under five hundred people. These workers came mostly from two former Delphi plants in Lockport, NY and Rochester, NY as part of a deal reached in

Those who were laid off longer than they were at GM lost their original seniority dates. This is a contractual requirement. I interviewed many who started in the second half of the 1970s but hold a seniority date from the 1980s.

²²³ Harrison Radiator was another supplier under the GM umbrella. Even though it was within the network, it was a second-tier plant like all the other suppliers. In its effort to focus on its core business in the 1990s, GM, just like Ford and Chrysler, started spinning off its suppliers. American Axle was spun off in 1994 and hasn't been affiliated with GM since. Harrison Radiator on the other hand was brought under the Automotive Components Group in 1994, which was renamed Delphi in 1995 and spun off in 1999. A giant supplier working mostly for GM, even after the spinoff, Delphi quickly ran into problems and in 2005 entered a painful Chapter 11 bankruptcy restructuring process. It took almost four years, and in the end, workers were stripped of their benefits and in some cases lost half of their wages. Delphi was eventually sold to a venture capitalist group, which abandoned production in the U.S. completely. Four of the plants were sold back to the GM and brought under a subsidiary network called General Motors Components Holdings (GMCH). For a brilliant analysis of the aftermath of the bankruptcy, see Appelbaum and Batt, *Private Equity at Work*.

2009 during the bailout re-negotiations. Both of these plants are part of the GMCH (See footnote 223). GMCH plants are second-tier plants and operate on a completely different model. They mostly rely on temporary workers. As for their permanent workforce, they do not have a two-tier system, because they have not had higher-tier workers since 2005. Workers in this third group at Tonawanda used to be the higher tier workers in Delphi before 2005, when they lost their status, along with wages and benefits. After the 2009 bankruptcy of GM, workers in these facilities were given a one-time chance to flow back into a first tier GM facility and retain their higher tier status, original seniority date, and Tier 1 wages and benefits. Until that time they worked in conditions similar to entry-level workers in Tonawanda today. Therefore, even though they were part of the first tier, they have experience working in the lower tier.

Another important feature of this group is that they were not laid off during the recession. Unlike the previous group of first tier workers in Tonawanda, this group was not laid off, as the business at their local was not as bad as it was at GM in general. Finally, the proportion of women in this group was at a high of almost 50%. So their arrival at Tonawanda made a big impact and tilted the gender ratio. Before, Tonawanda Powertrain did not have many women; in fact, it had less than five in the skilled trades. Lockport, on the other hand, had many, and their arrival after the bankruptcy, along with the new hires, brought the ratio of women on the floor to 30 percent. The higher ratio of women at a supplier as compared to the more heavily male-dominated shop floors in original equipment manufacturers (OEMs) shows us the persistent lower status of women

²²⁴ This applied to anybody except for skilled trades workers.

²²⁵ They did not retain their pension completely. Their pension coverage starts from the day they started work in the Tonawanda facility. The coverage for the period they worked at Delphi before is lost during the bankruptcy, as their pensions were transferred to the Public Benefit Guaranty Corporation (PBGC) for a fraction of its actual value. Appelbaum and Batt give a very vivid account of this transition. See, Appelbaum and Batt, *Private Equity at Work*.

in manufacturing today. The flow of workers from GM's own supplier network, i.e. GMCH, may have changed the ratio a little bit, however, as I will later show, women have remained at the bottom of the job hierarchy and mostly populate the less desired assembly jobs due to lack of seniority. This is particularly noteworthy among unionized workers, since the union is theoretically more cognizant and critical of gender inequalities in the labor market. 227

The remaining four groups consisted of lower tier or entry-level workers. Firstly there were 50 to 60 workers who started at the former Delphi in Lockport and after October 18, 1999 were given the opportunity to flow back to a Tier 1 facility but were not allowed to retain their Tier 1 status, which they lost during the bankruptcy. The cutoff date above was determined according to the spinoff of Delphi from GM in 1999. Therefore, coming to Tonawanda did not change their status. Workers in this group came to Tonawanda in 2009 mainly because the prospects at Lockport

²²⁶ Machine floor jobs are very desirable compared to assembly line jobs, and they go to workers with higher seniority. Thus the low number of women working these jobs is solely due to less time at the plant. This does not mean women earn lower wages. In fact, even though the two-tier system caused a major gap between compensation packages with regard to benefits, workers belonging to different tiers are still paid the same. (The only workers who are paid more are skilled trades, and this preceded the bailout.) Even more importantly, the wage scale of every hourly position is public. Thus, it is publicly demonstrated that women on the assembly line are paid the same as their fellow male workers. The same is true for those on the machine floor and skilled trades workers. I haven't observed gender to be an obstacle for promotions within departments either. Almost half the team leaders on the assembly line across shifts are women and one can also see women in certain union positions even though the ratio is significantly lower. However, in terms of upward mobility, the biggest problem is women's access to skilled trades positions. As I discuss in the chapter on skilled trades, transitioning to a skilled trades position is the main if not the only promotion one can get without leaving the protection of the union. This transition is highly gendered.

²²⁷ The situation was worse at the union leadership level. In an international auto industry panel I participated in Sao Paulo, Brazil, a women organizer from a local Volkswagen plant challenged a German unionist for the complete misrepresentation of women in the high ranks of the union. She said she is often the only woman at Volkswagen's international meetings. The response of the German party was quite discouraging. To paraphrase: "I am sorry, but the auto industry is a man's world. I can't change it!"

²²⁸ This is a rather complicated issue. Delphi was spun off from GM in 1999, but it continued to be a legal entity under the corporate umbrella of GM. Its workers were UAW members also. Workers in this group were quite vocal about this issue and at the time I interviewed some of them, I realized that there was a collective grievance in process. It was a highly sensitive issue, and thus I did not ask any questions regarding the legal details.

were not bright, while Tonawanda was on the upswing. In other words they chose job security, even though their status did not change.

The second group of entry-level workers began coming in groups of 20 to 100, flooding the floor gradually. Under the new contract, all these workers started as temps, and depending on need and negotiations at the local between the union and management, they became permanent, according to the order in which they were hired.²²⁹ Some workers became permanent as soon as two weeks after joining while others waited for up to one year. This group is the backbone of the lower tier. To apply for a job at GM, one has to have a referral from an active employee, salaried or hourly.²³⁰ Thus, many of the new hires are either related to the current workforce or their acquaintances. In a conversation with a senior employee, Ben, I asked about this dynamic, especially among people who know each other closely. His response was very straightforward:

> It's very simple. It's probably a complex issue but the jobs out there today... If you're looking for work, I have couple [kids] they have [higher degrees] but they can't find work. So the work is hard to come by in some places sometimes. So jobs are hard to come by. So a lot of people when they see \$14.50 or \$15 an hour they say: 'I'm gonna work for GM even though I know my father, my uncle or somebody else is making twice as much as me. I still want the healthcare, I still want the retirement as it is now, different than when I started. It's all worth working there to get that kind of \$15 an hour or maybe go up there to \$19 an hour at the end.' So if you look at that point, a lot of people are very thankful to have a job because they can't find any job even for \$10 an hour or 12 bucks an hour or whatever. This job pays decent, so it's either the street or working for \$14, \$15 an hour.

²²⁹ This is an interesting point, because contractually there is no mandate for management to follow a seniority order for making temporary workers permanent. In other words, management could choose to make the very last temporary employee permanent. However, even though the seniority clause did not technically apply, the union pushed for it, and the workers in this group were made permanent gradually in the order of their original hire date. This can be interpreted in two ways: i) the union was not willing to accept an arbitrary hiring process of temporary workers and pushed for a general application of union rules; ii) neither the union nor management was willing to dismantle a procedure that had been entrenched for decades, which could potentially cause friction on the floor.

²³⁰ The only exception to this rule is the veterans.

This way of explaining the influx of new hires is very common among the high-seniority Tier 1 workers. In fact, during my first conversation with Bob Coleman, ²³¹ the shop chairman who started his third term last year, I was told that excitement among new hires is analogous to winning the lottery. The reference to lottery may be a stretch as my own observations showed that the sentiment was not as positive among these new hires, but there was certainly great appreciation for working at GM.

The sixth group in general and the third group of new hires was the temps who worked on the line. At its peak, there were around 150 temporary workers at the plant. This number fell as low as 50 workers thanks to fluctuations in the market. Temps are technically new employees who are not made permanent yet. Therefore, legally speaking, temps can transition to a permanent status. However this does not mean that at one point all temps will become permanent. On the contrary, to attain and preserve some flexibility, management may be aiming to keep some of its workforce under temporary status at all times.

The final and seventh group did not have any right to eventual permanent status. They were specifically assigned to certain departments such as kitting (preparing kits for the assembly line workers to be used during production) or janitorial services. Locals, instead of outsourcing, offer such jobs in-house. This is an important novelty, because it goes against one of the basic principles of the UAW, which mandates that everybody on the shop floor should be eligible for accruing seniority, moving up the seniority list, and transitioning to other available jobs. Due to the lack of opportunity for advancement, this technically brings outsourcing in-house. It looks good on paper,

 $^{^{231}}$ All proper names are anonymized, except for the shop chairman Bob Coleman and the plant manager Steve Finch.

because these workers are reflected in employment numbers, however they are second-class workers on the floor without any of the benefits of working for GM.

Needless to say, the entry-level groups were far from homogeneous; in fact, new hires were demographically quite diverse, such as in terms of age. The hiring of middle-aged workers reflected the status of today's labor market outside of GM. Morton, a worker with about 30 years of seniority, reflected on two different influxes of workers to the facilities he worked at (in 1997 in Lockport and 2012 at Tonawanda) as follows:

When I got hired you could tell the difference between new hires and current employees [in the late 1980s.] Anybody just got hired was young. You could instantly tell the new hires because of their age. When they hired in 97 it was probably 70/30. There was older people that were losing jobs and came there to work. I had a boss in shipping who continued to give the better job to the person who had lower seniority. I was 42 and he was 57, but he was a new hire and I had 18 years. He looked at his age and old face and just assumed that he had more seniority than me. He didn't know. He assumed he had more seniority until I told him that 'look, he got one year seniority and I got 18. So if you're gonna give job assignments it goes by seniority. (...) Now when you get here it's fifty fifty. There's young people and old people trying to find a new career. (...) From [about 30] years of experience, that's a major transformation. (...) To me that's very scary because now I'm that age where do I go if this place goes under?

Thus, the gaps between the aforementioned entry-level groups were not just a matter of age or gender, since the realities of the labor market meant that older people were also put in a position of looking for work.

In other words, understanding the aforementioned seven groups on the production side comes not from a focus on their demographic features per se but rather comes from attention to the main divides between them within the GM system of hiring, pay and benefits. These divides have a significant impact on their reception of the material conditions of their work, the meanings attached to those conditions, and finally the differences between them and others. All of these are important for understanding the contours of the new conditions of work and its implications for class identities and class formation. In the next three sections I will examine how the differences between these groups unfolded in relation to compensation gaps, job security issues, the problem

of competition, relationships with management and finally the work itself. For the sake of quick reference, I will refer to these seven groups as G1, G2, G3, G4, G5, G6 and G7

3.2. On Tiers: Wages and Benefits

G1 workers have not been laid off for over twenty years. But in the 1980s, during the first great reorganization period of the industry, almost all of the G1 workers I talked to were laid off. In some cases, they were out of work for up to five years. Despite the time away from GM, they all hoped to return. Actually, their biggest challenge after the layoffs – second to exhausting their unemployment benefits – was finding permanent work while having GM on their resumes. Ben, a senior worker now recalls the period as follows:

"I was laid off for three years, actually three years to be exact. I went back to school. I started [my own] business. I went for computer programming training but I couldn't get a job because everybody knew when you're working for General Motors and make good money, you'd probably go back to General Motors when they called you back. So nobody wanted to hire you. You'd go back to GM anyways."

Wages and benefits were in fact the only reasons for Ben to work at GM. The assembly line was demanding and boring:

But what was good about it, if there is a good thing about it, once you got used to being on the line and used to performing the jobs you put yourself in a state of mind where you think of other things and you're capable of performing your job putting parts on it but you survive the line by thinking about other things or talking to the nearest worker. For that kind of money we're making back then, \$3.99 an hour, it was a lot of money in [the 1970s]. (...) I mean, I came off with a job where I was making a buck and a half, so over doubled what I was making. So [I said] I'm gonna survive, I'm gonna tough it up. I'm gonna make it work because it got benefits, health insurance and retirement and sooner or later I'm gonna have five years in and I'm gonna get a real good job, you know seniority wise. (...) If you had twenty years of seniority you could sit all day long.

Wilson, a retiree who started around the same time as Ben, pushed this point by highlighting the physical aspect of the job. For him, both the job and the environment were challenging, though the pay and benefits made it worth staying. He was very conscious of the pay gap at the time. He says a job at GM was prestigious and highly compensating:

We were hired for our physical abilities. The job was very demanding. You have to perform a physical job 8 hours a day and have to leave the plant and still feel human. It was not easy, you have to be physically fit and mentally fit. Working indoors is not like working outside. It takes a toll on you, also not all workers are happy there. (...) [But] it was prestigious. If you worked at GM, people would just looked at you and walked around. They didn't even want to talk to you. They didn't know how. When I started here I was making twice as much money as my father in [the early 1970s] when I was 18.

The pay gap between a GM job and a non-GM job requiring similar skill sets at the time has remained about the same until today. In fact, this is one of the reasons why GM was able to fill these entry-level positions so easily. However, unlike Wilson, who made twice as much as his father as soon as he started, most of current entry-level workers make almost half of what is made by their first-tier peers. Additionally, people in Ben's generation do not have to worry about losing their jobs unless there is a permanent shutdown. Even if this were to happen, they could retire, as they have earned it already.

In spite of the relatively better benefits and wages, some workers raise their voices against stagnant wages, and UAW leadership acknowledged this as a problem at its Bargaining Convention, adding this item to its bargaining list for the 2015 negotiations. At Tonawanda Powertrain, I observed mixed reactions to the problem. Ben thought his generation should consider the situation in relation to the conditions outside of GM, just like the entry-level workers:

Tier 1 people actually haven't had a raise in I don't know seven eight nine years maybe. (...) Some people complain, and I say: Where are you gonna work for \$28 an hour, where're you gonna get the same benefits or retirement that we have now if you want to start over some other place? You got five weeks of vacation. You work Monday through Friday, you don't have to work the weekends. If you want to start over somewhere else (...) you'll probably work in different shifts, you work weekends and holidays if you're a salesman, a car salesman you work evenings and weekends. So where are you gonna go? Am I happy, no! But *I understand the reality of the world.* \$28.50 is better than \$14.50, it's better than (...) I mean we are not happy, we lost our wages. ²³²

Ben's reference to \$14.50 is a rare expression of the threat posed by the two-tier system for Tier 1 workers. Changing demographics and the conditions outside of GM push tier workers "to

²³² Italics added.

understand the reality of the world." Lauren, who has been at Tonawanda for over thirty years, is a Buffalo native and very active in the union as well as on the floor. When I asked about her opinion and concerns about the upcoming contract negotiations, she pointed to the changing demographics as an issue to be addressed. For her, the two-tier system will become a challenge for workers in her group once they are outnumbered by entry-level workers. Tonawanda Powertrain is one of the few plants hiring a large number of entry-level workers. At the time of my research, 30% of the workforce was entry-level. The national ratio was slightly below 20%. ²³³ For Lauren, the change in demographics will have a profound effect that brings wages and benefits to the negotiation table:

The implication would be a less of a gap in the wages. So if they say we'll bring you down from \$25 to \$22, and we'll bring you up to a medium point, they'll go for it. (...) [T] he guy from Chrysler, the CEO of Chrysler, he puts on a notice at the signing of the contract and says 'I will not have a two-tier wage system.' So what do you take that to mean? (...) They'll offer buyouts to get to that. Before the bankruptcy they said 'we want twenty five percent two-tier.' (...) Now twenty five percent is the minimum.

Lauren's concerns about the future may not be shared by many in her group. Susan, for instance, had no concerns about the next contract or changing demographics. She works on the assembly line in the first shift, and she is a GM gypsy, as she traveled around after coming to Tonawanda in 2013. For Susan the biggest difference between the pre-bankruptcy and post-bankruptcy GM was the elimination of COLA and lost vacation time. Susan's isolation from the new hires is emblematic of the workers in the G1. With their pension and post-retirement healthcare in the bank, as limited as they may be, they were no longer actively involved in everyday events on the floor. Aside from those who were involved in the union, the life of G1 workers on the floor was one of seclusion. They visibly separated from the rest of the workers, mostly by their own choice.

²³³ See, http://america.aliazeera.com/articles/2015/10/9/union-walks-back-major-concession-to-big-three.html

The picture was quite different for G2 workers. Marshall was a Lockport transplant and came to Tonawanda Powertrain in 1998. He worked in the first shift and was laid off during the recession for almost four years. He blamed the G1 workers, who could have taken a comfortable retirement as one of the options offered. As he put it: "No one should have been laid off, and they wouldn't have, had those who earned their retirements took it and left. Had they taken it, layoffs wouldn't be so dire and painful." During this long period away from GM, Marshall worked for the city and was able to find a job that pays more with better benefits and even more vacation time. However, he came back as soon as he was recalled by GM. It would have taken him 30 more years to retire from that job while it would only take fifteen at GM. This was an important detail, because Marshall repeatedly expressed his frustration with "those who work there forever." Marshall wanted to leave once he has his thirty years in. As for the wage, he was faced with the "stigma" of GM workers making "too much money" while he was laid off. "People think we are millionaires. My friend thinks I am making \$120K a year, which is not even close to what I make." Ironically, the job at the city paid more than GM, but workers there, according to Marshall, did not face such stigmas on a daily basis as GM workers did. Everybody on the floor was conscious of it. Morton, a G3 worker, put it very bluntly when he said: "General Motors actually put out a flyer saying that we're paying more than average for the kind of the work you do. I don't even tell people where I work, because first thing they say is 'Oh, you're overpaid!"

Marshall's feelings about the bailout did not match his resentment toward G1 workers. On the contrary, he sympathized with the bailout, since he was convinced that the pension system was unsustainable. In his opinion, the actuarial balance was lost long ago when GM went down from 800 thousand active workers to 50 thousand. In the meantime the number of retirees outnumbered the active workforce. Marshall defended the removal of defined pension altogether, which was

ironic, because pension was the reason why he came back to GM. Despite the irony, Marshall's position speaks to the change of mentality towards retirement as an individual responsibility provided by responsible and smart investments, typically in the form of 401(k)s. For Marshall, the reorganization of the company was necessary for its long-term health.

He also found the two-tier solution to be a necessary measure, and in fact, he thinks it was not radical enough. A possible pay raise to bridge the gap would be outrageous to him, as it would impact the competitiveness of the company in the long run. For him, the pay gap does not present an ethical challenge, as the entry-level workers knew how much they would make when they took their jobs. "They shouldn't have accepted it in the first place, if that was the concern," he said. For Marshall, entry-level workers have no reason to be outraged at the situation. When I asked how he would respond to a wage cut – a dollar or two per-hour – he said he wouldn't mind it at all.

The subject of wages and benefits among G3 workers is more sensitive due Delphi's financial insolvency. Most of these workers are from the Lockport facility, a former Delphi subsidiary. As noted earlier, Delphi became independent from GM in 1999, but after an extremely turbulent 10 years, it was divided into two. Four Delphi plants in the U.S. have rejoined GM under the name of GMCH, while the rest were incorporated as part of a separate Delphi as the company emerged from bankruptcy. The latter is now headquartered in England and has no production facility in the U.S. 234 Workers in the remaining four facilities under GM's corporate umbrella were given the right to flow back into first tier GM facilities under the 2009 M. Having gone through

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²³⁴ For an impressive analysis of this long and complex legal process and its effects on labor, see Appelbaum and Batt, *Private Equity at Work*.

bankruptcy before the recession and bailout,²³⁵ these workers had more experience sustaining losses in pay and benefits. Morton remembers his days at Delphi as follows:

My wage went from \$28.87 to \$14.50. We went to a different kind of healthcare. I had \$2500 out of pocket costs. I pretty much sold everything I could. I got a modest house that cost me \$80.000. I really wasn't pinched as far as my mortgage but no new cars, dumped the cars. Kids (...) no trips, nothing, no movies, no going out for dinner. 2008 you don't know there is a stock market crash, caused by the house market crash, caused by the government allowing \$300,000 on a \$30,000 income. I lost \$40,000 on my 401(k) overnight. To this date, 2013, I've still not made up for that \$40,000 loss. That's because [of the] government getting rid of social security, I'm going with stock market, which they talked about. Total joke, total joke. Historically [the] stock market outgained anything, but we got too many crooks in the system manipulating. I wouldn't trust them one bit.

Morton's frustration is not limited to wages or benefits. The new agreement brought several other restrictions. He says: "I lost forty hours of vacation, which was part of the bankruptcy restructuring (...) you went back there with no benefits, vacation, *it was just a job*. You are a slave, you continue to go in, management style stays the same, nothing changes except for my wage, my healthcare and my vacation days, all went reverse." ²³⁶

G3 Workers constitute a hybrid form. They worked under lower tier conditions for up to six or seven years (roughly between 2005 and 2012) before they were transferred to Tonawanda. Their experience is very important, because of the two worlds they have already experienced. After the upheaval at Delphi, Morton reflects upon his own situation as follows:

I dropped from \$28.87 to \$14.50. That's what I started at in the [late 1980s]. So in [about 20 years] I went back to what exactly I started at! Gas was 75 cents then, in 2008 it was \$3.80. So my wage went backward to the 1980s wage. That's what I argued about with the supervision. I'm making 1980s wages yet I'm paying everything in 2008 dollars. Water, clothing, school taxes yet my wage dropped twenty years with a stroke of a Republican bankruptcy judge.

²³⁵ The Delphi bankruptcy started in 2005 and ended in 2009. The fact that it took so long and was so difficult legally was one of the reasons why GM management was reluctant to take the bankruptcy path in 2009.

²³⁶ Emphasis added.

Unlike workers in G1 and G2, workers in G3 experienced a pay cut along with a massive benefits cut.²³⁷ Wendy and Terri, who are in their early 50s and 40s respectively, took a pay cut and worked as lower-tier workers for about six years. They were both hired before the cutoff date, so when the opportunity presented itself, they transferred to Tonawanda to go back to Tier 1 status. Wendy also said the future of Tonawanda Powertrain seemed much better than that of Lockport, whose future at the time was unknown, as the jobs they worked were about to end and no new product agreements were signed. Regardless of the health of the plants, Wendy and Terri said they would have come to Tonawanda anyway because of the wages and benefits.

Their bitter experience of pay cuts and the loss of benefits made them very cautious and concerned about upcoming negotiations in 2015. They were afraid of a possible pay cut for the higher tier to "bridge the gap" between tiers. They had already gone through a significant financial loss once, which made it hard for them to make ends meet. Wendy said that if a similar scenario were to occur at Tonawanda, which seemed highly likely to G3 workers, she had no back-up plan. While workers in this group are very sensitive to this issue, I have only come across a few G1 and G2 workers with similar concerns. Lauren was the only G1 worker who raised this issue in relation to changing demographics. A possible twist of the ratio of Tier 1 to tier two workers could give management room to play between their differences, Lauren thought. However, this was not a problem in the 2015 negotiations. GM's lower-tier workers constituted around 20% of the general workforce, even though GM had the right to go up to 25%, the cap agreed on in 2011. Even at the FCA, where the ratio of entry-level workers was around 47%, there were no talks of a possible pay

²³⁷ They received a \$105,000 buy-down to compensate the transitionary three years, but after three years they were stuck with the lower tier pay and had lost their pension and post-retirement healthcare.

cut scenario for traditional workers. The fact that this was a major source of worry among G3 workers on the floor shows their mistrust of management.

Jackie experienced the same process as Wendy and Terri, and she had serious problems adjusting to her new lifestyle. She is a second generation GM worker; her parents retired in the early 2000s. During my research, she was happy to be back to her Tier 1 pay after six years at a lower status. She would never consider a buyout, because somebody else in her family did it, switched to the service industry, and is making much less now. She holds a professional degree that could put her in a job should she leave tomorrow, but she never considered leaving this job for another career. In her words, she has a "great job that pays well and has awesome benefits." She is not willing to start from the bottom in terms of hours, holiday issues, low wages, etc. ²³⁸ G3 workers continue to worry about future agreements. Their bitter experience at Delphi made them extremely cautious, but they are confident about the longevity of the plant. ²³⁹

G4 workers, numbered between 50 and 60 total, were Lockport transplants who never made it to Tier 1 status, wages or benefits. They had more than ten years of experience at GM, but they are entry-level employees. At the time I was on the floor, they had a collective grievance filed in dispute of the decision to deny their Tier 1 status. ²⁴⁰ The frustration among members of this group was by far the highest. Even though they were veteran workers, they were treated like new hires.

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²³⁸ Jackie's appreciation for the compensation is not matched by her opinion of the job itself. She repeatedly called it dull, boring and stupid. We will discuss this later in the chapter.

²³⁹ Scott, for instance, has no suspicions about the long-term health of the plant, even though it is for a surprising reason: "A car is a necessity and we make the hearts of cars. People will buy cars unless we shift to spaceships like the Jetsons." This was one of the few occasions that the product was mentioned in order to explain the economics of the plant.

²⁴⁰ Filing a grievance is a formal procedure requiring that any contractual issue is first addressed at the local level. In case of failure to resolve the issue, there are channels for the parties to take the matter to Detroit. At the time of my interviews, this group of workers had had their grievance filed for almost a year.

They had one slight advantage over entry-levels hired off the street, which is their plant seniority.

Otherwise they have entry-level wages and benefits. Since the grievance process was still active,

I chose not to explore this issue on the floor.

G5 workers consisted of new hires off the street. The world of these workers was remarkably different. Their first challenge is to be able to apply for a job at GM. As briefly stated above, one needed a referral from an active employee. The plant's older generation of workers who entered the system in the 1970s observed the stark difference between the recruitment processes of today and when they were hired. Ben said, at the time, one could walk down the street and see "help wanted" signs everywhere. So it was harder to stay out rather than go in. But the application process has changed significantly, too. Ben compared his experience to the present as follows:

[Now] obviously you have to be referred by somebody that's working here salaried, hourly or else, and then you go through a [series] of tests, you know and one of them of course is physical and drug tests and what not. The day that I started here, all you needed to do was bend over, touch your toes and get a haircut. And speak English. Well not even that, that wasn't necessarily [the case.] As long as you were able to bend and touch your toes [it was okay.] A lot of people weren't able to read.

It is not as easy to get in today. First of all, a high school degree is now required to apply for a job. But what makes a job at GM difficult to attain is the referral system, which was in place in the 1970s as well. However, since the labor market in the region was not as contracted then, it was not as much of an obstacle. What the referral system does is that it restricts the amount of people being considered to begin with, while active workers are limited to a single referral. This has the effect of excluding a large number of people. More importantly, the company didn't start hiring off the street until 2012. All that being said, once it did started hiring, it attracted workers from various backgrounds and work experiences.

Cordelia, for instance, bounced from one service job to another in Buffalo's contracted labor market. She had no manufacturing experience and only one union job. She worked in a variety of retail jobs and became an assistant manager in one of them. Even that managerial position was not comparable to her GM job in terms of wages or benefits, as she highlighted a few times during our conversation on the floor. When I asked her to compare the unions in her previous retail job and the current one, she said "the union at the retailer and GM are two different things. They are a world apart and the pay and benefits are incomparable." Retailers paid only a few dollars more than the minimum wage, and managerial positions were not separated by meaningful pay differences but rather by job assignments and responsibilities. Cordelia's emphasis on the disparity in wages and benefits between her two jobs is important, as she was a lower-tier worker at Tonawanda with a starting wage of \$15 per hour. This is indicative of the huge gap between these industries.

Like Cordelia, Daniel worked in a lot of places before coming to GM. What Cordelia referred to as "worlds apart" was very nicely explained by Daniel. Relatively older than his peers in the entry-level workforce, Daniel had extensive prior work experience. His reflections on the tier gap are instructive:

New people like myself we all want that higher dollar amount; we all do the same work. Why aren't we getting what they're getting? As far as I understand, one of the issues that's gonna be negotiated in the next contract coming up is going to be the Tier 1 tier two pay scale. They wanna get everybody on the same page, pay everybody the same, and I'm okay with that. Who doesn't wanna make more money? But if it doesn't happen, it doesn't happen. We still get pay raises every year. The benefits are unbelievable. I'm gonna say this. I've had enough shitty jobs in my life. When something good like this comes along you don't bitch about it too much. A lot of people take it for granted that they have a great job, they don't realize what they actually have. I have a family, mortgage payment, I got bills I gotta pay and working here allows me to do all that. Health insurance coming in, that's great. That's awesome, I don't have to pay for health insurance. What other place can you go and they'll pay for your health insurance? There's not too many places. (...) To come here knowing that

²⁴¹ She makes an additional 5% compensation for her shift assignment. Workers are compensated for an additional 5% in the second shift and 10% in the third shift.

I'm gonna have a retirement plan, I'm gonna have all those other perks and all these other discounts that I can [benefit from.] It's just amazing, no other place I went to has that.²⁴²

Daniel's take on the tier gap presents a comprehensive picture of the mentality difference across tiers. Both Cordelia and Daniel underscored the stark differences between tiers and this demonstrates how things older workers took for granted could be shocking to the new hires. This is one of the reasons why the generational transition was key to the change imposed by the bailout. Daniel called the benefits "unbelievable." This reflects the stark difference between GM and Buffalo's stressed labor market. This is why, I argue, the type of reindustrialization described in this dissertation takes place in Buffalo and similar places. The erosion of welfare in the last thirty years affected non-unionized workplaces asymmetrically across the country. However, in the Rust Belt, where such decline was not only eminent but also not replaced by an alternative current of economic growth, the effects of this erosion played a bigger role in shaping the labor market and the culture of these places.²⁴³

The vast differences between G1 and G5 workers do not seem as severe when compared to conditions outside Tonawanda. This is particularly evident with healthcare benefits. Roy pushed this argument by comparing the advantages of the healthcare offered at GM with his previous status:

²⁴² Italics are mine.

²⁴³ Various studies on post-deindustrialization policy choices focus on paths taken and not taken. Some of these studies attribute the failure of transition to a knowledge economy lacking economic and civic social networks (Safford) while others blame a lack of national or federal policies (Fox and Axel-Lute, and McGahey and Vey). For a few examples, see Sean Safford, *Why the Garden Club Couldn't Save Youngstown: The Transformation of the Rust Belt* (Cambridge: Harvard University Press, 2009); Richard McGahey and Jennifer S. Vey, *Retooling for Growth: Building a 21st Century Economy in America's Older Industrial Areas* (Washington, D.C.: Brookings Institution Press, 2008); Radhika Fox and Miriel Axel-Lute, "To Be Strong Again: Renewing the Promise in Smaller Industrial Cities," (Oakland: PolicyLink, 2008). Developmentalism is a common thread in all these studies, which are troubled by an isolated understanding of decline in the Rust Belt without acknowledging larger scale socio-economic trends. Critical geography offers a better understanding of how capital reorganizes spaces through time. For an example, see, Harvey, *Spaces of Global Capitalism*.

Once you're hired permanently, you have different time frames for different benefits kick in. So like say for instance our health insurance, it was supposed to be seven months after your permanent hire date. (1) It's tough. As a temp and then as a permanent for the first seven months you don't have health insurance. Fortunately my wife had health insurance through her company that she could put me on but that was out of pocket cost, so I had to pay for insurance under her. (1) [The] good thing about General Motors health insurance [is that] there's no fees involved. I mean outside of your doctor's visits... You don't have to pay a weekly fee for having health insurance. We had to contribute roughly \$600 a month to cover me under her healthcare plan (1) now we converted [to] over mine at General Motors. Now we're looking at no fees for both of us in General Motors. So we're saving \$600 a month. It was definitely a nice bonus for us. (1) You get good benefits. That's definitely a kinda job, that's why they wanna work for the automobile industry because of [benefits]. *Good future*. (245)

The Tier 2 healthcare plan was significantly more expensive than the Tier 1 plan, which did not have any fees or copays. As Kristin Dziczek, an auto industry expert from the Center for Automotive Research, told me, even entry-level healthcare coverage was better than the platinum deal you can get in the Health Insurance Marketplace established under the Affordable Care Act. 246 Roy and Daniel both saw a good future for themselves in terms of healthcare benefits. The fact that they paid more than tier 1 workers, and they were offered no post-retirement healthcare benefits—through VEBA or otherwise—does not challenge or change their idea of a good future in the auto industry.

Wilson, a retiree who kept his relations with the plant alive, describes this generation of workers as "pre-dedicated." Their awareness of the difference between what GM could offer them and what was available outside of GM motivated them every day they came to work. For Wilson

²⁴⁴ When I talked to Roy his insurance had just kicked in.

²⁴⁵ Italics are mine.

²⁴⁶ Interview with Kristin Dziczek, April 1, 2015, Ann Arbor, Michigan. Dziczek added that the cost structure may change following the implementation of the excise tax (known as the *Cadillac Tax* in the industry) in 2018, which is within the lifetime of the 2015 contract. Healthcare costs are already rising and have already become a major bargaining issue in the 2015 contracts. In an effort to respond to the situation in a proactive way, the UAW leadership proposed a coop for the active employees of all three companies. UAW President Williams has been the biggest advocate of the idea and argued on several occasions that bringing all three companies together would bring a massive negotiation advantage. The reaction among the membership has been very ambiguous. Some opposed the idea, arguing that healthcare would then become a VEBA type of structure for active employees. Healthcare is considered a significant factor in the initial contract rejection in 2015 by FCA workers. For Dennis Williams' reaction, see his letter, dating October 5: http://uaw.org/a-message-from-uaw-president-dennis-williams/

the opportunity presented by GM explains this pre-dedicated-ness. In response to my question about pay difference, he said: "Because of the way GM now organizes and professes to be as a company, (...) we're now the workplace of choice because of the opportunity. I think opportunity sometimes is more valuable than the money." I asked him to elaborate on what he meant by opportunity, and he said:

Absolutely. You know what there are no gifts any more. You're not gonna be given a job that you can succeed, work thirty years and retire with a pension. (...) Those jobs don't exist anymore. So the opportunity to accumulate that may be more important than the gift job. (...) Well, obviously you're not gonna be making \$15 to \$18 an hour anywhere else, especially in this economy that we see today. Electric bills, gas bills, utility bills, just owning and running a home you need two incomes. And owning a car is like owning a house. (...) Certainly it is an advantage for the young guys and girls to come to the plant and work. If you don't mind working inside of a building, we'll provide you a great environment.

The constant reference to being realistic and cognizant of the economy surrounding GM was common among both the new hires and G1 workers. There was a common acceptance of the changing economy and the idea that the expectations of different generations should be adjusted according to their surroundings. For Daniel, it all came down to the market, to what was available in Buffalo. He said:

A lot of businesses are struggling in this area. That's not a secret. One time this was a place for manufacturing and shipping. Take a look at the waterfront there's old factories all over the place, they're just sitting there. So people who don't know how to do anything else, there's a lot of people who can build stuff, they're good with their hands, they can work hard they can do something. But when those jobs aren't there, what are they gonna do? They don't know what to do. The places that are hiring are hiring people that don't know how to do things and they're paying them very little. There's really no benefits. [J]obs that I worked they didn't really have no benefits. I only had sick time and a paycheck.

Daniel was not alone in pointing out the gap between the norm in the market and GM's lower tier compensation. Edmund, who was also an entry-level worker working on the assembly line, makes the same point. I interviewed him during a short break in Plant 1. In response to my question about the pay differential, he said those who complain about it are older people who didn't spend the last ten years outside GM: "They don't know the market and wages out there. They do not know what's

available. This job gives me the opportunity to buy a car, get a mortgage and be a homeowner. I couldn't do it with my previous job." Edmund held more than one job at a time before coming to GM. He sometimes worked up to 60 to 70 hours a week in physically demanding jobs. His current job was physically demanding too, mostly because it was repetitive, but it wasn't as wearing. Besides, he longer worked two jobs. At Tonawanda, he worked forty hours minimum and took overtime occasionally.

June, who was also a new hire in the second shift, underlined a completely different "bonus" of working at GM. She said the fact that she worked 40 hours guaranteed every week is a major leap from her previous experiences. Linda, who was still a temp when I interviewed her, said not thinking about the workweek is a luxury. Before GM, she worked in a care facility where she could never put a 40-hour workweek together. Falling short impacted not only her pay but also her benefits. Here, she said, she could occasionally get overtime on top of her 40 hours of work, which she considered a huge boost for her pay. This emphasis on 40-hour weeks indicates how wide the difference in work experience is across tiers. A higher tier, senior employee took the workweek for granted; in fact our conversations about hours were never about the standard work week but about overtime. June, on the other hand, said repeatedly that in her previous retail jobs she was offered 25 hours maximum, and she had to patch other jobs together to reach a bare minimum. In comparison, she said working at a union shop brought "predictability and job security." Among GM veterans, the use of the phrase "job security" to explain the workweek was extremely unusual, because in the context of the contractual framework, the definition of the workweek was a technical issue and not open to debate. Also, the workweek and job security were completely different concepts. But June's memory of her previous work experience impacted her perception of work nearly a year into her time at Tonawanda.

Comparing her new job to the one she held before, another worker named Linda repeatedly said that the wages and benefits were incomparable. This was puzzling to me, because as a temp at Tonawanda, she did not qualify for any benefits. When I later asked her to clarify, she attributed her earlier response to her motivation when she started the job. She hadn't expected to remain a temp for more than three months, which was something her father, a retiree, told her too. She quickly realized that temporary status at the plant was different than in her father's time. In her experience, there was no promise to become permanent nor was there a definite timeframe for doing so. Mary, a new hire in her late 30s, came to Tonawanda at the beginning of 2013. She had prior manufacturing experience but never worked at a union shop before. Compared to her earlier job, GM's pay and benefits were better, she said. Besides, she did not find the two-tier "outrageous." The gap was justified, because they had been working at the plant for much longer. This speaks to another aspect of the generational transition: what does a union shop mean? New hires were not familiar or simply did not agree with the core UAW principle of equal wage for equal work.

What is the situation at the other end of the equation? What did Tier 1 workers think about new hires and their economic status? Unlike the lower-tier workers I interviewed, older workers had a gloomier view of new hires' life standards. Morton said:

They're not going to Disneyland. They're not taking their kids to movies. They're not coming here for dinner tonight. They're worried about their goddam mortgage or rent? How are they gonna get gas for the car or how they are gonna pay for the car? (...) The corporation dictates it. The union is between a rock and a hard place. If you say no [to two-tier], the work goes away. Where does it go to? It goes to a community in America where there is two-tier wage, which is poverty level, or goes to a third world country; Turkey or Mexico. So the economy dictates that. (...) So next generation Americans coming up, they're gonna be living in poverty. (...) You're fighting against the economy.²⁴⁷

²⁴⁷ Italics added.

But appreciation for the job among new hires did not necessarily mean they all embraced the situation without resentment. On the contrary, I also interviewed workers who questioned the logic behind the two-tier system. Valerie was one of them. She had extensive prior work experience, and she worked in the first shift.²⁴⁸ I interpret her elbow-to-elbow experience with first tier workers as one of the main reasons for her disquiet:

The thing that is bothersome is we do the exact same jobs, and I could probably do the job better than this Tier 1 person. They're making thirty dollars and I'm making \$16. So that kind of bothers me. But we have a contract coming up in 2015. They already bring it up. They wanna raise our union dues because they say they know that we're gonna have to strike. They wanna bring our wages up. But Tier 1 might have to take a pay cut. So that's just the new buzz. They had a meeting about it the other day. In 2015 so that they would have enough money in the strike fund, because if we strike, we get paid from the strike fund. (...) This is what bothers us. I understand I just got there, they earned that pay, I get that. But our max out pay is \$19.28. And that's over a four year period. That's unreasonable. (...) I'm not young. I've had better paying jobs than this. I can say I've had even better jobs than this. You can't tell me in four years I'll make \$19.28. They took away cost of living. (...) This is an opportunity I wouldn't pass over but you can't have that gap in pay and you can't expect me to make \$19. That's unacceptable. At some point you're gonna have to give me a raise. (...) We'll have to see how the negotiations go.

Valerie was right about the issue being brought up during the 2015 contract negotiations. The gap was one of the main issues that locked negotiations between the FCA and UAW. However, at the time we spoke, these points were not raised by many workers.²⁴⁹ Despite vocalizing her disgruntlement, Valerie also expressed her trust in the union. When I asked her to compare her current experience with previous ones, she said:

I know because I made a lot more money than I'm making right now. But the opportunity within that company is *astronomical*. So I'm not really concerned about being stagnant because I know I'm not gonna allow them to pay me at that \$19. There is room to get what I desire. I'm not really concerned about that but at the same time if I know I do my job better than you and you make \$30 (...) And the benefits. You don't pay anything. (...) I have two children."²⁵⁰

²⁴⁸ Even though it is unlikely, sometimes lower tier workers can land jobs in the first shift!

²⁴⁹ One of the main reasons for the difference between GM and FCA is the ratio of entry-level workers in each company. GM had a cap for the ratio of workers that could be hired at the entry-level. It was 25% but the company did not even reach that level and entered the 2015 negotiations with about slightly less than 20%. FCA, on the other hand, did not have any cap and entered the negotiations with a 47% of its workforce in the lower tier.

²⁵⁰ Italics added.

Whether this will cause any tension on the floor or not in the near future is an important question. As I have shown so far, lower-tier workers were mostly content with their current compensation level and they preferred not to "bitch about it." However, there are others like Valerie, who were not only conscious of the gap but found it unfair. The 2015 contract negotiations showed that the gap was a major issue and had to be addressed by the union. Lauren had reflected on the novelty of the dynamics on the floor, a point that was not raised by many at the time I conducted my interviews. According to her, more time was needed to see how the relationship on the floor unrayels:

"They don't know enough yet. The only thing they know now is that there is people, older people that are getting paid and they're doing the same thing I'm doing. So they're just starting to get, now that they're permanent, they're just starting to realize the disadvantage. You know we work and we say 'Oh, I'm gonna go to Salvatore's this weekend for dinner. Oh, I'm going to Country Buffet for dinner. You know you understand that you're making fifty percent more. So when you talk about things you talk about your lifestyle. You're not conscious, because we're used to everyone making the same. That hasn't sunk in that they're not making the same, they can't afford some of the things you can. (...) Once they settle down that's when they start to concentrate on the work life and what's going on in the workplace. So now, they're just starting to figure out what's going on in the workplace. (...) Now that they've been here for almost a year or two, they've been here for almost two years they can settle down and think on their work life."

Needless to say, new hires were aware of the pay gap. What they were not aware of or had a hard time understanding was the policy of paying the same wage to a new hire and a senior worker with 55 years of seniority.²⁵¹ A worker named Jake saw the two-tier system as a reflection of the gap of years in service and thus not structurally problematic. He said he understands differentiating between a new guy and someone who's been there for ten or twenty years. This is indicative of the discrepancy between the mentalities of new hires and traditional hires. The equal pay for equal work principle did not reflect the reality of the market outside GM.²⁵² For new hires like Jake, it

²⁵¹ At the time I conducted my research, the person on top of the seniority list had 55 years of seniority.

²⁵² In fact, it is important to note that many U.S. unions (teachers unions and others) believe in a wage system where pay rises with seniority. I encountered workers at the plant who also advocated such a system. Max, a skilled tradesman, once mentioned that he found it very odd that he, as a starter, made the same amount as his fellow

was not a must, ergo not a matter of principle. Besides, seniority did determine the hierarchy of other things beyond wages. In fact, at a union shop, seniority determines everything but the wages: job assignments, shift choices and layoff and rehiring orders. For Jake and other workers in his generation, the wage difference between tiers was not any different than other issues determined by seniority.

What does all of this mean? First of all, the debate about tiers was mostly about wages. Even though wages constituted only half of the story, entry-level workers complained more about it than healthcare and pensions. In fact, the accounts I shared above present little complaint about benefits, if any. Losing a defined pension was often not even a topic of conversation. 401(k) plans were seen as sufficient by the younger generation, who grew up in an era where defined benefit plans have disappeared. As Munnell and Sunden argue, most of these workers' peers in the labor market do not even sign up for 401(k)s at the beginning of their careers. Thus, eliminating pensions within the two-tier system was arguably the least contentious issue thanks to the generational transition.

As I also showed, debates around healthcare were also not heated. Even though entry-level healthcare required more copays and fees, it was much better in terms of quality than plans in the marketplace, and it allowed workers to include their family members on the plan and save significant amounts. This is another aspect showing the critical nature of the generational

tradespersons who have more than 30 years. In other words, though it may have been a founding UAW principle, it was not considered the most rational thing to do, even on the floor.

²⁵³ This is not just a matter of temporal myopia and an inability to plan the future. It also has to do with low wages, which make it harder for workers at the beginning of their careers to save for investment in the distant future. See, Munnell and Sunden, *Coming Up Short: The Challenge of 401(k) Plans*.

transition. Healthcare in the U.S. has been privatized systematically since the 1980s,²⁵⁴ and many employers in the service sector either offer very limited coverage or invent new ways to avoid offering any. Voss and Fantasia identify the redefinition of "fulltime" by major retailers such as Walmart, McDonald's, Starbucks and the like as a strategy to dodge these responsibilities.²⁵⁵ I should remind the reader that most of the new recruits at Tonawanda Powertrain were coming in from such retailers. GM's tier one workers did not have first-hand experience of labor and healthcare markets. Since the two-tier system did not impose the same conditions on them, they were mostly quiet about the transition. More importantly, for the reasons explained above, the majority of the new hires were not as dismissive either. Thus, the generational transition also pacified potential contention on the floor.

The transition was the trickiest around the issue of wages. While during my research, new hires expressed appreciation for their wages at Tonawanda, the 2015 negotiations showed that there is a demand more generally among entry-level workers in auto union shops for higher wages. However, as I also claimed in the introduction, a possible wage progression to the Tier 1 level does not mean the gap between tiers will disappear. On the contrary, this will allow the compensation system in the Detroit Three to reach the wage levels of transplants. But the main difference between transplants and the Detroit Three was never a difference of wages but of benefits.

²⁵⁴ It should be underlined again that healthcare in the U.S. was never public in the way it was in major European states. As Kalleberg argues, welfare benefits were always distributed through employers, however with the neoliberal turn, the responsibility was transferred from employers to employees and marked the individualization of welfare in the U.S. See, Kalleberg, *Good Jobs, Bad Jobs*. For studies focusing on healthcare, see, Gordon, *Dead on Arrival*; Klein, *For All These Rights*.

²⁵⁵ Kim Voss and Rick Fantasia, *Hard Work* (Berkeley: University of California Press, 2004). p. 12. This is a trend in the American labor market in general. Workers in the service industry particularly suffer from shorter work weeks. This opens up the laws and regulations on the definition and oversight of work hours. Alexander and Haley argue that current tools perpetuate work-hour insecurity and require a federal level institutional change. See, C. Alexander and A. Haley-Lock, "Underwork, Work-Hour Insecurity, and A New Approach to Wage and Hour Regulation," *Industrial Relations: A Journal of Economy and Society*, no. 54 (2015).

Therefore, a progression into Tier 1 wages will not represent the end of the two-tier system; instead, it will solidify the transition of the compensation regime in the Detroit Three to a transplant model with weaker benefits. This massive transformation was only possible with the generational transition.

The picture gets blurrier when considering how the issue of temporary workers impacted people on the floor. GM had temporary workers before, but the ways in which they were utilized after the bailout was different. First of all, every new employee post-bailout came in as a temp. Depending on need, these workers might be given a permanent position in a few weeks or denied one for over a year. Depending on need, these workers might be given a permanent position in a few weeks or denied one for over a year. At its peak during my fieldwork, Tonawanda Powertrain employed 150 of these workers. Temporary employees were paid the same amount as entry-level employees, but they did not qualify for any benefits. Once they became permanent, they acquired a new seniority date and the time they worked as a temp did not count. A senior employee named Lauren compared the current state of temporary workers to those before the bailout:

If any temporary at that time when I got hired was at work for 91 days they were automatically permanent whether the company added them or not. That was contractual. (...) Post-bankruptcy they defined the new workforce to include temporaries for a long period of time. Temporaries can be indefinite, (...) they are now a classification of employees.

The situation changed so much, and this impacted the ways that temporary workers were viewed by other workers on the floor as compared to entry-level employees. Bruce, who worked as a temp for about five months, recalled his experience as follows:

There is no contract. You can be fired at any time. That is the biggest thing about being a temp. You don't have protection. (...) It was interesting and I hear it from other people too. (...) Some people fold you. But others, they would be nice to you on the line, and especially when you're working, but let's say you saw them on the hallway, they wouldn't even talk to you. See when you are union, people would be happy about bringing more union people because that bumps them up the list. You're union, you've been there for five years. I come in, I'm union, I'm brand new, well you're

just bumped up the list because I came in. But [if] you're temporary you're taking work away from union people. So they're not happy about that.

If Bruce was irked by this treatment, Ryan, another temp in his early to mid-20s, did not complain. Despite his young age, he had more work experience than many others on the floor. He contemplated going to college but gave up on that path shortly. He started working right out of high school and always held more than one job. He worked at a local retailer most recently before he came to GM, and had a part time job at the same time. He made \$8.50 at the retailer before he left, which is half of what he makes at GM. He no longer has two jobs, and when I asked why, he said: "I have to focus on this job and do my best." His attitude towards the job was much more positive than that of many others, especially those with higher seniority. This attitude difference becomes more interesting considering that he was still a temp, with no clear path toward becoming permanent. He constantly checked in with the union leadership and management. At the time I conducted this interview, he had just talked to his committeeman who advised not to expect a status change anytime soon – in fact, until the end of the contract – which ended in 2015. Despite the bad news, Ryan was not planning to leave anytime soon: "It sucks, but what can you do about it." Temps were not offered health insurance, but Ryan had insurance through someone else in his family, without dental or vision coverage. When I asked him if he is concerned, he said: "I'm hoping to have healthy eyes and teeth." Ryan did not have "any other plans" and planned to wait until he became permanent, which he was confident would happen eventually if not soon.

Another temp named Mindi came to Tonawanda after working in the service industry. She was making twice as much as she made prior to GM, but she was not happy with the absence of benefits for temporary workers. Despite the lack of benefits, she said this was the best job you could get without a degree. Being a temp in a post-bankruptcy automobile company meant experiencing an in-between status par excellence, and one could see the overlap and conflicts

between the issue of compensation and job security. Every conversation I had with temporary workers centered on their status rather than the wages they were making. Like their permanent peers, temporary workers usually found the pay satisfactory, but unlike their permanent peers, the ambiguity of their status was quite frustrating.

3.3. On Job Security and the Union

Job security was a crucial issue during the bailout. It's also one of the key features justifying the very existence of the union. However, both the union and the managerial approach to job security were seen as archaic by many in the U.S., especially by important figures such as Steven Rattner. In his memoir, Rattner shares his amazement about the matter as follows:

Every industry has its own drivers and idiosyncrasies; if our sessions with Chrysler and GM did little else, they helped me learn more about automaking. I was astonished, for example, to learn how the Detroit Three accounted for labor costs. Broadly speaking, the operating costs of any business can be divided into two buckets: variable and fixed. Variable costs are those that change with the level of production: if you make more vehicles, you need more parts and steel. (...) Fixed costs are those tend to remain constant regardless of how many units you produce: items like interest and rent payments and the salaries of permanent staff. Most businesses account for wage workers as a variable cost because the companies hire and lay off workers based on production. But at GM, Ford and Chrysler, it wasn't that way. They accounted for labor as a fixed cost—under the UAW contract, autoworkers got paid nearly the same whether they built cars or not. (...) *The evident absurdity of this state of affairs* sapped morale and had a perverse effect on how the U.S. automakers did business.²⁵⁶

The automobile industry has always been cyclical because of fluctuating demand. Changing customer preferences, fluctuating prices, competition, availability of credit²⁵⁷ and many other factors add to the uncertainties in the market. UAW played a key role in this environment by fighting for certain unemployment benefits (such as SUB Pay—supplemental unemployment benefits and the JOBS Bank). This was indeed part of a strategy to make labor a fixed cost. This strategy was not popular outside the industry and as Rattner shows it was considered an "evident"

²⁵⁶ Rattner, Overhaul: p. 87. Emphases mine.

²⁵⁷ This is particularly important because more than 85% of the new car purchases in the U.S. are financed. See, http://www.bloomberg.com/news/articles/2015-06-09/here-s-a-smart-tradeoff-for-new-car-buyers

absurdity" by many. In this section, we will look at the ways in which workers react to this "evident absurdity" and its restructuring by Team Auto.

In evaluating the issue of job security, I'd like to start from the status of temporary workers, because from the managerial perspective, temporary workers are the key source of desired flexibility. Bruce, a former worker, explained the simple but profound difference between a temp and a union as follows:

I think they still have some people that are temps that would probably never switch the union or be made permanent. (...) That would just depend on the business though; temps are important to them for the business, because if you keep people as temps you could kick them out the door and you don't owe them shit. But if they're union then you gotta worry about it.

This lack of security affects temporary workers' motivation, too. Temps worked harder than their permanent peers in anticipation of a promotion. Bruce recalled the process as follows:

Temps bust their ass because they wanna become permanent. They wanna show they're good workers and that will push the company and the union to make them permanent, to make them union so that they get the pay, the benefits.

In spite of these efforts on the part of temps, technically, there is no mechanism of competition that yields to a permanent position. As noted in the second chapter, management takes the date of hiring as a reference if and when they want to switch a temporary worker's status to permanent. However, temps still work harder than their counterparts, as Bruce and many others acknowledged. I interpret this effect upon temps as belonging to managerial policy whereby the insecure status of temps ultimately exerts control and discipline over this temporary workforce. This also marks a key difference between the Detroit Three and transplants. Limited research on transplants show that the temporary workers there are temps for life. There is no policy of making them permanent

and some work more than ten years holding temporary status.²⁵⁸ At GM however, this functions as a stick to promote a faster pace and greater discipline on the floor.

Despite their precarious employment status, some temps paradoxically have a very positive understanding of the union and job security. Ryan raised this issue during a conversation about opportunities on the floor. He considered options that could take him up the ladder later on in his career. He mentioned switching to management as one of the options for promotion and getting off the line, but then added, to paraphrase: "You are not protected by the UAW any more. You're pretty much on your own." Ryan's trust in the union is intriguing considering his temporary status, meaning he was not protected by the union at all. Ryan used phrases like union brothers and sisters very often, and he followed union updates even though he did not attend meetings.

Though he was not part of the union, he had full confidence in the job protection provided by it. This trust in the union was also accompanied by his trust in the longevity of the Tonawanda location, which was the main reason for many Lockport transplants to transfer. The trust in the longevity of the plant as well as the company merits attention when one considers that these people came to GM after its bankruptcy. The trust in the health of the company is disproportionate to its reputation on the street. Even though the new investments in Tonawanda after the bailout secured some job security in the medium run, they did not mean lifelong job security by any means. Workers' trust in the plant should be interpreted in another way. To better understand this we need to understand what job security means to others.

At the other end of the spectrum were higher tier workers, who were the least concerned about job security. A generation with 30 or more years of seniority, their personal experiences with

²⁵⁸ DePillis, "This is What a Job in the U.S.'s New Manufacturing Industry Looks Like."

layoffs were distant memories dating to the 1980s, another time of major transformation in the industry. The stories of these workers and how they decided to start at GM illustrate the way a job at GM was seen when they began work as compared to the present day. Ben, one of those workers closer to the top of the seniority list, recalled a recommendation made by his father, who did quite well as a salesman:

You're better off being a worker at General Motors because you have a guaranteed retirement with good wages. (...) You're better off being in a factory, being in a union, being protected by the union you know. You can't get fired like I can. You know for a salary person there is no union right, he says. You don't want that.

Memory is an ongoing practice where the past is constantly reconstructed,²⁵⁹ thus here what is important is not the factual accuracy of the recollection, though it may very well be accurate, but the way it was remembered. Ben and others in his generation recalled finding their way into GM for reasons that kept them safe in terms of job security and good wages.

Memories of the layoffs of the 1980s still existed among this group of workers, though they had little worry about. Lauren, who was laid off for about four and a half years, recalled the pressure to diversify her skill set: "I was going to school part time, because I never wanted to be in that position again, being laid off. I was always fearful of being laid off and not having any type of skills. So I went back to school." As this generation of workers climbed up the seniority ladder, the threat of layoffs was significantly reduced if not completely eliminated. There was a real threat of permanent shutdown during the recession, however even that did not pose a major threat, as these workers already qualified for retirement.

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²⁵⁹ The Benjaminian renaissance in the academy has led to one of the most interesting conversations on social and individual memory and the politics of remembrance. The past is no longer seen as a mere entity but as a political object of and a target for the social reconstruction of the present. See, Peter Osborne, *The Politics of Time: Modernity and Avant-garde* (London: Verso, 1995).

The issue of when highly senior workers retire is a source of resentment among other groups of workers, as expressed above by a G2 worker named Marshall, because it impacts layoffs and rehiring. Bernard, who had more than 35 years of seniority, had contemplated retirement during the recession but had not taken one. He recalled the period and the state of the plant after as follows:

There were buyouts and people had to make that decision including myself. I worked with a group of people, they were scheduling a retirement in a month or two, and management came and said 'look we're gonna let you go now if you wanna go. We'll give you a buyout.' They were training me at the time, and they were supposed to train me for a couple more weeks but they left that Friday. (...) The plant did suffer because of that because you had a lot of knowledge [going away.] Some of the machine floor jobs, I don't wanna say [they are] highly technical [jobs] but you gotta know what you're doing. And a lot of knowledge went with those folks.

Yet, less senior workers in my research did not complain about loss of knowledge at the plant. One of the temporary workers, Mindi, blamed this group for the ambiguity of her own status. "Had they left, there would be enough room to convert all temps to permanent positions," she said. This attitude toward G1 workers was common among both temporary workers and G2 workers. Adam started at GM in the mid-1990s and was laid off for about three years during the recession. He is now back, and with his current plant seniority, he can hold on to a relatively comfortable first shift job that takes him off the assembly line. But, his seniority only made a difference after the influx of new hires. Until that happened, he was at the bottom of the plant seniority list, and he worked every single job on the floor. It took him a couple of minutes to list them all. His low seniority was also the reason why he was laid off during the recession. At the time, having more than ten years of seniority did not help much, as the average age was around 55. ²⁶⁰ Adam blamed higher seniority workers for his misfortune. As mentioned above, he called them Civil War veterans who started

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²⁶⁰ These were the numbers given by plant manager Steve Finch at a public event organized by the local branch of the Labor and Employment Association.

working there in 1801. As he put it: "In 2006, a Civil War veteran was offered \$30,000 and a car voucher but didn't take it, even though he didn't need the job. As a result I was laid off in 2008 after Christmas."

Stephen and Ian worked on the line. These two workers were in the same category as Adam but had less seniority. Their resentment about the high seniority in the first tier was enormous, to the point that they were sarcastic about it. They mentioned two people who actually died while being employed at Tonawanda, something I could not verify with anybody else on the floor. Stephen then added, even though he does not have enough years in to take full retirement, that he will leave in 2015, because he does not want to die there. I observed similar dissent against the higher tiers among some of the G3 workers. Cindy was a team leader down the line. During a conversation we were having about her team, she saw a man sleeping on the table in the break area. She pointed at him and said, "Look at that guy, he's ancient." I asked how long he had been there. She responded: "I don't know, he won't say!"

G2 workers were laid off during the bailout for up to three years. This was one of the most troubling economic periods in the U.S. in the last few decades, raising unemployment rates in an already troubled urban area with severe unemployment issues.²⁶¹ When these laid off workers came back after the bailout, there was a tension vocalized by many during my interviews. Lauren, a G1 worker, commented about the resentment directed at her cohort:

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²⁶¹ Buffalo's unemployment rate peaked at 9.7% in January of 2010. It gradually fell and came down to its current level of 5.3 as of September 2015. This is below the national rate (which is 5.5%). However studies also show that Buffalo suffers from significant underemployment and poverty. In other words, the relatively better unemployment rate does not reflect the severity of the problem of poverty across the region. For a comprehensive analysis, see, http://www.ppgbuffalo.org/wp-content/uploads/2010/06/poverty-2012.pdf. This report also shows that the region suffers from low growth and severe racial segregation. One of Buffalo's distinguishing characteristics was its prolonged economic misfortune compared to many other metropolitan areas that grew with the housing bubble. Buffalo did not suffer from the housing crash simply because it did not benefit from the bubble prior to the recession.

There's an anger there. There's a group of people who wants my group of people go away. 'You're old, it's time for you to leave. It's time for us to take over.' Because they said that they suffered being laid off for a long time. (...) Some people in my category, in their minds, are old school thinkers. So we're not thinking out of the box. We may have caused the bankruptcy, in their minds. (...) There's a group of people who were laid off for two three years and came back. (...) They didn't get the wage cut [with the bankruptcy] but they were out for period of time their benefits exhausted, or they had to go to another location.

Even though he was not laid off during the recession, Vincent also had resentment towards those with 35-40 years of seniority. Vincent said the job is not designed for such long careers, workers should leave the system after 30 years. It is called "30 and out" for a reason, according to Vincent. This way, he argued, there would be more room for those in the middle. That said, Vincent, who was himself middle-aged, also understood those who were in their mid-50s with 35 years seniority. They would not even be eligible for social security if they retired, he said. But then he said: "What will they do? Perhaps they could live their life." Vincent's mixed feelings reflected the confusion about how the generational transition should proceed.

How can we interpret this resentment towards G1 workers in relation to job security? So far, I have argued that the generational transition played an enabling factor in implementing the two-tier system and other landmark changes. The dynamics were different when it came to job security, where there was much more resentment towards Tier 1 workers from different groups. What we can be observed here is a push from lower-level workers to accelerate the generational transition. Workers in the lower ranks of the hierarchy did not express disgruntlement about gaps in wages and benefits but were very vocal about job security. This illustrates the importance of job security over wages very clearly.

How did G1 workers respond to the gripes of fellow workers on the floor? Conrad, who had worked for more than 35 years and still worked on the line, summarized a prevailing G1 point of view. Our conversation on the line was not a long one, since Conrad was not really a talkative

person, but he wanted to address this issue, which bothered him sincerely. He said he'd been at GM for over 35 years and to others that made him seem like a prehistoric relic. He was not even sixty years old, and he was years away from collecting social security. Besides, his wife still works, and she has no plans for retirement. He turned to me and asked: "Why would I leave, even when I still have to work as soon as I leave the door?" This is one of the issues that complicated the generational transition. The younger generation was pressured from the bottom, but workers like Conrad in the first tier were not in the minority. This has to do with conditions outside the factory. The labor force participation rate has steadily increased for those over 65 over the past twenty years, and especially in the last ten. 262 The labor participation rate has increased across the board, however the increase in the older workforce reveals a trend in which retirement ages have been pushed back. The tension on the floor about job security at GM should be considered in this context. Even though workers in the first tier also qualified for a pension, they refused to retire before reaching a certain age. As Conrad clarified, they would need to work as soon as they left anyway, thus leaving a job with high wages, good benefits and high job security did not appeal to this generation.

The axis of the debate on job security so far may appear confusing, because what the bailout mainly did was to eliminate the JOBS Bank. But the JOBS Bank rarely came up during my interviews. Job security meant something completely different for the new hires, mostly because they were unaware of previous arrangements such as the JOBS Bank. It wasn't pre-bailout times they compared their jobs to but their own prior work experiences. Cordelia, for instance, arrived at Tonawanda Powertrain after bouncing between a few service industry jobs in Buffalo. She

²⁶² For a study focusing on this particular issue, see, https://www.census.gov/prod/2013pubs/acsbr11-09.pdf

became permanent quickly, after two weeks, and with more than a hundred workers in the seniority list under her, she has more job security than her new peers. As mentioned, all layoffs and rehires are based on seniority. Thus, in case of a layoff, Cordelia will be laid off after these one hundred plus workers under her on the list. She previously worked as a professional at a downtown law firm, and she complained about not having any job security then because of the nature of at-will employment contracts. Under such contracts, once one loses one's job, there is no path for going back. Compared to the seniority-based layoff and rehiring system, what she had earlier seemed completely arbitrary. Thus, union protection for Cordelia meant not only having a collective voice or a transparent grievance procedure but also predictability. In case of a downturn, she knew that if she were to be laid off, she would be recalled in reverse order of the layoffs.

Within the context of a union shop, "job security" has traditionally referred to a safety net – meaning compensation and benefits – in the event of layoffs. Yet, what Cordelia referred to as job security – a path for returning to work after a layoff – is actually a basic element of being part of a union: union members are permanent and are covered by a contract. To make sense of Cordelia's use of the term, one needs to understand the context of the prior work experiences of Cordelia and other new hires in non-union shops, where relationships between employers and employees are not mediated by a union. The difference was captured in one worker's stated enthusiasm for unions. Daniel mentioned the role of the union in case of disagreements or grievances as a very key source of security:

I love it, to be honest with you, knowing that somebody's got your back. You know, it's amazing. I could've used it in other places I worked at [laughs], you know. You got a problem, you can have a union rep come over, and you can talk to them about it. That'll give you their input. It might sway your thought about something, shed some light about something before it blows up into something big that doesn't need to blow up. And [if] something happens where you were wrong, they'll take it a step further to make it right. Again, it's a big place, stuff happens, people forget to put your hours in, you know what I mean. Usually it's a conversation with the manager, but if you're gonna argue with it, you get your union guy. And your union guy steps in, and they know how to argue it. A lot

of people on the floor, they're just hotheads, they don't know how to do it. So that's why you got your union, because they know how to do it.

For Daniel, a union rep on the floor was first of all a person who knew the procedure, "a person who knows how to argue." This knowledge of the process is really important. As explained in the second chapter, national agreements, supplements, and the local agreements are very detailed and complex documents, and require some expertise to comprehend. Valerie saw the union in a similar way, and she also connected that to the idea of a safety net: "The safety net of the union for me is like when you have an argument with your supervisor, and he tries to write me up or something like that. I can tell him I no longer desire to talk to him and get my union rep." 263

The very existence of the union meant a lot to new hires. Many identified job security as more valuable than the pay itself. It is important to note that the union and the labor contract don't provide job security per se. Rather, they provide clear rules about who gets laid off first based on seniority rights. However, this resonates differently among workers, as my research shows. The union was often associated with protection from the external labor market and operated as a medium of job security in itself. GM is open to hiring entry-level management personnel from the floor among hourly workers. Yet, this was not a popular option among many workers, and the reasons had to do with job security. Edmund, for instance, would not consider switching to a management job, because he did not consider it secure. He perceived the shield and protection provided by the UAW as very comforting. Those who pursue promotion do so by remaining within the hourly workforce. As I will discuss more in detail in the chapter on skilled trades, the majority of the new hires on the line preferred a position in the skilled trades over a management job, solely

²⁶³ Not everyone was satisfied by the "service" provided by the union reps though. Veronica, for instance, said she never got a clear answer from her union rep. Even worse, she said it is very difficult to get a hold of him. After the bailout, union positions were reduced to bare minimums. Non-essential union positions, including some union reps on the floor, were eliminated. Jackie also complained about the lack of knowledge of her union rep on the floor.

because of job security. As I showed above, even Ryan, who was still a temp, expressed more trust in a union position and its job security when compared to a high-return yet high-risk management position. In the context of Buffalo's struggling economy, this choice made sense to workers.

Earlier, I questioned the trust of new hires in the future of the plant. It seemed like GM's emergence from bankruptcy just a few years prior did not shake their confidence in the future of the plant. One might explain this paradox through their preconceived notion of job security and their trust in the union. It should be noted that while temporary and permanent new hires considered the plant stable and were confident about its future, older hires did not share such optimism. According to them, layoffs for the new generation could happen at any time and should not come as a surprise to anybody.

An event I observed towards the end of my plant visits provided an insight into the asymmetrical nature of such threats and the importance of union protection. There was a "rumor" on the floor about possible layoffs of temps. I call it a rumor because it was unknown to many workers. Mindi said she had first heard about it two months before we talked. She "freaked out" at the time, but eventually she got used to the idea. She also started putting money away to go back to college so that one day she could return to Tonawanda and bid for a group leader job. Linda, another temp in the same situation, was frustrated by the ways in which these rumors circulate. "They could handle it better, but they just don't!" Linda was not only frustrated with the possibility of a layoff, but also with the lack of information on the floor. Everybody came to expect a layoff, but no one knew when or how many people would be affected. The process worked completely differently for a senior employee. Procedures were well-defined and the implications were clear. The accounts I cited so far from among new hires referred to this procedural clarity as "job security." This and a relatively well-founded trust in the near future of the plant together formed a

sense of "job security." Contractually, this has nothing to do with the job security debates that took place between management and the union in the few past decades. As the generational change occurs, the perception of security evolves from a safety net provided for workers during layoffs to the very existence of the union. This creates a discursive context in which there is no room to debate how the elimination of programs such as the JOBS Bank have impacted job security.

The situation was not as pleasant for temporary workers. Their status in terms of job security was not changed a bit by becoming GM workers. Since temporary workers did not qualify for any unemployment benefits, being laid off was no different than being laid off by a non-union shop. They had no call-back rights, and even if they were to be called back, they would start from the beginning, since they accrued no seniority. This was a post-bailout novelty at Tonawanda and a major divisive issue among the workers. The justification for the use of temporary employees on a permanent basis was to make the local more competitive. In the next section, I will discuss perspectives on competition among the workers.

3.4. On Competition

The gap between the tiers was perhaps the biggest in regard to their perspectives on competition, which were closely related to the idea of job security. As discussed in the second chapter, the post-bailout form of Appendix K promoted job security only by promoting competitiveness. The funds like the JOBS Bank that had provided protection during layoffs were removed. ²⁶⁴ Locals were encouraged to increase their competitiveness so as to bring in more jobs, and this would provide "job security." In other words, there is job security as long as there is a job. This tautological

²⁶⁴ Once again, a gradual transition was envisioned in the 2007 NA and only the new hires were excluded from coverage. But in 2009, the JOBS Bank was suspended for everyone, and finally, in 2011, it was removed completely.

statement has become the backbone of job security in the post-bailout era. This entails a new understanding of competition on the floor, not only with transplants and imports, but also with other locals and even with workers in different shifts.

Historically, there were three main moments that made competition a household issue for traditional hires after the 1980s. This competition was firstly about imports—mainly from Japan and some from Europe, particularly Germany. The Japanese challenge in the small- and medium-size car market, which was powered by unfavorable gas prices and stagnating wages and purchasing power, characterized the negotiations between the UAW and the Detroit Three in the early 1980s. This competition was not only about the product but also the efficiency of manufacturing the product: lean manufacturing. As discussed earlier, GM, Chrysler and Ford reacted to this novel situation in similar ways. The issues raised by this competitive environment, such as efficiency of production, reorganization of the assembly line, the use of technology, the focus on the small car market, etc., became central elements of the bargaining environment in the 1980s.

The competition with imports, which constituted the first stage of the formation of the current competitive environment, was followed by competition with transplants in the U.S. Starting in 1982 with Honda's investment in Ohio, ²⁶⁵ Japanese and later German and Korean manufacturers expanded their operations in the U.S. This instigated another major challenge to the UAW, as transplants targeted mostly right-to-work states with strong anti-union sentiments. They offered no guaranteed post-retirement benefits but matched the wages of the Detroit Three. They also used temporary employment opportunities to adjust for changing market demands. The

²⁶⁵ Honda converted its motorcycle plant in Marysville, Ohio to a sedan assembler in 1982.

resulting gap between the two in terms of compensation and employment policies (flexibility) established itself as another permanent item in the bargaining environment.

The third moment followed the arrival of Mexico to the matrix in the aftermath of NAFTA. 266 Mexico's economic integration with the U.S. rose with NAFTA, which made the electronics and automotive sectors two leading sectors of integration. The growth of Mexican automobile production has been spectacular in the last two decades. It is anticipated to reach 5.5 million units a year in product capacity, from under one million in the mid-1990s. However, the type of competition created by Mexico's integration was qualitatively different than the first two. First of all, both international competitors and the Detroit Three were investing and expanding their networks there. Yet, because of duty free access to the U.S. market, facilities in the U.S. are in direct competition with the working conditions in Mexico. Especially since the bailout, 267 the investment in Mexico has soared, and it has become a regular bargaining item between the UAW and the Detroit Three. 268

These three major moments occupy a central place in the imagination of first-tier workers, as the problems caused by these moments were the main issues in the collective bargaining process. These moments cannot just be characterized by competition in a free market. They are complicated by the additional factor of *the* state at multi-scalar levels. For instance, when the competition with

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²⁶⁶ Tamara Kay, *NAFTA and the Politics of Labor Transnationalism* (Cambridge: Cambridge University Press, 2010); David Bacon, *The Children of NAFTA: Labor Wars on the U.S./Mexico Border* (Berkeley.: University of California Press, 2004).

²⁶⁷ GM's plans to expand its operations in Mexico was a big bargaining item in the 2009 renegotiations. UAW's pressure on the Obama Administration at the time limited the amount of new investments that would idle facilities in the U.S. See, Cal Rapson's email to Team Auto task force.

²⁶⁸ More recently, investments in Mexico became the highlight of the negotiations between FCA and the UAW. The first tentative agreement was vague in terms of the future of investment in Mexico. After the failed tentative agreement, FCA was forced to inscribe a moratorium instead of a verbal promise in the 2015 contract.

imports first became a problem, the reaction of management at GM was to lobby for raising tariffs on imports. Roger Smith, the then CEO of GM, was able to convince the Reagan administration to initiate higher taxes on Japanese imports. ²⁶⁹ As for the second moment, states are also major actors with tax subsidies, incentives and other direct and indirect services they provide to international automakers in exchange for large-scale investments. Finally, Mexico's involvement was possible due to a combination of the NAFTA deal and open access to the U.S. market, a state-sponsored repressive labor regime, a weak currency, and incentives and subsidies similar to those offered by individual states in the U.S. ²⁷⁰

One of the main managerial policies to respond to these forces is to promote competition between locals, i.e., between sister plants within the GM umbrella. Generally known as the *whipsawing*, this method is used by management to create an environment for locals to bid for new investments. GM is not an exception by utilizing this tactic, in fact it is used in various ways by almost all multinational automotive companies in the world.²⁷¹ What appears to have emerged in the post-bailout context is the intensification of competition among UAW locals and a decline in solidarity between them. In some cases, there seems to be even more solidarity between the union and management at a certain local than the UAW locals in two different plants.²⁷²

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²⁶⁹ Roger Lowenstein says: "Roger Smith, GM's new CEO, had been hired, as an accounting clerk, in 1949-the last executive from the pre-pension era. Having operated in a cartel for so long, he failed to grasp how serious the situation was, or to realize that the old arrangements wouldn't work. His first instinct was to push for so-called voluntary restraints on Japanese imports, duly agreed to by the Reagan administration. This merely insulated the companies for a little longer." See, Lowenstein, *While America Aged*: pp. 50-51.

²⁷⁰ For a recent study, see Alex V. Covarubbias, "The Mexican Auto Industry: From Crisis to Greater Region-centric Influence," *Norteamérica* 6, no. 2 (2011).

²⁷¹ Greer and Hauptmeier analyze the types of whipsawing in Europe. See, Greer and Hauptmeier, "Management Whipsawing: The Staging of Labor Competition Under Globalization."

²⁷² How did new hires react to this situation? They had little or no memory of such a history of competition. The collective bargaining process for the 2015 contract was the first occasion where workers were exposed to a series of issues related to competition outside the plant. Despite their relative lack of interest regarding competition on a larger scale, they are engaged in some competition in an unexpected place: between shifts. This has been a long-

The relocation threat in the auto industry is real. There are only a few OEMs and they all operate on a global scale, not just in terms of sales but also manufacturing processes. That said, moving production elsewhere with new investments is an expensive process. Considering the fixed costs such as the machinery, which costs about the same everywhere, the competitive advantages of producing elsewhere may not be the first choice of management in the short run. Companies prefer taking this route for certain products. Additionally, leaving a facility idle is very costly as the capital invested brings no returns. Thus, in the long run, it is not profitable to reduce production in one facility unless there is a clear plan towards a permanent shutdown. When we consider the massive technological retooling that has transformed the entire network of GM's facilities in the U.S, which cost more than \$18 billion since the bailout, I anticipate the relocation threat becoming smaller in the existing 40 GM facilities located in the U.S. in the short run.

However, such threats circulated in a different form among workers at Tonawanda, suggesting a more immediate threat on the floor. Ben, a senior employee, put it simply:

So it's not easy. I would not be happy if I were in your shoes, if I'm working next to somebody making \$28.50 an hour and I'm only making \$14.50, psychologically after a while I'd kinda [say] 'Oh geez, he's on the same work, I'm underpaid.' But General Motors says if you want business you have to agree to the two-tier system, and if not the new business will go elsewhere to another plant or to another country that we can afford to pay those rates.²⁷³

The immediacy of the actual threat was independent of its effect on the floor, where there was a willingness to accept that competition was fierce enough to warrant a two-tier system.

Although I am arguing that plant relocation is less likely in the US auto industry than is often presumed, the threat of competition with transplants poses challenges that can be felt on the

standing issue inside the union. New hires, who were fresh on the floor, were usually assigned to second or third shifts where they competed with the first shift and tried to beat them in the number of engines made. Management always prefers higher output numbers, however the impact of competition between shifts had less to do with competition than with disciplining new hires.

²⁷³ Italics added.

shop floor. Morton, a G3 worker, was especially conscious of competition with transplants and expressed concern about a recently failed UAW organizing drive:

Politicians put their nose in it and said if they get union they're not gonna get anymore government aid. That's proof for you right there that they're anti-union and it shouldn't be allowed. (...) Everybody knows why they're going to the south. They're historically anti-union, low wage... There's a Mercedes-Benz plant. (...) Some of the guys I talk to that are working for them are making \$9 an hour and they're making Mercedes-Benz SUV that costs \$45.000. The wage isn't even proportional to what they make. How do you afford that?

The threat of relocation may not currently be as extreme as it was, but competition still exists, and it is sufficient to put pressure on wages at home. This is reflected in Morton's observation about the low pay of those making Mercedes-Benz SUVs.²⁷⁴

To fight this new aspect of competition, higher tier workers prefer another actor to be part of "the game": the state. Ironically, one of the main destabilizing factors, the subsidies and incentives offered by Southern states, was often considered a possible route for fighting such competitive pressures. Morton, like many others in the union's leadership, attributed a key role to state/s in this "game":

New York State does need to get into the game in giving money to keep and attract companies. (...) That [providing public subsidies] started in the 80s when Toyota came to the U.S., which happened to be in Georgetown, KY. I was a little kid then but I was reading up on it. Toyota basically went to all these states and asked: 'What are you gonna give us to come build here?' This is in the 80s, unprecedented. (...) Huge amount of incentives [were offered.] Georgetown Kentucky won. They build the infrastructure for Toyota to build its plant. They gave them water, sewer, electric, paid for that all. They gave them a ten-year tax break. Basically they started the game, that's the game you play to keep, retain or draw businesses. As far as General Motors Tonawanda plant, you're not gonna pick that plant. You kinda got them, but guess what they make that product elsewhere. General Motors can just close the plant and walk away and the town of Tonawanda and state of New York are stuck with 490 acres of brownfield. See you later, bye bye! (...) You gotta pay to play. That's the phrase.

²⁷⁴ Interestingly, Morton considered transplants to be an important target of the UAW in union efforts to expand the organizing of labor in the US-based auto industry. During one of our conversations, he gave me his opinion on the position UAW was taking: "Toyota, Honda... UAW is trying to break into those shops. Right now, they're trying to increase our union dues from two hours to two and a half hours. I suspect that extra half hour is needed to organize the non-union transplant companies."

If this is a "subsidy game," in Morton's terms, how can workers get involved? In a union meeting I attended in 2013, I listened to one of the local leaders of the union address the crowd. After briefing the membership about the most recent developments at the local and national level, and responding to members' questions, which are all part of routine practice, he called the membership to act on two issues. He said these are vital to sustain the competitiveness of the plant and secure more investments: 1) improving their safety record and, 2) reaching out to local and national representatives to ask/lobby for incentives and subsidies for the plant. I was shocked by the emphasis on these seemingly two different issues in the context of sourcing in more jobs. The call for safety, as I later learned, was important, because Tonawanda Powertrain was underperforming in terms of safety, ²⁷⁵ and that was an important metric for Detroit in choosing places for new investments. The call for political action on the other hand tells us the place and importance of state/s in the new nexus of competition. This call to act was highlighted by many others in my research. I asked Morton whether workers should get in touch with politicians themselves, and he said:

I do. But the apathy among the hourly people to call their politicians is rampant. They don't. Union doesn't do enough to get the word out to the membership to get on the god damn phone and call your congressman, get on the phone call your local assemblyman, get on the phone, write to them, email them. I think they should have somebody that allocates handing out telephone numbers to politicians, (...) give them all the information they need to do but give it to them. There's eighteen hundred people there. If they continually bombard politicians it would help. (...) I don't know why they don't do it.

Morton's frustration with others on the floor may have been justified on his part. Yet, what I would like to highlight here is the sense of urgency in his call. He argued that politicians should be bombarded with such requests. In fact, the expectation that the state actively participate in "the

²⁷⁵ Tonawanda had record workplace accidents and recordables and at the time of my research, it was second to last in the list of plants across the U.S. for safety. I will discuss the nature of these accidents below.

game" was quite common among employees. They may not have been as active as Morton and the union leader wanted them to be, however there was a consensus about the urgency of the state's involvement. This is a key characteristic of reindustrialization in the U.S., whereby multiple stakeholders view state involvement as an integral part of sustaining the competitiveness of the Detroit Three. GM was bailed out by the federal government, a process where the public lost more than \$10 billion in investments.²⁷⁶ At the state level, the state of New York is very willing to provide incentives and subsidies to major companies. In fact, the Buffalo Billion Program, a program endorsed by the Cuomo administration to promote economic growth in the region, initiated a workforce training program to provide training for employees.²⁷⁷ In other words, there is a very strong alignment between the discourses of the state and that of workers about whether the state and the public should be actors in the labor process. This is not a particular to the postbailout context in the auto industry. Studies on entrepreneurial and neoliberal state/s have documented such trends long before the bailout.²⁷⁸ This can easily be observed on the floor, especially among the traditional hires. They regard competition among states and countries as not only real but indisputable, agreeing that every locality should play "the game."

²⁷⁶ For the economic details of the bailout, see, Goolsbee and Krueger, *A Retrospective Look at Rescuing and Restructuring General Motors and Chrysler*.

²⁷⁷ For details, see, http://buffalobillion.ny.gov/

²⁷⁸ The state's involvement in economic processes is a well-researched topic. For a few examples see, Brenner, *New State Spaces: Urban Governance and the Rescaling of Statehood*; William Sites, "Primitive Globalization? State and Locale in Neoliberal Global Engagement," *Sociological Theory* 18, no. 1 (2000). For a comprehensive and critical analysis of such entanglements in Mexico, see, A. C. Laurell, "Three Decades of Neoliberalism in Mexico: The Destruction of Society," *International Journal of Health Services* 45, no. 2 (2015). States are an integral part of such economic entanglements. But they not only justify investments but also play the role of a "disinterested" intermediary actor that sustains production by "resolving" and actively taking part in negotiation processes. For an impressive study of such manifestations of the state, see Ching Kwan Lee, "The Power of Instability: Unraveling the Microfoundations of Bargained Authoritarianism in China," *American Journal of Sociology* 118, no. 6 (2013).

This reasoning appears in terms of competition with other countries too. Morton is very vocal about competition with Mexico and China. For him the equation is very simple: "Every plant in the U.S. has a sister plant in Mexico that makes the same thing. 'If you wanna go out on strike, go ahead, I'll lock the doors, see you later buddy.' (...) They got a million people waiting outside of the fence there." This rather crude image of Mexico is quite widespread.

Workers' imagination of Mexico is particular and vague at the same time. It is vague, because workers have very little information how things are really run in Mexico. For instance, some workers think Mexican plants have no robots whatsoever just because the labor is very cheap and they can afford it. In a public meeting, I once heard someone describe an image of an assembly line being pushed manually by workers, again because labor is very cheap. Another worker, who actually has been to a plant in Mexico once, remembers a completely different picture. He praised the willingness of Mexican workers to work together with management and said GMS (General Motors Global Manufacturing System)²⁷⁹ is implemented in Mexican plants much faster than it is in the U.S.²⁸⁰ Despite such contradicting views of the labor process, workers showed a consensus about the conditions of work in Mexico. They agreed that labor rights were minimal, wages were low and benefits were limited. Morton compared his experience at Delphi with what he had heard about Mexico:

What happened to Delphi was pre-engineered. They did it for a test run to see what they can do with other GM facilities. (...) Knowing that they went through an experiment with Delphi and their experiment came out perfect. [They] dumped the pension on the government, ditched all the creditors and now they're offering work in those facilities. They're hiring now and guess how much? Fourteen and some change. Benefits? Zero! Vacation? Zero! You got your own little Mexico right there in Lockport, NY. It's the Mexico of the U.S. (...) What better way to clear out your balance

²⁷⁹ Every car manufacturer has a production philosophy akin to GMS. At Chrysler it is called World Class Manufacturing, and at Ford it is called Ford Production System. Basically all of them are variations of the Toyota Production Model.

²⁸⁰ The last one is the closest to reality. GM's plants in Mexico carry a similar technological footprint to their counterparts in the U.S.

sheet, dump the pension? People coming through don't have the pension they have 401(k). But if you're feeling the wage pressure, threatening with closure or bankruptcy you know what I'm saying. Even now they can pull that in Tonawanda or any other Tier 1 plants in the U.S. (...) It is spoken every day on the floor.²⁸¹

"It is spoken every day on the floor." This is very important, because constantly speaking about these threats keeps workers on their heels. But as I stated earlier, the labor process is defined very tightly. There is not much room for individual workers to speed up the process of production and respond to competition by producing more engines. Therefore, these competitive pressures need to be addressed in other ways. This is where issues such as outsourcing, the use of temporary employees, and eliminating certain classifications come in to the picture, along with the role of state subsidies. This is why the threat of relocation and the competitive forces associated with it are key elements of reindustrialization in the U.S.

How does whipsawing work on the ground? The textbook case is from the 1980s: "Michigan versus Texas." It may no longer be the norm, but it is well-known. Morton gave a comparative account:

The old Saturn plant, which is in Tennessee, Spring Hill, Tennessee; we're in competition. The union does not want what they call whipsawing, putting Tennessee plant versus Tonawanda plant [in competition], but they do. They constantly pitch the Tonawanda plant versus the Tennessee plant. When the LGE block started up, they were having production problems with the launch. Spring Hill, they already had their machine floor for LGE, so we were asking for the block so that we can assemble it. Spring Hill says we won't give you the block but we'll take your order. (...) What can the union do for us? Can you go six days straight weeks, can you eliminate job classifications? Some union plants say 'no, we're not gonna do it General Motors, Arlington says, 'hey we can do it.' They close the Ypsilanti, put all the production down to Arlington, TX, which is still open to this day building pickup trucks etc. and Ypsilanti is nothing but a parking lot. And that's basically what

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²⁸¹ Veronica and Cameron are also Lockport transplants, and they have family members working in Lockport. According to their second-hand information about the conditions imposed in Lockport, the ratio of temporary workers is much higher, there are no sick days, and more importantly, everybody works in the lower tier on the production side. This is particularly interesting when one considers the fact that the Lockport facility is still a GM plant. Morton is not the only one who sees a close relationship between the Delphi and GM bankruptcies. Even though the Lockport facility is a second tier facility, which does not compete with the same type of GM products, this raises another question about the nature of competition among different locals and what conditions locals will sustain in order to compete with one another.

happens. (...) It's still going on, not as prevalent but very subtle. You know it in the back of your mind.

The Arlington, TX-Ypsilanti, MI case is very well-known in the industry. It is a textbook example of putting different locals in competition with each other at the expense of the other's existence. At the end, one local, Arlington, won the bid and survived while the other, Ypsilanti, was permanently shut down not long after. However, whipsawing does not work that way anymore. As Morton said, the competition and whipsawing is currently more subtle, more productoriented and does not play to the expense of one location's terminal shutdown. The current aim of whipsawing is to draw more concessions from one local at the expense of the other while avoiding a permanent shutdown. 282

Whipsawing has been around for a while in various forms. Despite its long history, the main, post-bailout characteristics of whipsawing have changed thanks to a weakening collective bargaining framework. For G1 worker Lauren, this had to do with the collapse of the pattern bargaining model where the International set a pattern and locals developed strategies within that model. This no longer exists, as locals are more autonomous, which is a euphemism for being more vulnerable to competition with other locals. She explained that subtlety in relation to the bailout:

Because we're used to operate under a pattern, so at the higher up they create a pattern and us local unions, we follow that pattern. So, now after the bankruptcy they created you on your own. Locals are bidding on work. Locals are [asked], you know, 'what would you do?' After the bankruptcy, the structure changed and we're no longer able to follow a pattern. (...) [More competition] between plants. (...) When the government interfered and came in and said, you know, 'cut this, cut this, cut that,' you know, the whole process of approving the bankruptcy, they just watered down the union's power. They started looking at things and they didn't do a balance. They started eliminating things and it took a long time to be communicated across the board for people to understand what it really meant. And the interpretation of the contract, you get a contract, but until actually you test it out, let's say you have a statue or a constitution and it's a case law, various cases that define it. So this is what's happening now. You have a new, revised contract where usually there was a pattern, and it evolved over time. Here you have this drastic change and almost in every area of that contract. And so now you have people who are elected by popularity sometimes by skills or past performance,

²⁸² For whipsawing in relation to extracting more concessions at a GM location, see Sallaz, "Manufacturing Concessions."

but most of the time basically by popularity, who would normally be dependent on that pattern to fall back on. Now we're trying to survive in this post-bankruptcy [environment.] What are some of the things we have to do locally? The laws are different. You know, subsidies are different. The workforce is different. What do we have to do in our area to survive? So that's where the disconnect came with the solidarity forever.

This long quotation addresses multiple issues at the same time. The contract Lauren referred to is by design weaker than the pre-2008 pattern. I argue that one of the biggest factors complementing that weakness is the introduction of temporary work as a classification. The use of temporary workers, the duration they can be employed, and the justification for them in the first place are all up to local parties. Even though there is a need for approval from Detroit, these parties do have the authority to negotiate in this grey area. There are many other grey areas, and locals can also negotiate over cost saving practices such as outsourcing and cutting certain services. ²⁸³

Lauren also raised questions about the role of leadership, since the role of the International, in terms of alleviating the effects of whipsawing, has been contested. Workers like Lauren refer to the collapse of the pattern to explain the International's reluctance to observe and intervene. As the meeting I referred to earlier also suggests, many in the Local 774 referred to their sister plants in the U.S. as competitors instead of sisters and brothers. Despite the connective framework provided by the national contract, as experienced workers like Lauren argued, there is a strong trend towards diversification between locals. Already existing competitive pressures, which were exemplified in the Arlington, TX versus Ypsilanti, MI case, have been transformed in ways that impact solidarity. The collapse of the pattern, as Lauren suggests, explains the looseness of networks of solidarity, which further weakens labor vis-à-vis capital, even in the union context.

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²⁸³ Conditions for outsourcing are vaguely defined in the national contracts and initiative is mostly left to the local parties. At Tonawanda this was harder to track because the most recent local agreement was signed in 2003. (A new agreement is being negotiated as I write this dissertation.) Issues like outsourcing that are left to the locals are negotiated individually by the leaders of each party and finalized in what's called a "shelf agreement." I requested access to these agreements and other local supplements, but I was not given access to them. Members of the local can access these agreements if they want to.

Intensified competition among workers across locals, which is not only promoted by management but also acknowledged and appropriated by leadership in the union, grants a view of the new characteristics of working class culture. In this context, I observed more unity between workers and management at the local level than solidarity between workers across locals. In the next section, I will discuss how these relationships manifest themselves across tiers.

3.5. On Relationship with Management

Seniority is often seen as the key component of internal labor markets. Michael Burawoy argues that its main function is to promote the loyalty of the worker to the workplace. The more they stay in the system, the more they are protected. And possible risks of losing their employment increases exponentially.²⁸⁴ I was able to observe the impact of seniority on shift preferences and job assignments during my trips to different shifts. In the second and third shift, I would see more workers in my generation. The first shift however, especially certain jobs, would consist of workers with a minimum seniority of 35 years. None of these workers were laid off during the recession thanks to their seniority. Some of their peers at the time took the buyouts or simply retired, but obviously the ones I encountered on the floor were those who chose to stay. These are G1 workers who express a clear and strong mistrust of management. Raymond, who has been on the machine floor for decades, thinks management's priorities have never changed. "It was always [about putting out more] numbers, and it remains to be so." More importantly, he said that when the numbers are met, success belongs with management, but when they are short, the blame is placed on workers. Raymond said this never changed in his long tenure at GM: "What has changed is the level of knowledge. Personnel used to be more knowledgeable about the process, but now a college

²⁸⁴ Burawoy, *Manufacturing Consent*: p. 107.

graduate with an irrelevant degree can get the job just because his parents had money to buy them a degree."

Despite their different views of each other, this group and the G2 and G3 workers seemed to agree in their opinion of management. In one of my visits to the floor, I sat around a table during a break with a group of high seniority workers. The higher the seniority, the lower the trust was with management. Another worker with more than forty years of seniority said management has never changed since he's been at GM. Thanks to their seniority, these workers have little concerns about job security or job assignments. They can bid for and get any job on the floor in their preferred shifts. Because of their long tenure, they are not intimidated by management either. They are not affected by the bailout at the scale that their peers on the floor were. They were not laid off, and they did not lose any wages or benefits. Given the current state of affairs at Tonawanda Powertrain and thanks to their seniority, it is unlikely for them to need any of the lost job security measures. The transition to VEBA for retiree healthcare is the only loss they will suffer when they retire. Yet, when I asked repeatedly about the changing issues of the last ten years, I received similar responses. Specifically, I asked if they agreed with academics and experts who claim that there is a transition from an adversarial to a cooperative relationship with management on the floor. The answer was the same. Relations between management and union have never changed.

Morton, who is a member of the third group, has similar ideas about management and relations on the floor. Since he was largely affected by the recession and the bailout, he also reflected on the relations before and after 2009. He says: "Absolutely nothing changed. Their mentality changed to 'you work harder not smarter.' If you question them, basically they said, 'There's the door.' (...) Basically they said, 'Shut your mouth. If you don't like it, I got thousands of people outside that fence that would take your job. People working for ten bucks would come

in and work for \$14.50. I got people (...) fifty years old that would come here and work for \$14.50. If you don't like it, there's the door.'" In the same interview, I came back to this issue, asking about the labor-management cooperation model and how/if it works on the shop floor. Morton replied as follows: "I believe it's all lip service. (...) I see none of it on the shop floor. I see their way or the highway. That's my opinion [after] twenty-five years [of service]. The only cooperation they want is you shut your mouth and do what you're required [to do]. That's it!"

This is important because this generation of workers is gradually being replaced by a younger generation who has had a completely different relationship with management. A series of observations on a certain practice may shed light on the importance of this generational transition. In the auto industry, the emphasis on quality has risen thanks to growing competition and narrowing profit margins. However, meeting the numbers is still a major concern, and management does everything it can to reach the targets. This manifests itself differently in different shifts. One of the main ways to increase the numbers of engines produced is to force workers to work through their breaks. Workers in my research had two 20 minute-long breaks before and after their lunch. During this time, the assembly line stopped and workers rested. Some stayed around the line. Some rested in the designated rest areas right behind the line. Some went outside to get fresh air or to smoke. Some went to the cafeteria or to the vending machines. Some even went to the gym to work out. I had a chance to talk to many workers during their breaks. I even played table tennis a few times with workers. Since the entire line would shut down, workers were not supposed to work. However, depending on the trajectory of production that day, group leaders sometimes asked/requested/forced one or two workers to work through their breaks. With one worker working all the stations him/herself, s/he could add a few engines to the final output. Workers were compensated for the time they put in, but it was against the contract, and it came up several times

in the meetings I attended. However, workers in different tiers responded to this practice differently. At a local gathering, I heard a first tier worker refer to these requests as bullying. In my individual interviews with new hires on the line, I observed more willingness and acceptance towards such requests. This showed the deep running divide between workers of different shifts.

When such requests came from management, the union leadership asked the seniority workers to speak up and say no. One union member also said that the high seniority workers should speak up for their younger seniority fellows. But there was a technical problem here: because of seniority, there was very little overlap between high seniority and low seniority workers on the assembly line. In fact, I never observed a manager asking anybody to work his/her breaks in the first shift. Because of the deep divide between shifts, this happened more often in the second and third shifts. Morton, a seniority employee of around 30 years, shared his observations, highlighting the age of management as a factor, as well:

The new hires in the afternoons are working through their breaks. The management, most of the supervisors at afternoon are kids in their twenties and thirties (...) they're all new hires in the management, they're the same age as those on the assembly line. So they back slapping and 'hey buddy' you know, and you can see the final numbers of the assembly line in the afternoon shift outproduces the day shift. (...) LGE afternoon shift they wanted a rate of 500. They hit it multiple days in the afternoon shift, the day shift only had 375. The people on day shift are all traditional, thirty plus years, they don't work through their breaks, they stop when something's broke, they call proper people. On afternoons, they work through their breaks. When something's broke they try to fix it. (...) They do whatever they could do to keep it going. On day shift they won't do that. They sit down wait for the appropriate trades. (...) You need to stay very quiet during the day, afternoon shift it's like an animal house. (...) They're like going to battle. (...) There's music playing which is not sleeping music like on days, hard rock, you know it's just the generation.

New hires did not consider working through breaks to be a major violation. In fact, Jake, an entry-level worker who works in the third shift, was upfront about this. To paraphrase, he said, "Of course I'd volunteer my lunch time." What was considered harassment by some traditional workers was seen as routine practice by new hires, a matter of helping the company to succeed.

The use of the term "volunteering" is particularly important to understanding the difference of perspective among generations.

I encountered a similar difference of perspective on labor-management relations on a completely different occasion in the second shift. I was interviewing a team composed of entirely G6 and G7 workers. This team had three temps at the time I visited them. I first talked to Jessica, who was still a temp after about 8 months with no status change on the horizon. She was quite reserved the whole time—we talked about 15 minutes—and did not complain about her situation. She had previously worked in various service industry jobs, from retail to restaurants, and had had jobs where she made more money than she was making at GM. But she liked some elements of the job at Tonawanda Powertrain, such as the lack of constant human interaction. Despite the ambiguity of her status in the long run, she wanted to stay. After Jessica, I talked to June, who had started only a few weeks before Jessica but was made permanent in less than a month. This was because, at one point, the company stopped granting temporary employees permanent positions because of the lack of a guaranteed product flow, which reduced the need for more seniority employees. In fact, management needed a reserve of temporary employees to make adjustments for fluctuating demand.

June's explanation for the long-term tenure of temporary workers was quite different than the circumstances explained above. According to June, management will hire them as soon as they know that they will not need to lay them off again. A rather confusing logic, this did not reflect the actual hiring process, which prioritized volume and market demand instead of the employment status of the temporary employee.

Temporary workers were in a completely precarious position. Since they were not protected by the union, they are also vulnerable to more managerial provocation. They pay union

dues, but they were not defended by the union. Valerie, who was later made permanent, recalled an instance where she and her entire team were relocated because of a ramp-up, which meant a planned increase in production on one of the lines. Such moves for the regular workers required a foreseeable process, and it was never done at the last minute:

When we got put in Plant X, they put that entire second shift from Plant Y, and they said temporary workers, we're moving us all because they were in a ramp up phase. (...) We were building thirty engines a week so they took all of us temps. They made us think like we were on the spot so you do your job quickly and you did it well to best of your ability. So they moved us second shift from Y to Plant X.

Temporary workers were often left in limbo in terms of their future employment. Less than two months after starting her job, Valerie was told that she would be laid off, along with a group of people in the same situation. She said she was even given a date and layoff papers. But the day came, and it did not happen. She thought the ambiguity was unprofessional, and it affected her mood on the floor significantly. Luckily she was not laid off, and after another six months, she became a permanent worker in 2013.²⁸⁵

The phrase "labor-management cooperation" circulates rather liberally in the auto industry. It was originally proposed to replace the adversarial relations between the union and the Detroit Three. A relatively less contentious lean model was taken as a point of reference, and parties were encouraged to work together instead of perpetuating conflict. As I showed above, one can see elements of both approaches in Tonawanda. Among the older workforce, adversarialism and complete mistrust towards management are the defining characteristics. The younger workforce,

Lockport transfers.

²⁸⁵ According to Veronica, who still had relatives at Lockport, temps at Tonawanda, were treated much than at the Lockport plant. They could get time off if needed, and they were not harassed on a permanent basis. The Lockport facility did not offer any sick days or vacation. One third of its entire workforce had a temporary status, and everybody on the floor made the flat, lower-tier wage, except for the skilled tradespersons. The fact that such conditions could exist in another plant with the same GM name scared workers at Tonawanda and especially

on the other hand, is more willing to work without stimulating conflict. However, this transition does not reflect a mere mentality change. What changed in the last couple of decades, and especially after the bailout thanks to the generational transition, is that the balance between capital and labor has been realigned. Labor is no longer in a position to assert itself as a factor in decision making processes. On the contrary, with the advancement of production philosophies such as GMS, labor is pushed out of any decision making processes. This manifests itself clearly on the floor in the ways I described above. Once again, the bailout and the generational transition following it left a huge mark on labor relations on the shop floor.

3.6. Perspectives on Work

The assembly line was composed of 12 to 13 teams. Every team consisted of 6 to 12 stations. The Detroit Three adopted the team concept gradually. Before it was fully implemented, the assembly line was divided into stations, and every worker was stationary in his/her station. Lower seniority workers were assigned the least desirable jobs while high seniority workers worked on the easiest stations, performing the easiest tasks. However this system was not ergonomically acceptable, nor was it modular enough. Despite some friction and resistance at the beginning, ²⁸⁶ the union and management agreed to transition to the team system, which took years to complete. In 1996, Tonawanda Powertrain fully transitioned to the team system on the assembly line. Lauren, a worker who observed this transition closely, noted that the level of engagement by team leaders was the main difference between this and the system used before. Before, there was a lead man assisting the supervisor but never with a thorough level of engagement stemming from new responsibilities for audits, covering jobs, training people on how to do the job, and conducting

²⁸⁶ The biggest resistance came from senior workers who had earned their right to get easier tasks. With the team system implemented, these workers became part of a rotation, where they performed different tasks again.

team meetings. In the new model, team leaders were assigned semi-managerial roles to run their teams.

After the change, team leaders on the assembly line were in charge of a team, which became the first position away from the line. It was an hourly position, but it had some managerial responsibilities. According to the GMS philosophy, team leaders occupied a key liaison position between the line and management. They not only oversaw the process and make sure the quality standards were met, but they also took care of their team members' needs. They were compensated 50 cents an hour more and unlike team members, who could be moved by management at any given time, they were stationary.²⁸⁷ There was an application process for the position, and it may have been the only hourly position that didn't have a seniority priority. In other words, a higher seniority worker could not bump a team leader out of their position as s/he could do for any other position.

It was an in-between position, because of its managerial responsibilities, such as administering team meetings before the shift, filling in paper work, communicating with the team leaders of other shifts, communicating with other team leaders in the same shift, attending production meetings, communicating with the union, and communicating with area and group leaders. However, team leaders were technically not superior to the workers on the line, and this could occasionally cause tension between them, especially with regard to being late to work or with overtime arrangements.

A team leader named Ian, briefly responded to my question as to whether it was important to him to get off the line: "Yeah, who wants to be stuck to the line!" Being stuck on the line is not

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²⁸⁷ The compensation of team leaders was a bargaining item during the 2015 negotiations when it is raised from 50 cents per hour to \$1 per hour.

only a complaint among workers because of the work. Line workers have to raise their hands and ask for permission if they need to go to the restroom. This is humiliating to many. But Ian was interested in the security it provided, because working on the line was a permanent position. When I asked Ian the reason why he chose the line position, he said because he wanted to hang on to his preferred shift and that that was the only way to do it. He was not thrilled about the job though. He complained about the amount of paperwork he needed to take care of on a daily basis. He said nobody wanted the job. Ian was not alone in his assessment. Another pre-bailout worker who worked as a team leader, Cameron, said it was like baby-sitting for adults. There are too many personal issues to deal with and not enough rewards.²⁸⁸

There were clear differences between new hires and pre-bailout workers with respect to the team leader position, as well. One could become a team leader even while working as a temp. There were instances of this, and among new hires, being a team leader was often seen as a kind of success and an acknowledgment of having done good work. Cordelia, the aforementioned temporary worker, led a very young team composed of entry-level workers and temps. There were no traditional hires, transplants or *motorheads* in Cordelia's team. At the time I interviewed her on the floor, she had just finished her first year at GM. Like her higher tier peers, she admitted that the position came with a considerable workload and bore a lot of responsibility. Yet, she also said she liked it. Like her peers who chose to take the job to get off the line and hang on to their preferred shifts, Cordelia also appreciated the flexibility given by her position, but she did not *hate* the line job as did many others. In fact, she had considerable experience working with other teams and did not recall any negative feelings about this kind of work. One could relate this to her very

²⁸⁸ As I discussed in chapter 2, team leadership was introduced in the maintenance department also. However, the dynamics of it were quite different. This issue is addressed in chapter 4.

short tenure at Tonawanda, but it may also be that her fast track to a team leader position was a source of pride.

Jake, like Cordelia, was also a new hire and a team leader. He was a true believer in the team system. He thought it was well designed and said that when people followed the rules and standardized work descriptions, everything moved as it was supposed to, reducing workplace injuries. More importantly, it made it easier to integrate more people into his team. He had three experienced workers on his team, but the rest were new, and occasionally he needed to work with workers from other teams. In that case, training could be accomplished on the job, which granted Jake a great level of flexibility to manage his team. Jake saw the position as managerial, and unlike peers such as Ian, Jake also saw the position as an opportunity to prepare for a higher managerial position at the plant; he did not seem as concerned about job security as his peers. The paperwork, which was overwhelming for Ian, was the fun part of being a team leader from Jake's point of view. He had extensive retail experience in various positions, and he most recently held a managerial position. He stated that the process in large-scale retail and in manufacturing have more resemblances than one would think. Every day he said he was learning something new and that it was an eye-opening experience, adding: "I know I'm only here for a year, but unlike what they say about the line job, that it is repetitive and same stuff all the time, you learn something new every day."

The older generation's perception of the line contrasts with Cordelia's and Jake's views. Wilson, who retired during the mid-2000s after about 35 years at GM, remembers the line job as the most boring task he had. That is why he moved from one line to another, to make the job exciting for himself and to meet new people. Eventually, after more than twenty years, he got off

the line through a program offered by GM in partnership with a local educational institution. After bouncing from one job to another, Wilson applied to one of these programs:

Then I started thinking about myself. What am I doing here? What can I do to help? Certainly turning a lot of wheels here in the assembly line, making a lot action happen on the assembly line. But what can I do to make it different for me and improve the life and the work life of everybody in the plant. So I started to look to the education programs in the plant. And the first program that I came about to see was called [Project X]. And it was an organized effort by local system to bring in an educational program that could help you further your education while you're working. So if you're on your break, on your lunch break or after or before work, you go to a specific area, a room, and on computers teachers assisting you to learn English, math, industrial math, reading and writing. For folks like me who've been working on the assembly line for years, that's a gift. I'm in an environment where I can use my mind and make myself feel at least more complete. I'm incomplete working on the assembly line because I'm only using my hands now at work. I'm not using my intellect at all. So folks who never got a chance to use their intellect, expand their horizons now had the opportunity to do that. So I took everything they had to offer.

Wilson's ability to describe the nature of work on the line is remarkable. Even more so is his enthusiasm for the options outside the line. His command over language, style and content amazed me every time I met him. He was never critical or dismissive of the management in the ways that most of his peers were. He did take "everything they had to offer" and got himself off the line after more than twenty years. One of the reasons why this is important is because these programs, usually known as worker improvement programs, are the very first gains that were cut with the bailout. Already in decline over the years, these programs ceased to offer assembly line workers an option to get off the line. New hires thus had to turn their attention to other work opportunities at the plant. Daniel, one of the new hires, explained his feelings about working on the line and having other options on the floor as follows:

I'm trying to get into the machine floor because that's something I'm always interested in. Assembly is fast pace, there's a lot of focus on safety, a lot of focus on quality. Not that that doesn't happen in any other department but production seems to be... there's so much that could go wrong. Just because it moves so fast there's so much equipment you're working with. (...) When you go to a job there's only certain number of things you qualify for. (...) Here you can go anywhere. And I

²⁸⁹ The 2009 M lists the suspension or permanent shutdown of a number of such programs along with cuts in CHR (Center for Human Resources) funding, which runs many of these programs. See, The 2009 M, pp. 85-91, 137. The tuition assistance program, a key program providing opportunities for the workers on the floor, was suspended in 2009 but brought back in 2011.

think that's awesome. Even though the line is great, I love the line, I love the high intensity, high energy of the line I want to go to the machine floor. The motion of the line, I want to get away from it.

Daniel has suffered from various physical injuries from his previous jobs. He considers himself physically tough, but he wants to get off the line as fast as possible. This is a common theme among new hires. The appreciation for the job often parallels dissatisfaction with the work and the labor process itself. This is another reason why the team leader position appeals to those like Cordelia and Jake. Unlike their tier one peers such as Ian and Cameron, who dismiss the workload, Cordelia and Jake see it as an opportunity to take them off the line and to enjoy a low-level administrative position.

What did this say about the assembly line job? It may have been challenging to perform a series of repetitive tasks on a regular basis eight hours a day, five days a week, but the job itself was not too difficult to learn. Normally, after an orientation process of two weeks, workers showed for their first day of work without needing any training on the floor. In some cases, when necessary, workers reported for work before the two-week long orientation period ended. Valerie was one of them. She started work after four days of orientation, because of the manpower needed at Plant 5. Valerie had extensive work experience before coming to GM. She worked in various industries but not at an automobile plant. Yet, she learned the job very fast, to the point that she became a floater.²⁹⁰

Vincent, a G4 worker, had been working in this environment for over ten years. He was frustrated with his status as a lower-tier worker, but he was also dissatisfied with the job itself.

and often learn their team assignment a few minutes before the start of their shift.

²⁹⁰ A floater is a worker who can work in multiple teams. In other words, these workers can perform most of the jobs on the assembly line or the machine floor. They can usually work in 6 to 10 teams out of 12 or 13 and are utilized in case of need. Being a floater gives one an opportunity to "change it up" along with more chances to get overtime. Every shift has about five to ten floaters. Normally, workers are assigned to certain teams, but floaters are flexible

One of my standard questions to those with kids was if they would like to see their kids working at GM. Vincent's response to this question was a very reluctant yes, not because of the job itself but because of its benefits. For Vincent, the way the job was designed left no room for enjoyment. The assembly line was designed to divide the work into small, repetitive tasks, which are easy to learn but extremely unpleasant to perform on a constant basis. Rotation within teams, according to Vincent, was not enough to overcome this major problem.

There was a consensus among workers about how repetitive and boring the assembly line job was. Those who preferred to stay on the line highlighted the low level of human interaction as a plus, while the rest were constantly looking for a way to get out. Prior to the bailout, there were many employee improvement programs offering a path to those who were willing to take extra classes and attend extra seminars. These programs offered a way off the line, however such programs were cut substantially.²⁹¹ Given that the team leader position offered the most quickly available position for getting off the line, the reactions to it among different generations give us more clues about the characteristics of the generational transition. Higher tier workers saw it as extra work with no additional benefits, while new hires considered it to be an acknowledgement of their performance on the floor (Cordelia) or a possible step towards a better job (Jake). For Jake it was an experience and an opportunity to learn something new about the job every day. What's considered dull by Ian appeals in various ways to Jake. Such a discrepancy of perspectives can only be explained with the generational transition. These younger attitudes may remind the reader of Wilson's earlier stated point about new hires coming to GM pre-motivated. This level of premotivation makes it much easier to establish and exert managerial control over workers.

²⁹¹ The Quality Network model had many such programs for interested workers. GMS, replacing the Quality Network, puts less emphasis on worker improvement programs. The sole focus under GMS is quality.

3.7. Conclusion: On Tiers, Solidarity and Work

After spending months in and out of the plant, one day Guy Newell, the president of the Local 774, gave me a call and asked me to write an article for the union's monthly. I was humbled and honored. I quickly said yes, without even asking about the topic. He said, "It is very simple. One question. What is solidarity? You have been here for a while now, talked to so many workers on the line, so tell us your opinion." I was given a little more than a month, and people around me knew that it was one of the hardest tasks I have ever been given. One of the biggest problems for a plant undergoing such a transition was the communication between tiers, and I was unable to observe promising bridges between them. The separation of tiers was evident and manifested itself clearly in shifts, departments and job assignments. It restricted communication severely. Morton, who was highly concerned about this absence of communication, expressed his ideas as follows:

That's the problem. When I got hired there was seniority people on my right side and seniority people on my left side. Now in the afternoon shift, left and right you got people hired yesterday or who's been there less than a year. And they're all in the same mode: keep your mouth shot, keep working, nobody really needs, nobody tells them what to do. (...) In the afternoon shift and the midnight shift, there are no old timers out there to help you out.

As Morton noted, it's not only that the divisions between tiers was solidified by different work schedules but also that the ways in which workers in certain shifts undertook their work had been affected by the absence of veteran workers. This situation in which high new hires were not benefitting from the knowledge and experience of veterans was also a factor within union organizing. Bob King, the previous president of the UAW, had a vision to organize transplants in the U.S. He put his legacy on the line promising that he would successfully organize at least one transplant in his term. He expected that organizing the first plant would lead to a snowball effect and a large scale organizing campaign. He failed, and his successor Dennis Williams refused to follow in his footsteps. Workers at the Local 774 had mixed feelings about it. Agreeing with the

initiative at the level of principles, I observed criticisms for different reasons. Two of these reasons focused on the condition of existing UAW workers after the bailout. Lauren, an experienced worker, said the following in response to the strategy of the leadership:

Well see the president's [Bob King was the UAW president at the time] strategy was organizing the south. He felt numbers will generate power. To me, there is also your household is divided. Your household is in chaos. So you have to get them together first before you go on the outside, and that didn't happen. Now you have this house of chaos. (...) Time has not been spent on educating people on unionism. So a lot of these new people are coming in and they're coming in as referrals but their referrals never involved in the union. So you got a gap in the union I should say. (...) My generation had that strong unionism training. This group coming in is getting very little union history other than what they hear. (...) They don't know the importance of the union. (...) You have a divided group, you have people from Michigan, you have people from Syracuse, you have people from new hires, rural, city, urban, you have a generation[al gap]. You have the young, Facebook, all the electronics; you have us still have our little notepads writing stuff down. So it's a generational thing too.

Lauren's comments suggest that part of why King's efforts to organize transplants failed was due to a lack of communication across generations. The divisions between tiers that were solidified in shifts, jobs and departments not only impacted the ways that work was done at Tonawanda but also what the younger workers could know about the institution that protected their jobs.

From a different point of view, Sam, another veteran G1 worker, was simply mad at the fact that the union dues were "wasted" in an organizing drive at Volkswagen. In his view, the money would have been better spent on internal efforts. In this way, solidarity was not just an idealistic term, as workers also reflected on it material conditions. These conditions were related not only to how union dues were spent but also how the union structures and organizes itself. Lauren offered important observations regarding changes at UAW, which by the time of my research, had a completely different structure of membership than decades ago:

Do we have as a union the ability to fight? Well the biggest impact is the right to work state law in Michigan. Another issue also internally is the fact that we have a huge amount of membership, 40 percent I think, Republican. (...) The other thing is that the union has transitioned from auto to professionals, or non-auto. Now it's more. We're the minorities of the UAW. Now you have the professional workers, you have the casino workers, colleges and we have the suppliers. So before, you just had to be friends with someone, you could get a position making six figures. Now, you

can't represent the people properly without having some type of skills, negotiation skills, understanding of the economy, understanding of the political system. You just can't function properly as representative of the people if you don't have those skills and we don't have those, we don't have those skills! And we're not doing anything internally, not putting education as a priority. We have not done that in the UAW.

Given these circumstances it was difficult for me to answer that simple question about solidarity. There are many factors undermining solidarity in the auto industry today. The generational transition, which started in 2012 with the influx of new hires, changed the culture of work on the floor. The lack of communication and the divide that manifested itself in various ways blocked interaction between tiers. However, the differences between tiers were due to more than just lack of communication. Workers in different tiers were situated in different material conditions, as their compensation, perspectives on job security, competition, relations with management, and finally, their views of work and the labor process varied immensely. The generational transition not only enabled such a massive transition but also gave birth to a new working class culture while another one continues to disappear from the shop floor. The next section addresses a paradigmatically different transformation that took place in the skilled trades classifications, where there was no generational transition.

CHAPTER 4

INSIDE AN AUTOMOBILE PLANT 2: THE RADICAL REORGANIZATION OF SKILLED TRADES

The choice to focus on workers' perspectives does not only aim to empower workers, even though that is an important aim. It also allows observers of the auto industry to go beyond the limitations set by the institutional analyses of the bailout. As I explained in Chapter Two, analysis of contractual evolution in the auto industry on its own would give us no opportunity to grasp the extent of the technological change that has occurred on the shop floor. Putting workers' experiences, choices and reactions at the center of this study allows us to see the structural changes that are in fact absent in formal documents. Without workers' perspectives, it would be impossible to understand one of the most important technological overhauls that the auto industry has undergone since the 1980s. Upon closer inspection, this technological reorganization unfolded in a seemingly paradoxical way effecting different parts of the labor force asymmetrically. Without an ethnographic approach, such a diverse array of effects and how they impact the ways that workers relate to each other, would be impossible to understand. This is also crucial for understanding the trajectory that the industry will likely follow in terms of its policies of skilled and unskilled labor.

Production at Tonawanda sat at the center of the entire operation while maintenance sustained the continuity of production. Despite this mutual dependency, one could hardly find any similarity between the ways in which these two departments operated. Anything from job classifications to work hours, from compensation to demographics, from their representation in the union to shop floor culture was visibly different. The same applied to the transformation they

underwent before and after the bailout. As discussed in the third chapter, major concessions such as the two-tier system or the elimination of the JOBS Bank for new hires were added to the contract in 2007. Management's efforts to restructure the skilled trades, however, always ended in disappointment prior to the bankruptcy. It was only thanks to the bailout and government intervention that management was able to extract the concessions it aimed for.

However, identifying the importance of government intervention, which I did in the second chapter, does not adequately convey the extent of the changes that occurred on the shop floor. The first reason for this is that the impact technological reorganization had on the skilled trades was so huge. This colossal change is nowhere to be seen in the contracts, and it differently impacted the assembly line and machine floor. The machine floor's technological composition became extremely complex due to new CNC machines. On the one hand, these machines reduced the number of operators needed to run them, since it became easier to control multiple machines at the same time. On the other hand, the machines were more complex and thus harder to maintain and fix. First, the advanced software they used required more computer knowledge. Second, they performed high-precision tasks. The fetish of high-quality across the industry mandated more precision, which was one of the main motives behind the retooling after the bailout. However, this commitment to precision and high quality made the machines more vulnerable or, as one tradesperson called it, "self-destructive." They would break more often and thus, required maintenance more often than their predecessors according to tradespersons.

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²⁹² CNC is short for computer (or computerized) numerical control. It refers to a wide variety of computerized machinery introduced automation to the production processes. First used in the 1940s, CNC technology plays a key role in automation. It is defined as follows by www.manufaturingerms.com "Numerical control (NC) refers to the automation of machine tools that are operated by abstractly programmed commands encoded on a storage medium, as opposed to manually controlled via handwheels or levers, or mechanically automated via cams alone." See, http://www.manufacturingterms.com/CNC.html

The introduction of high-tech machinery also challenged the skill composition of the existing workforce. Some processes required more skills and knowledge, which tradespersons did not have at the time. Thus, new technologies also revealed the limits of tradespersons' command of their fields of expertise and created a heated debate around training and retraining. Training programs since the bailout focused mostly on retraining the current skilled trades workforce instead of recruiting more apprentices from the shop floor. This limited the transition of workers from production to maintenance, which was highly desirable among production workers, as it was considered a safe and prestigious promotion that still afforded protection by the union.

This chapter focuses on changes to the labor process from the perspective of skilled trades workers, focusing on: i) technological reorganization; ii) the newly emerging training mentality; and iii) the reactions of workers to basic contractual changes, such as alternative work schedules (AWS) and the production-maintenance partnership (PMP). At the end, I make three arguments. First, the technological retooling had diverse impacts, even within the skilled trades workforce. Electricians were faced with challenges introduced by the new technologies and were forced to work more closely with engineers. This caused tension, as the two groups have historically been clearly demarcated from each other. Furthermore, new technologies affected the mechanical trades adversely, threatening to consolidate several different trades into one. The various mechanical trades were ultimately forced to retrain and learn other trades.

This brings us to the second argument: the new technologies required a better-trained workforce. In order to address this need, management hired electricians off the street instead of training them in in-house apprenticeship programs. This effectively closed the route for production workers to become skilled tradespersons and further deepened the divide between the production and maintenance departments.

Finally, the grey areas in the national contracts allowed locals to interpret the national contracts differently and selectively implement some changes while ignoring and/or not prioritizing others. On the one hand, this actually revealed the resilience of skilled tradespersons' bargaining power. It demonstrated that they have more room than production workers to negotiate over elements in the labor process. On the other hand, this further deepened the divide between locals. Every local reacted to the demands of management according to the conditions of their own locals. This decreased the uniformity of locals and deepened an already existing rift among locals. Let us look at the ways in which this transformation manifested itself in Tonawanda.

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On January 15, 2013, Buffalo's only daily newspaper *The Buffalo News* published an article on the General Motors Tonawanda Plant using the following caption: "GM Tonawanda hiring electricians: General Motors' Town of Tonawanda plant is looking to hire *six electricians*." Serving a metropolitan area of over 1 million people, it was surprising to see the only daily of the region feature a news article about six possible positions at a local manufacturing plant. Perhaps this piece of news shows the importance of manufacturing in general and General Motors in particular to the people of Buffalo. Thought it barely escaped terminal shutdown in 2008, this plant was still considered to have major value for the area, and even the smallest changes found a place in local media. What's more interesting though was not the number of people hired²⁹⁴ but the way they were hired. As the article continues:

²⁹³ http://www.buffalonews.com/apps/pbcs.dll/article?AID=/20130115/BUSINESS/130119433/1005. Italics are mine.

²⁹⁴ In fact, unlike what's advertised the plant eventually hired 14 people off the street instead of six. It was also incorrect that the plant did not hire any electricians off the street since the late 1980s. I interviewed at least one electrician who was hired in the mid-1990s.

For the first time since the 1980s, General Motors' Town of Tonawanda plant is hiring some electricians 'off the street,' instead of filling positions with GM workers transferring from other plants. (...) While the plant is hiring for only a handful of jobs, it is a sign of progress for the Tonawanda complex. 'It's just another benefit of the business and the growth at GM,' said Mary Ann Brown, a plant spokeswoman. (...) Hiring skilled tradesmen from outside of GM has been rare lately at the Tonawanda site; the plant did hire some millwrights in the 1990s, the last of them in 1999. (...) The last time the plant hired electricians 'off the street' was in 1987, Brown said. The plant has brought in some people from plants in Lockport, Saginaw, Mich., and a closed facility in Shreveport, La. (...) GM also has people in an in-house electrician apprenticeship program, but that is a five-year program, and GM could not wait that long, Brown said.²⁹⁵

What would seem like an insignificant matter to an outsider is in fact indicative of a greater transformation. I'd like to use this news article as an entry point to our discussion and ask the following questions. First of all, with regard to the article and its effects, what was the significance of this hiring date? Did the plant hire any other trades or just electricians? Did technology play a role in their decision? What were the expectations of these new outsider hires? Why could GM not wait that long? Secondly, considering the history and existing practices of hiring at the plant, why hadn't Tonawanda Powertrain hired skilled tradespersons "off the street" for such a long time? What was the function of an in-house apprenticeship program, and why did it not have enough apprentices in the bank to meet the plant's need? How did the process of transferring workers from other plants work, and why was this method not employed in this particular case? Thirdly, with regard to how these new hires would be integrated into the plant, were they subjected to the bailoutimposed two-tier system or not? What was the impact and reception on the shop floor; in other words, what did workers and specifically skilled tradesmen think about this? Answering these questions in view of an earlier discussion on contractual changes will give us a chance to evaluate the situation on the floor.

²⁹⁵ Italics mine, inverted commas original.

4.2 Another Technological Revolution with Different Outcomes for Skilled Trades

General Motors plants across the U.S. have been going through a major technological upgrade after the bailout.²⁹⁶ Though technological retooling has had an immense effect on trades, this issue is nowhere to be seen in the media coverage, memoirs or academic analyses of the bailout process. This is particularly astonishing once we recognize the volume of such retooling, with investments that exceeded \$11 billion as of the summer 2015, and another \$5 billion has been reserved for investment over the next three years.²⁹⁷ GM's investments in retooling were equally distributed among its assembly and powertrain plants (GM operates 12 plants in each category in the U.S.) while its stamping plants lagged behind. Only matched by the technological retooling in the mid-1980s, this upgrade was not incremental but substantial and had massive and sudden effects on shop floor relations. Interestingly this technological leap was not a subject of discussion during the bailout renegotiations. In fact, it never made it to the bargaining table and none of its direct consequences are mentioned in the national agreements.

Unlike the retooling of the 1980s, this one was not welcomed by the skilled trades because of its negative effects on employment numbers as well as job rules. The post-bankruptcy technological upgrade did not involve a rise in employment; if anything, it entailed a significant headcount reduction. It also mandated the consolidation of trades and an increase in cross training. The trades, which were hitherto unaffected by lean production principles, were now completely exposed to them, and these changes came at a time when the leadership was most vulnerable. In

²⁹⁶ Kristin Dziczek, Debbie Maranger Menk, and Yen Chen, Contribution of General Motors' Manufacturing Plants to the Economies of Ten States and the United States in 2013 and 2014, (Center for Automotive Research, 2015), http://www.cargroup.org/?module=Publications&event=View&pubID=119.

 $[\]frac{^{297}}{\text{http://www.autonews.com/article/20150714/OEM01/150719932/gm-plans-\$1.4-billion-expansion-retooling-of-texas-suv-plant}$

fact, the changes were made possible by this conjuncture between vulnerability and state intervention, which not only legitimized but also financed the process.²⁹⁸ This chapter will first list these changes and then focus on the reactions on the floor from the perspective of the skilled trades and production workers.

I met Matt at one of the open plant tours. He had worked on the assembly line for about 30 years before he retired in 2000 and was eager to see how the plant had changed. He told me he had been content with his job on the line and never considered transitioning to the machine floor. His seniority secured him a comfortable job in the first shift, but getting a similar post on the machine floor could be difficult. He said he didn't even bother trying. He was not a very social employee either and did not keep in touch with any active employees. He did not participate in any of the retiree activities either. He ran into a few familiar faces during our two-hour-long tour but on none of these occasions were the parties able to remember each other's name. After more than ten years and no effort to keep in touch, Matt was not really expecting to see any familiar faces anyway. He was here to see what the plant looked like after so many years.

The first part of the tour was all about the machine floor. It was brand new, and the management was eager to show off its state of the art technological equipment. There were little boards and charts next to some of the machines explaining their might and wonder. We were also occasionally given brief lectures in order to further explain the accuracy and quality made possible by these machines. Their precision levels were underlined so clearly, at the end of the day, everybody must have learned that a micron, "is forty or fifty times thinner than a strand of your

²⁹⁸ The U.S. government lost around \$10 billion in its investment in GM. But what I mean by financing the technological retooling is not only this loss, which I consider a form of cash transfer, but also the release of GM from its many financial and legal obligations. Without such relief, I argue, GM would have been unable to invest at such a large scale in such a short time.

hair."²⁹⁹ We were also informed that the new, high-precision machinery was such a massive change even the floor had to be completely resurfaced for these machines to operate at the precision level they were designed for. Matt was simply amazed and said repeatedly that the plant looked completely different.

Matt's fascination was not that of an old worker's nostalgia. Many active workers on the floor who were there before the bailout shared his fascination with the scale of change. The machine floor was divided into major areas based on the type of product made: block job, head job and crank job. These different jobs were in turn divided into mods. The block job for instance was composed of four mods, which roughly employed 8 to 9 people per mod. This was a significant reduction from about 20 to 25 people per mod prior to the retooling. Even though the machine floor always had some level of advanced technology – as Max, an active tradesman, explained –, the difference between the current and pre-bailout technology was vast. He responded to my question about whether there had been any complex technology on the floor in his day: "Not on the machine floor, not by today's standards. I mean all the machines were electrical controlled but not computerized. Some of the gauging might have been computerized but most of the equipment was letter logic, relay etc., very very primitive electrical stuff. (...) Each one of these [CNC] machines you see [on the floor], that's called an operation. (...) So each one of those machines took away 15 to 20 times the mechanical parts we had previously." 300

This swift and profound transformation in the composition of technology had a dual effect on the machine floor. As Matt mentioned, the machines reduced the number of operators by almost

²⁹⁹ A unit of length equal to one millionth of a meter.

³⁰⁰ It is important to remember that the impact of technological retooling on the assembly line and machine floor has been quite the opposite. Assembly line employment almost doubled even when production volume decreased from around 1,000 engines per shift to around 550-600 per shift.

60%.³⁰¹ However, this reduction had nothing to do with the reduction of mechanical parts Max underscored. On the contrary, the increased computerization in this highly electrical machinery amplified the complex nature of the production process. Eventually this increased the need for tradespersons to fix and maintain such machinery, even though it dramatically reduced the amount of operators. Throughout my interviews, I heard several comments about changing technology on the floor. Since most tradespersons have a lot of seniority, ³⁰² they also constantly compare the post-bailout preferences of management to the pre-bailout setup. Some of these accounts also bear an element of nostalgia for simplicity, a strategy used by high seniority workers to criticize not only management but also the industry.

Brian, an electrician who has been at Tonawanda for almost thirty years, also thought these machines were too complicated, too expensive, and not even utilized fully, since they were not used as intended. According to Brian, these are highly capable machines, and they should be reprogrammed for different kind of products on a continuous basis. At Tonawanda, however, each of these machines was used for one sole function within the assembly process. The flexibility they could offer was not sought here, Brian said: "Here, they do one thing, which could be done for much cheaper with much less complicated machines." The kind of machines Brian was talking about ere the ones replaced by the new generation of CNC machines – the machines that had been there for decades.

Carter, a very experienced mechanical tradesman, was also very suspicious about the new technology. He said there was much more technology on the machine floor now than before the

³⁰¹ To repeat, machine operators are production workers. They are not skilled tradespersons. They run the machines instead of maintaining and fixing them.

³⁰² To restate, the average age for tradespersons was around 53 as of 2013.

bailout. Machines brought in in the last couple of years were more flexible but less durable in comparison to the older ones made of cast iron. He repeatedly said that the machinery used before was capable of lasting for decades, whereas these relatively brand new machines had already started breaking down. Another high seniority tradesman, Ben, also in mechanical trades, challenged the need for machines working at the precision levels of micron. He pointed out that the plant was making engines not microchips for computers. Management's dedication to such precision did not make sense to him, and he did not agree that such precision guaranteed higher quality.

Max, also in mechanical trades, was critical of the sudden and large-scale transition to advanced machinery. Pointing out the number of people now working on the machine floor, he argued that the search for quality and flexibility was not the real reason for the retooling: "GM pushes that, and they went to CNCs because they were more flexible and that they can make the change in the engine design [easily], that's a bunch of horse crap. (...) The real purpose [of transitioning to CNCs] was to eliminate manpower. They hide behind the flexibility." Max's comment calls the justification of retooling into question. However, management's emphasis on quality is not merely hype, or a "horse crap," as Max calls it. As I discussed in the introduction, companies are restricted by competitive pressures and are forced to improve the quality of their products.

As for the impact of retooling on the maintenance department specifically, we can identify three main effects. First of all, the new technology—specifically the new CNC machines flooding the machine floor—increased demand for skilled tradespersons exponentially. Secondly, the nature of the machinery brought in created a gap between electricians and others. There were always clear-cut differences between the trades – known as the lines of demarcation – but these

were basically in place to identify job assignments; there was never any hierarchy implied. However, with the introduction of the new machinery, where many processes transitioned into computerized control from basic electrical systems, we see much more electrical work than any other. This changed the dynamics between electricians and others. The sudden need for more electricians explains why the news article mentioned above only mentions openings for electricians.

Third, these electricians were not freshly-skilled tradespersons just out of their training programs. In fact, the ad that the company posted sought a very specific kind of electrician with at least 25 years of controls experience. The incoming electricians were needed to address the challenges of the new, advanced machinery, and GM could not wait *that long* to train its own journeymen. However even this hiring move was not sufficient. The complexity of the job brought another novelty to the shop floor, something unfamiliar to the union tradespersons: the need to work closely with the engineers, who were often from Tonawanda management. The reactions on the floor to this novelty were varied and provide a framework for understanding the nature of the relationship between tradespersons and engineers after the bankruptcy

Brian was even more critical than his peers about the implications of retooling for tradespersons on the floor. With the new technology and programming knowledge required to fix it, jobs became more complicated for tradespersons. The complexity made some skilled tradespersons almost obsolete, since these machines were too complicated to fix. Brian said technology should solve problems, not create new ones. He argued that the current state of the workforce was there was too much training required and not enough time for it. Roger, a much more experienced tradesperson and a transplant who arrived at Tonawanda about 20 years ago, shared similar concerns. Roger had been working for GM for over 35 years and had seen many

technological retooling processes. But he believed the post-bankruptcy retooling operation was the most drastic. According to Roger, in spite of there being more technology on the machine floor in in the previous couple of years and in spite its flexibility, ultimately these machines were less durable. He often referred to them as garbage, saying they were made of aluminum.

Charles, another electrician who spent many years on the machine floor before he got into the trades, reflected on the same process of high-tech as follows: "[The job] has gotten high-tech. We don't have wires, as many wires as we used to have. A lot of what used to be wired is now done with software. A lot of electronic drives that didn't exist before, you had a motor and you'd go forward, make a switch and it would slow it down and go forward, make a switch to return. Now all that is done with numeric control." Another skilled tradesperson, Cole, reflected on the changes that came with the new technology in a similar fashion: "Technology has changed drastically, and it took people that were highly skilled and the equipment they worked on, and it changed everything they did, because this is not even remotely close to the equipment we used to have in here in terms of technology." It not only changed the type of work demanded from the tradespersons though, it also the increased the demand in absolute numbers. When I ask why, he said: "Personally my own opinion on this [is that] it's cheaper equipment. It's high-speed, selfdestructive equipment. It moves at a lightning speed for accuracy. But the problem with that is when you move something with lightning speed, it's self-destruction. The faster you run a robot, the more it wears it. If you accelerate the slowdown, it's gonna last longer." The complexity of the new, state of the art CNC machines was so great that some tradespersons found it challenging to make informed diagnoses when they broke down. Max, an experienced tradesman with over twenty years of experience on the mechanical side, said the following:

Oh yeah! The biggest problem I have now with the technology is finding the root cause of a situation. When it was strictly mechanical, when you had a hydraulic clamp that wasn't clamping, you'd start with the clamp and work your way back to the power unit which is where everything starts. Somewhere between the clamp and the power unit, you're gonna find the problem. Now with all the electrical stuff, it's not getting the signal to make up a relay three stations down and that makes it a lot more difficult. It's like growing up in the states all you needed for a car to run was to spark and fuel. If it didn't run you could figure out why. Now with all the computers and technology the reason why it won't start could have nothing to do with either.

The implication of the situation summarized by Max is that it may be easier to upgrade machinery in a rather quick fashion but the knowledge and experience to maintain and fix it is not as easily upgraded. Cole argued that this sudden leap required more tradespersons on the floor, as well as additional and more intensive training. However, Cole's assessment of a need for more skilled tradespersons in absolute numbers was not shared by the management. On the contrary, management argued that the company had way too many tradespersons, as discussed in an earlier chapter. This is a major point of contention, as all tradespersons were working overtime while they were, at the same time, told that there are too many of them on the floor. This apparent contradiction has a lot to do with the kind of skilled tradespersons needed on the floor. In the following section, I will discuss the widening gap between electricians and mechanical trades.

As stated in an earlier chapter, the maintenance department went through a completely different restructuring than the production side. There were no new hires in the maintenance department in a way that was similar to the production department. The only new hires, mentioned in the opening of this chapter, were already extremely experienced and some came in with a profound knowledge of a union shop. Skilled tradesmen, who were traditionally more resistant to change for the reasons discussed in chapter three, consisted of workers with a very clear memory of before and after the bailout. The adversarial culture was most embedded in relations between the tradespersons and management. One could see a similar attitude among high seniority workers on the production side, as was discussed in the second chapter, however management usually

responded to that by ignoring them, as that generation will disappear in the short run and will be replaced by the culture of new workers.

In the skilled trades however, there was no such transition. Management had to work with the current workforce, and that is why the bailout renegotiations demanded as many concessions as possible from the trades. The "old school attitude" toward machinery, which Cole acknowledged was no longer sufficient to run things on the floor, was nonetheless incredibly persistent. This time management, thanks to the bailout, had a very strong hand coupled with the support of a national contract. However, as I also showed, the trades still retained a lot of power, as the technology didn't work as planned and required regular, informed intervention. In the next section, I will discuss how the divide between electricians and other tradespersons became the norm on the shop floor.

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As the job got more complicated, the kind of work the maintenance department did actually changed. Charles responded to my question about whether it increased demand for the skilled trades: "It does increase the demand for electricians. It has actually reduced the amount of machine repairmen and tool repairmen. (...) Because it's more numeric control. What used to be done with hydraulics is now done with numeric control. The hydraulics was mostly machine repairmen [work]; now it's numeric control, it's different." New technologies are deepening the already existing divide between electricians and other trades. On the one hand, the skills demanded from electricians are on the rise, while on the other hand, non-electrical trades are facing a problem of consolidation. As one of the mandates of the bailout, General Motors is expected to reduce the number of skilled trades classifications to two: electrical and mechanical. The change of the

technological composition of the machinery on the floor, especially on the machine floor, is seen as justifying such a consolidation.

As the machinery gets more and more complicated, different parties—hourly and salaried—may need to work together, creating new challenges. Matt, a retired electrician who left the plant couple years before the bailout, had strong feelings about the division of labor between an engineer and a tradesperson. First of all it is a matter of practicality, and engineers do not have the same depth and experience when it comes to the practical aspects of the work: "There's a difference between engineering and making something work. What you have to do as an electrician, you have to do, you fix that machine when it goes down as fast as possible and put it back to work. And when an engineer shows up, he's got a theory in mind. And I say forget that. You have to get it running in five minutes. We don't have five hours to play around with it." For Matt, command of practical aspects of work was one of the reasons why tradespersons were so vital to the continuity of production.

Yet, given the complexity of the new equipment, it is hard to find tradespersons on the same page with Matt regarding the work of engineers on the floor. Charles, for instance, who saw the bailout as a major break with the past thought the push to work with engineers was the new reality and something tradespersons could not escape: "There's a lot more engineering involved now. Before the engineering was just maintenance, more maintenance of the paperwork, prints, updating of the prints, maybe some changes, but a lot of what actually was going on was done by just the electricians. [There is] more partnership." Charles says engineers come to the floor more often and get engaged in the processes more.

Cole, who considered himself a good tradesperson, but who was also aware of his own limits and capabilities, presented a very challenging picture: "The technology that [is] required in

all these jobs is beyond comprehension. I gotta tell you that, it really is. And I always tell all these electricians, 'You're not gonna ever know 50% of what you need to know to do your job. You're gonna have to rely on people you work with. It's now a matter of we have to work with engineers whether we want or not.'" Close encounters with engineers were a concern brought up by many tradespersons, because these does not always go smoothly. One of the main reasons for that was the old and entrenched culture of separation between the two. The mentality described by Matt still dominates the floor, even though tradespersons understand that the jobs performed require more input and knowledge. Cole, who acknowledged the need to work closely with engineers as well as other tradespersons, expressed his personal discomfort when I asked if the new reliance upon engineers was a novel problem: "Yes it is. It's an aggravating point here for some people, but it's a reality that they're gonna eventually have to face. I'm not really happy with it myself. I'm old school too, but okay, we waited too long for where we're at as far as the technology goes. We need it. We just don't have the people and the capacity to go in there and get involved."

"I'm old school too" is a very important statement and can be read as a response to the divide new technologies created on the floor. Cole, who acknowledged the mandates of the new technology, also reflected on the necessity to continue doing business. But not everybody who considered themselves "old school" shared Cole's views on the necessity of working together, at least in the long run. They admitted that the influx of technologies was a necessity in the short-run, but they had different views of what was possible long-term. Max, for instance, was open to cooperation and in fact argued that there was always close cooperation among the tradespersons, but he also sought to emphasize the possibility of learning through cooperation so as to alleviate dependency. In response to my question regarding the blurring lines between skills he said:

You almost have to. Even if I'm not troubleshooting the electrical aspect (...) I try to go there with an electrician I can talk to, I try to use the proper terminology so that I'm not sending him to the wrong direction. (...) Lines of demarcation are mainly between the mechanical aspects of it, between mechanical and electrical it's pretty obvious. Well the electricians' lines of demarcation comes in with engineers. At what point of technology do the engineers get involved. (...) From what I think, what I observe that's fine, there's nothing wrong with that. At the same time, the electricians should be learning from the engineers so that they don't have to rely on engineers as much in the future. Some of the electricians rely on engineers too much in my opinion. [That wasn't the case in the past] because the components were less [electrical.].

This was particularly interesting given that in this view, electricians would be learning from their employers, since engineers tended to come from management. Why were some tradespersons more critical of these collaborations than others? I find mainstream arguments about "resistance to change" to be very superficial. 303 The dynamic between the hourly (on the floor) and salaried (management) tradespersons was determined by various factors, and collaboration on the floor was only one of them. At Tonawanda during my research, some skilled tradespersons tried to draw a line between job assignments and responsibilities while management sought complete flexibility and smooth transitions across the trades. More importantly, the relationship between the two was still one between an employer and an employee, and the tension, for some, was created by management engineers. Max suggested it depended on the engineer in question: "We work with engineers too, we work with this kid just graduated from college, and it's a blessing working with him. First of all, he understands we have experience. Sometimes you get an engineer right out of college who thinks, 'I know everything, he doesn't have a degree.' That doesn't go well. You know, my boss two years ago, this kid right out of college starting everything new, and he's telling

³⁰³ Even though it doesn't address the skilled trades directly, I find Briody et al.'s work extremely relevant. She brings together every single criticism on the persistence of the old culture and how it affected GM's performance in general. However her perspective lacks a framework that situates GM in a larger socio-economic context and fails to address issues troubling the auto industry in particular and manufacturing in general. She reduces the problems of GM to an "archaic culture" and the tradition of adversarialism on the floor. Hence, she suggests, a transformation of culture would be sufficient to solve its problems. See, Elizabeth K. Briody, Robert T. Trotter II, and Tracy L. Meerwarth, *Transforming Culture: Creating and Sustaining a Better Manufacturing Organization* (New York: Palgrave Macmillan, 2010).

me how to do my job. I says, 'Look I've been doing my job longer than you've been alive. If I have an issue I'll come to you."

The blurring of lines between tradespersons and engineers reveals another source of power that tradespersons benefit from thanks to their special position within the labor process. Despite the tension and differences of opinion on whether parties should work more closely or not, tradespersons can claim a certain autonomy owing to their knowledge of and experience with the practical aspects of the job. It may be surprising to see the persistence of such autonomy despite the massive technological reorganization and the new sets of skills and knowledge required to perform certain tasks. While the new technology from one perspective appeared as a potential threat to their autonomy and power on the floor, the technology in some ways sustained their autonomy, as its implementation was far from smooth and trouble-free. However, these positions are not absolute and are open to change over time. Workers who hold a stronger position at the time of the implementation of a new technology may find that position is undermined as the process is standardized over time. 304

In a plant in Southeastern Michigan, I had a chance to talk to a tradesman who was involved in the union. Blurring lines between the tradespersons and engineers was a major issue, and Henry had quite a different perspective on the matter than those I met in Tonawanda. Henry, like many others, acknowledged the fact that the job was getting high-tech. Also, he said, the union should accept the fact that the consolidation of trades is in effect. But instead of creating a grey area, he

³⁰⁴ Barry Wilkinson discusses a similar split between operators and programmers in the 1980s. At a machine tool production facility, which had recently turned from NC to CNC, he observes that the operators of CNC machines were very skilled workers, but programmers were more skilled than operators. However, there is a sharp conflict between the two, because there is a skills gap and also conflict over control. The ironic thing is that programmers earn less than skilled operators. Yet, this is only true for the early stages of CNC use, because in time, skilled operators will be more obsolete. This shows that the short-term and long-term effects of automation are not always the same. Wilkinson, *The Shopfloor Politics of New Technology*: chapter 7.

proposed a new kind of apprenticeship program for the future where electricians also get trained in systems and controls engineering, and mechanical tradespersons get trained in solid and fluid engineering. This brings us to the next section on the issue of training. Below, I will discuss the new reality of training in an environment of old apprenticeship programs that lost their central role and were replaced by various other programs and/or tactics addressing the same issue.

4.3. New Tradespersons for the New Auto Industry

Max was an experienced tradesman. He had been at GM for over twenty years and was very proud of his trade. He was not happy about the perception of skilled trades as workers who do nothing but sit and chat. He agreed that waiting is in the nature of the job, but this waiting was not an entirely idle process. On the contrary, there was significant pressure to stay up to date and keep up with the equipment and technology. He said:

Being a skilled trades is kinda like being a fireman. [If] machines are running well, you're waiting. If they're not you have to hurry and fix you know. So if we weren't busy I would ask my journeyman "Do you mind if I go with other people when we're not busy?" So I would go out with everyone just to learn as much as I could. So the job comes you learn it, you actually do it and (...) you go from being an observer to doing it. A journeyman watches you to make sure you're doing things properly. And it really never ends, I mean, especially now the equipment we have is so much different than when I learned. Not only is there a lot more electrical components, but even the coupling designs that are mechanical have advanced.

Some of this training was on the job training, and tradespersons learn from each other. Sometimes, thanks to the new machinery, new problems came up and tradespersons had to respond to that in a timely fashion, too. As discussed earlier, changing technology on the floor skewed the need for tradespersons towards electricians. However, this was not enough to respond to problems with the new technology in a timely manner, and in some cases these problems caused a big labor shortage. More importantly, this caused a problem for the union, as the technological composition of the labor process was not likely to change dramatically any time soon. The question was: how will we train the new tradespersons for the new auto industry?

Henry worked in an assembly plant in Southeastern Michigan. He was concerned about the change in technologies and the need it created for new skills and new tradespersons. When I asked for his opinion on skill consolidation and the training it required, he raised a few very important issues. First, he said, whether workers like it or not, the consolidation of trades are in effect. He considers it the new reality and thus saw that the issue of closing the gap between tradespersons, electricians and engineers would have to be addressed in the future. Henry had his own idea about how this transition should be undertaken. He proposed a new apprenticeship program for the future that would train electricians who are also systems and control engineers and mechanical tradespersons who are also solid and fluid engineers. In his words: "I propose a six-year long journeyman training program instead of four. At the end, electricians will be capable of performing the work of controls engineer. Same with the mechanical engineer. I will create another set of incentives with higher pay, better benefits and holiday schedules. We have to get rid of the delusion of trades and start seeing this as an opportunity rather than a threat." According to Henry, engineers made \$45 an hour. An electrician could easily be bumped up to that pay scale with the same set of skills and capabilities, and it would have saved the corporation money.

It may sound logical and feasible to some, but I have not come across a plan similar to Henry's. However, in this plan, Henry very successfully highlighted the extent of the transition, and the challenges it created for the union. The main challenge was the need to work together. In the absence of a generational transition in the maintenance department, what could be observed was the persistence of the adversarial relationship. The "old school" mentality Cole underlined, and the need to address the new reality imposed by the post-bailout technological retooling was a major challenge. As cited above, Max was concerned about electricians relying too much on engineers, which begged the question: how should they stop doing that? For Max, this would be

possible with experience. Tradespersons should learn faster and prioritize to become independent of the engineers. This was tradespersons' competitive edge and advantage over the engineers anyways: the command over the actual process rather than the theoretical aspects of it. Cole thought the drastic change of technology after the bailout had made the learning by experience process obsolete. Now the union was facing a triple problem: an aging workforce who was very close to retirement, 305 a headcount reduction, and an urgent need to train and retrain the workforce. Another consequence of the need for such quick adaptation was the de facto elimination of apprenticeship programs. This blocked the way forward for production workers, who considered switching to trades to be the only plausible opportunity for promotion without leaving the job security provided by the union.

Apprenticeship programs are a traditional way to train skilled tradespersons in unionized auto plants. Companies only hire off the street if and when there is overwhelming need and there are no apprentices in the bank. Exclusively hiring off the street, like with the most recent electricians hiring, used to be a rare event, however it is becoming a norm as the apprenticeship programs lose their traditional role and the industry heads in another direction in terms of recruiting skills. Established decades ago, apprenticeship programs were the main ways in which the skilled workforce controlled the quality of training as well as the number of skilled tradespersons entering the workforce. For decades, it operated both as a gate keeping process and as a form of quality assurance. Thanks to the historical changes discussed in Chapter 2, trades in the auto industry have gained significant power and autonomy over the years, especially after the technological change in the 1980s. This was reflected in the apprenticeship programs as well.

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³⁰⁵ As of 2013, the age average for the skilled trades in general was 53.

However, for over a decade, there has been a dual pressure on trades, which caused tension on the floor. Apprenticeship recruitments have been going down as part of a workforce reduction effort. The last three contracts, as discussed in the previous chapter, progressively promised to recruit fewer tradespersons, while the amount and type of work demanded from not only changed but also increased. Apprenticeship programs in some locals have become virtually non-existent, while retraining and cross training programs for current skilled tradespersons are taking over. So there is a dual pressure on tradespersons: downsizing and multi-skilling. The number of tradespersons is in decline due to two factors: a) attrition, b) plants not recruiting new apprentices. The push for multi-skilling, which was a bailout mandate, added another dimension to downsizing, as it made more tradespersons available beyond their once clearly demarcated fields of expertise. The effects of this transition were clearly visible at Tonawanda Powertrain.

Tonawanda Powertrain had no new apprentices training to become journeymen in its apprenticeship program at the time I conducted my research. The entire training program was oriented towards retraining and cross training as mandated by the bailout modifications and the subsequent national agreement. The most immediate effect of this was on production workers. Since switching from production to trades was the only secure form of promotion, since workers would not have to sacrifice union membership, the closed doors for apprenticeship programs meant a segregated workplace, effectively eliminating any hope of promotion. This frustration was most visible among second and third generation lower-tier workers.

Roy, a second generation worker, started on the assembly line at GM in early 2012 after bouncing from one job to another in the service sector. He was the son of a GM skilled tradesperson who retired before the recession. Even though Roy's father was an auto worker, he never imagined working in the industry himself, nor did his father imagine or expect either of his kids to end up in

the auto industry. Matt, Roy's father, worked for GM for over thirty years and made more than enough to provide a comfortable life and good education for his kids. He wanted his kids to go beyond the auto plant, however, Roy ended up working at GM after the bankruptcy. I discussed the details of this transition in earlier chapters. Here I want to focus on the implications for the trades.

I met Matt once and Roy a couple of times on different occasions in and outside the plant. When I first asked Roy about his plans in the plant, he mentioned that he'd enjoy becoming a skilled tradesperson like his father. There were technically two ways to get promoted: switching to skilled trades or to management. The latter is more common than the former at Tonawanda Powertrain simply because apprenticeship programs are not recruiting. This came up during conversations with Roy a couple of times. On one of these occasions, we were talking about job security. Roy clearly said the path towards management, despite its much higher pay, was not as desirable as that of skilled trades. In response to my question about whether he considered switching to management, he said:

I did at one point. I did apply for a supervisor job, when I was considering that, which was shortly after I started, a year ago. I've spoken with some other employees. They said 'Be careful,' because if you ever take that job as a supervisor, you leave the union, you go work for General Motors, you no longer a union employee. You're a General Motors employee that makes good salary, but if you go over, you cannot say 'Eh, I don't like this job, this supervisory job.' Or maybe something happens, and they don't need you anymore. They can let you go, and you cannot go back. (...) The good thing about being an hourly employee, as a member of the union, you have the protection of the union, they speak up for you when, in the case of a layoff. Or when you have another kinda problem, they wanna fire you. The union can step in and you know [they can say], 'He's got rights, he's a union employee, maybe we could move him to a different area.' As a production supervisor, you don't have that protection anymore. You become very expendable. What's more important: the security of the job, or the money you make? Because production supervisors, they make very good money, but again, they could be very expendable if the numbers are not met. Say we had some very poor days and poor weeks, and all of a sudden numbers are taking a dip, they start going down. Who's gonna be the first person they're gonna look to. I mean, yes they are gonna look at the hourly workers who is actually working, but then they're gonna look at their supervisors, those production supervisors and say, 'You didn't make sure they did a good job and got more engines. You're out the door.' So that person will be the first one who's let go. (...) Having changed careers a few times, I'm not willing to make that jump and leave protection. I'd like to make twice the amount I'm making right now, but then again I gotta look at my family. (...) I wanna be able to support my wife

in case she couldn't work. (...) It's a gamble. Some people would take it. Most people won't. You can make more money right now, but as I say, you could be expendable. If I'm gonna work here for another twenty-five years, I'd rather do that as a skilled trades person, as an electrician or as whatever. I'll go through that way as opposed to take more money upfront and not know what will happen in five years, ten years.

As a second-generation worker, Roy was aware of the value of being a skilled tradesperson at an auto plant. Growing up in a household where his father always had work with good pay and abundant overtime opportunities, Roy knew the strategic position of tradespersons. However, as the quote above states, Roy's main motivation was job security. The wage difference between him and higher tier workers did not concern him as much, since he compared his situation with his previous experience, not his father's or that of any other first-tier worker. After migrating from one low-paid job to another, he ultimately valued job security more than other things.

Union membership also eliminated arbitrary and last-minute impositions. The contract provided clear guidelines for issues such as the allocation of overtime, breaks, vacation procedures and many other time-related issues. While hourly workers benefit from clearly defined guidelines, from grievances to job assignments, salaried workers operate under a different paradigm. If a manager in the second shift was asked to stay for overtime, s/he could be notified at the last minute, and it wouldn't automatically mean overtime pay. In fact, it rarely meant overtime pay. More importantly, there was no contract for these workers akin to the agreement between the union and management. Management contracts were at-will and they could be terminated by either party at any time. Similarly, there was no similar layoff process that included a call back right. As Roy stated, an employee could be fired, and management would not have to recall that person to work. The open-ended nature of such contracts did not appeal to Roy.

However, Roy was also disappointed with the absence of apprenticeship programs for production workers. He told me a couple times that he inquired, but he never received a clear

response. At best, he was told that there wouldn't be any programs in the near future. Roy's life standard hasn't changed drastically since he arrived at GM. The biggest difference came with becoming permanent, since another ninety days after this, he qualified for healthcare, and he and his wife could switch from her insurance to his. Even though the health insurance offered to traditional workers and new hires had significant differences in terms of copays and fees, Roy said it was still a blessing and saved his family a significant amount. Roy associated this boon with the union, and that's why he seeks a promotion only within the union. Even in its heyday, the recruitment to trades was limited. In fact, this is the nature of trades, as discussed in Chapter 2. However, its complete elimination from the horizon has had a different meaning for workers. Workers are now stuck in production, and the trades are fading from view as a promotion mechanism. This is how Roy reflected on the ambiguity:

In the second meeting that I went to I approached the issue of the apprentice program, about getting into the skilled trades. Because I talked to people, people my father used to work with, some of them still work there. Nobody's sure what's happening. But the growing concern is, there's gonna be a lot of people retiring in the skilled trades department, and they might retire next year, in two years, three years. We don't have people to fill these positions. There's only a few, a handful of people there. (...) We have yet to get a concrete answer [from the management.]

One may think that this speaks to the so-called skills gap in the literature: As senior tradespersons retire, the apprenticeship programs are incapable of responding to the possible demand that could suddenly emerge. And, in fact, as several testimonies I cited above show, this is the way hourly workers perceived the problem. However, as I discussed above, instead of recruiting apprentices and training them in four- to five-year long apprenticeship programs to respond to the transition, what management aspired to do was to hire skilled tradespersons off the street and/or outsource as many maintenance jobs as possible in order to minimize the reliance on permanent tradespersons. Yet, at the same time, management did not want a sudden change of its entire maintenance department, because tradespersons hired off the street would still need to be

trained and familiarized with the specifics of the auto industry. The 2015 national agreement offers the best evidence that management made a conscious choice to deal with this apparent contradiction by offering buyouts and retirement incentives to production workers while offering none to maintenance workers. Because of their relatively higher average age, maintenance workers were much closer to retirement and incentives would encourage many more to retire. However, management did not want the know-how to disappear. When combined with management's historically low commitment to apprenticeship recruitments (300 across the country over the life course of the four year-long agreement), this difference in the rewarding of retirement benefits makes clear the direction of managerial strategy. The absence of buyout incentives for the skilled trades department was the main reason why tradespersons at GM down struck the original tentative deal. Not surprisingly, there was not as much concern or debate over the shrinking apprenticeship programs. ³⁰⁶ I will come back to this at the end of this section.

Not everybody reacted to the absence of apprenticeship recruitments in the same way though. Jake gave up on switching to trades a while ago. He was a laid-back team leader and communicated very well with folks on his team, which was mostly composed of new hires, Lockport transplants or temporary workers. The team leader position is not technically a managerial position, but Jake operates as if it is one. He communicates well with his team members and was very helpful to me by relieving them of their responsibilities when I asked to talk with them.

³⁰⁶ The International executive board unanimously voted against the skilled trades vote and overruled the rejection. As I discussed above, while skilled trades workers can technically strike a contract down, they have to justify it as a skilled trades-related issue. In this case, the International argued that concerns raised by the members were beyond the maintenance department. This contractual and constitutional ambiguity continues to be one of UAW's major internal problems.

I met Jake a few times on the floor, so our conversations were relatively long but not recorded. My comments below rely on my observations and field notes. Jake was not a second- or third-generation auto worker. He came in with a referral from an acquaintance, not a close family member. Unlike Roy, Jake had limited experience with the auto industry growing up. He considered skilled trades at the beginning but quickly realized that there would be almost no way to get into that "exclusive club" anytime in the next five years. His assessment of the timeline was probably very accurate. Within the lifetime of the 2011 agreement, there was no interest in recruiting apprentices at Tonawanda. Ongoing negotiations are very likely to produce a surge in recruitments, as the company is still trying to reduce its skilled workforce significantly. However, another point Jake made was very important. Unlike Roy, Jake identified the trades as an exclusive club. As I discussed earlier, the history of skilled trades organization does show a significant degree of exclusiveness. Kinship being the most important quality, tradespersons were rarely from outside the network. Observing this at an early stage as well as realizing the limited and almost non-existent apprenticeship programs, Jake had made a realistic choice.

Unlike Roy, Jake had a very positive perception of switching to management. Workers switching from production to entry-level management jobs were not that common, since these jobs were very limited in number, however, a few workers had done that over the previous few years. Compared to no recruitments in the apprenticeship programs, this appeared to be a path to promotion for workers in production. Jake, with his ability to easily communicate with many other workers, including his fellow team members and management, seemed like a plausible candidate. When I asked him about his future plans at the plant, he said he would like to switch to management. Jake saw himself more than competent enough and he fulfilled the basic requirements of a bachelor's degree and positive interpersonal relations at the plant. His difference

of opinion from Roy had more to do with his status in the auto plant. He was not a second- or thirdgeneration worker.

Carla, another entry-level worker with a lot of prior work experience, also considered the skilled trades. She worked in numerous industries, mostly service, filling numerous positions. Carla, unlike many other entry-level workers in their early 20s, came with different expectations. She had a clear plan for moving up the ladder in a reasonable amount of time. When I asked her what reasonable meant, she said: "In three to five years, I want to see myself in a better position. Otherwise I wouldn't stay here." Promotion, especially in the service industry, was usually a clear path, however the pay and especially the benefits in that sector are much lower. Moreover, promotion does not always translate as a significant move up, especially at the bottom of the service industry. In the fast food restaurant business, for instance, managerial positions are only slightly better than normal positions.

A union job at GM, especially in production, had a different structure than jobs outside the company. Aside from seniority, which meant more job security, years at work in most cases do not lead to a "higher" position with better pay or more responsibilities. Carla, though, did not seem to be content with this structure. I met her a few times on and off the floor, and she repeatedly said she would seek alternative ways to move up the job hierarchy. Unlike Jake, she was not interested in a management position. She found that too volatile, and she didn't like the hours. Like Roy, she liked the ways in which hours were more predictable on the hourly side. A mother of two, Carla had to be in control of her schedule. This left only a few options for Carla, and the first one was the skilled trades, though like Jake, she considered this to be a dead end option. One thing was surprising though. Even though she found the trades a hard nut to crack, she thought she could become more active within the union and seek an alternative path for herself that way.

Roy and Jake did not really have any ambitions to move up in the union hierarchy. Ely Chinoy, in his now classic study of auto workers in the late 1940s and early 1950s, argues that union positions, elected or appointed, are the only viable paths of mobility for workers on the line, along with the skilled trades jobs. Even though Carla found the assembly job challenging and interesting for a short while, she did not imagine herself staying on the line forever. It's noteworthy that Chinoy's observation of a dual path for some kind of promotion, with either a monetary bonus and/or a professional one, remain the two options on the table. With the skilled trades option essentially blocked after the bailout, workers on the line are now left with very limited options.³⁰⁷

Roy, who was unwilling to bid for a management position and did not plan to run for an elected union position, was likely to remain on the production line for a while. Jake, with an absolute belief in his ability to bid for a management job, will remain in his current position until the opportunity shows. Carla had not made any bids for union positions the last time we met. The cycle for local union elections is four years, and thus the next one would be in three years' time. In all three cases, workers were responding to the absence of an option to apply for a skilled trades opening. The practical elimination of skilled trades apprenticeship programs caused a lot of disappointment on the floor and pushed workers like Roy, Jake and Carla to search for alternatives. With the limited availability of other alternatives, one could observe more immobility within the

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³⁰⁷ One of UAW's major successes is its highly extensive system of committees. These are commissions dealing with a variety of issues from community involvement to workplace safety, from racial issues to gender issues, from environmental involvement to retiree affairs. These committees are run by active voluntary workers who are not compensated. Occasionally seen as a bureaucratic burden, these committees are where problems on the ground are first brought together. Women are highly active in the Women's Affairs Committee. While, the committees do not serve as a means for upward mobility within the plant hierarchy or a pay increase, women do acquire certain elected and/or appointed union positions through these commissions. Since committee positions come with desk jobs, they can nonetheless be perceived in terms of upward mobility, as they take workers off the line. I have observed repeated interest among the workers on the floor for such positions in order to get off the line. This speaks more to the nature of work than upward mobility per se.

plant. A main outcome of the bailout was thus that the divide between different classifications was deepening even further.

A comparison of aspirations to join the skilled trades and the actual agenda of management helps to demonstrate the difficulties new hires face in seeking upward mobility in the plant. Valerie, another entry-level worker, wanted to switch to the skilled trades too, mostly because of the pay. With the combined job security and good wages, Valerie viewed this option as ideal. But just like Roy and Carla, she was concerned about apprenticeship openings. I asked her which trade she would likely choose were she to become an apprentice and whether she'd be open to an engineering position:

I don't care which trades it is. It could be electrician or the guy who paints the straps. It's starting at \$32 an hour. Then I watch them, and some of them is like you gotta be kidding me. (...) I want to go back to school for engineering. I want to study electrical engineering. I went to high school for that. (...) The only thing that scares me a little bit is I will no longer be under the safety net of the union. That's the only thing kinda keeping me from enrolling to a school. I'd much rather be in the skilled trades but I don't know how long will it take that door to open. (...) You don't even know when the test is coming up. You get to apply to be in the apprenticeship program. You know I have to have multiple things on the table.

Valerie is trying to think long term, and that is why she is considering going back to school for engineering, so she can qualify for a management position. It is that long-term vision that likewise gives her qualms about losing union protection. Management's agenda is different, as they need to address machinery problems in the short run instead of the long run. This brings us to the Buffalo News article I cited earlier. Why did Tonawanda only advertise to hire electricians off the street? Brian, the senior electrician, had a simple explanation:

We do what's called controls work here. The people that were picked were the best of the best for controls work. When they came down to the floor they took them in the cabinets, they saw the stuff on the floor right now, equipment they never saw in their life. Stuff they never worked on before. A lot of these guys are in the process of training right now. (...) Part of the game plan was we get people with controls experience. Those are the people that are willing to dive in, tackle a problem in stuff they've never seen before. They have the analytical ability to be able to do that. That's what we ran after.

Even the most experienced electrician hired off the street needed training to "tackle the issues" posed by new technologies. But according to Brian, the electricians hired off the street had analytical ability, and at that point, this was important. Not surprisingly, the ad posted these positions as requiring 25 years of controls experience.

Despite the urgency of the shortages in machinery expertise, Brian also thought hiring off the street did nothing but postpone the real problem. As a firm believer in the in-house training programs, Brian thought programs at home should specifically be designed for the kind of jobs performed on the floor. Such training would target extremely unique processes, and thus the bailout mandate of cross-training might not be as easily achieved as management expected and desired.

Henry, the tradesman with a plan for in-house training programs in engineering, also thought cross training was not as easy as it sounded and that skills were not as transferable as management believed. For instance, assembly plants, which were completely different than powertrain plants, were composed of three subdivisions: General Assembly, Body Shop and Paint Shop. General Assembly was also divided into two main parts: trim and chassis. All these areas and the machinery they were equipped with showed significant variations and required different skill sets to maintain and fix. However cross-training was a bailout mandate, so locals were called upon to develop their own programs and to start training their workforces accordingly. At his local, Henry said, parties follow a strategy to cross-train tradespersons within departments first. According to this program, a pipefitter in the paint shop will be cross-trained in the millwright and tool-maker trades in the paint shop first, and s/he will then move to the body shop, general assembly trimming and general assembly chassis. The plant already had a 98% cross-training rate within departments, however the number plummeted across departments. Some of the training

processes could take up to four years due to a lack of overlap. In other words, cross-training a millwright in all the other mechanical trades could take up to ten years under the current training guidelines.

Another complicating aspect was the non-transferability of skills between the final assembly plants and the powertrain and stamping plants. These plants operated according to a completely different mentality, and Henry suggested that a great tradesperson at a powertrain plant could be useless at an assembly plant. Even though his was a point of view that management strictly opposed, this view found many supporters among skilled tradespersons in my research.

Last but not least, a demographic challenge threatened to undermine the cross-training mandate. For the tradespersons on the floor at Tonawanda, there was no incentive for so much additional training. The skilled trades were already a very old workforce. Across the company, the tradesperson's average age was 55, and it was 53 at Tonawanda. Those at the top of this seniority pyramid were especially disinterested in cross-training, since it was too time consuming and hard. As Cole suggested once, no one wants to go back to school after 60 years of age. The main reason why management wants a multi-skilled workforce was not only the flexibility but also because it could reduce the headcount of tradespersons. Management was already convinced that GM had too many tradespersons, and cross training could reduce the numbers in the long run. This posed a significant disincentive for current tradespersons to cross-train, because in the long run, it could very well work against their own interests by making them more replaceable.

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³⁰⁸ Actually GM really does have more tradespersons than transplants as well as Ford and Chrysler.

The issue of cross training cannot be properly evaluated without considering the team system implemented after the bailout. Tradespersons have always been criticized for resisting lean principles and refusing to work together. Post-bailout, teams were formed with tradespersons from every classification, with a team leader from one of these trades. They were obligated to respond to calls as a team, and just like their counterparts on the floor, they had to report to their supervisors as a team. This new logic was simply negated by many tradespersons on the floor who said that the actual task would be performed by only one or two of these tradespersons anyway. Even before the team concept, they worked together to figure out the problem, thus cooperation already existed. Brian found the model dysfunctional in the skilled trades, with no clear gains other than paperwork. To paraphrase: "The person who came up with the idea in Detroit will lose his job soon."

Tradespersons also challenged the idea that lines of demarcation serve as evidence that tradespersons don't work together, since in fact, these lines were organically produced by the nature of the work, and they didn't prevent tradespersons from consulting each other. Max acknowledged the fact that parties needed to work together across lines: "You almost have to. Even if I'm not troubleshooting the electrical aspect (...), I try to go there with an electrician I can talk to. I try to use proper terminology so that I'm not sending him in the wrong direction. (...) Lines of demarcation are mainly [within] the mechanical aspect of it, [since] between mechanical and electrical, it's pretty obvious. Well the electricians' lines of demarcation comes in with engineers. At what point of technology do the engineers get involved?" For Max, the demarcation between mechanical and electrical trades was not an issue, and potential overlap was more significant with respect to lines between electricians and engineers.

Whereas Brian saw the team concept as dysfunctional because tradespersons adequately performed tasks individually or in pairs, Roger took issue with the way the teams were assembled

after the bailout. Since skilled tradespersons did not work in the same way as production people, the team concept did not fit as smoothly as expected. While the idea was often referred to as bullshit and stupid during my conversations, Roger did not oppose to idea of teams per se. He was a transplant, and he referred to a position called the "lead man" he filled at American Axle, his former plant, more than twenty years prior. A lead man was the leader of a group of fellow tradespersons, which meant that a team leader from one trade would lead others who performed completely different tasks than one another. Roger thought that less diversity of skills within a group would have made for more efficient work performance. He recognized that the post-bailout idea was conceived due to management's belief that skills should be transferrable. For a very long time, skill trades were seen by management as an obstruction, and their lines of demarcation in particular were seen as a main obstacle to efficient production. This view was reflected in the postbailout contracts where lines of demarcation were posed as uncompetitive labor practices, as I discussed in the second chapter. This led to a concept of teams in which a skilled tradesperson from any trade can lead a group of diversely skilled tradespersons. According to Roger, this way of assembling teams hasn't brought any advantages, as the organization of work does not comply with it.

4.4. Changing Work Rules

Tonawanda Powertrain received more than \$800 million worth of investments since 2011. This led to the massive retooling of the machine floor, with brand new CNC machines for block, head and crank production. Tonawanda Powertrain also hired almost 1,000 workers in the same time period. The employment numbers, which fell to around 600 during the bankruptcy period, were ramped back up to 1,800 with the influx of newcomers. However, the massive technological investment was not the reason for hiring off the street. On the contrary, retooling on the machine

floor reduced the number of workers working on the machine floor. In an engine block mode, ³⁰⁹ for instance, there used to be around 20 to 25 workers, whereas the number is now 8 or 9. New and complex technologies and robotics reduced the number of workers per station significantly. The gain in numbers occurred almost exclusively on the assembly line, and the reason for greater numbers on the assembly line was not due to an increase in technology there but in a reduction of it. Assembly lines, which used to have 40 to 50 workers per shift, now have as many as 120 workers per shift, depending on the engine being assembled. Thus the relationship between new investments and employment is always more complicated than it looks. Earlier I discussed how these investments impacted the nature of the work performed as well as the issue of training. Here I briefly discuss reactions to other wage-related issues such as alternative work schedules (AWS) and the concept of production-maintenance partnership (PMP).

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For skilled tradespersons, overtime was a major source of income, and losing this income was one of the two reasons why there was so much reaction and resistance to Alternative Work Schedules. The other reason had to do with changes to scheduling in order to avoid overtime. Prior to the implementation of these new schedules, tradespersons were paid time and a half after 8 hours straight, time and a half automatically on Saturdays, and double time on Sundays. Under AWS, tradespersons no longer qualified for overtime after 40 hours straight (this also applied to production workers). So, if they were assigned a regular week of four days, ten hours a day, and were asked to start work on a Thursday, they would not qualify for any overtime, even when they worked more than eight hours a day and on weekends. This did not resonate well among workers,

³⁰⁹ The entire engine block section is composed of four separate units called as modes.

and the lost overtime was not the only reason. Max, a mechanical tradesman says, "It was horrible. Not because of lost overtime but because of the hours and lack of rotation. The Hours were 10-hour shifts, 10 PM until 8:30 AM. Thursday, Friday Saturday and Sunday." The salaried workforce disliked these 10-hour shifts as well. FCA, among the Detroit Three, used them the most, and during the contract negotiations, they met with tremendous resistance on this issue. ³¹⁰ It was tried for a few months at Tonawanda but discontinued soon after.

The element of overtime was still a major factor though. Throughout my interviews I observed series of references to the overtime as a major source of income and a difference maker for the tradespersons that distinguish them from the production workers as well as from the engineers. Matt, a retired electrician, said he worked overtime whenever available. And it was amply available. He did not start at GM wholeheartedly, and was still considering going back to college for engineering:

I was still thinking about going back to college and then I started making friends with a lot of people and it wasn't so bad. And I found out how much an engineer was making at that time, electrical engineer. And I find out an electrician makes twice as much money. (...) Maybe the electrician makes three times more right now. Because they are working a lot of overtime. I'm not talking about forty hours. You get to work a lot of overtime, which there was plenty the whole time I was there. (...) I worked overtime all the time. I probably averaged over 37 years sixty hours a week. There was a lot of time I worked seventy, eighty hours because there was so much work to do.

Skilled tradespersons at Tonawanda Powertrain still take a lot of overtime. Part of it is voluntary because it is a main source of income. On the other hand, part of it is compulsory because management's reluctance to hire more tradespersons and reduce the headcount in the long run without acknowledging the problems on the floor causes a mismatch. Many tradespersons, especially electricians, are forced to take mandatory overtime. This is one of Brian's main questions, who believes there is need for at least thirty more electricians and mechanical

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³¹⁰ In fact it was the main reason why skilled trades struck down the tentative agreement during 2015 negotiations.

tradespersons if not as many. He say, if there is no need for new tradespersons, as the management suggests, why do we make every single one of them work overtime on a continuous basis.

AWS addressed this issue because overtime for tradespersons was a costly route to take. Because of the hardships it caused in terms of rotation, it caused a major reaction on the floor, and eventually management decided to discontinue the practice. As mentioned earlier, locals have the space to negotiate these contract mandates and selectively implement some of them while ignoring others. AWS was one of these issues at Tonawanda Powertrain.³¹¹

AWS imposes significant changes on not only wages but also work hours, and they were met with significant shop floor resistance. The same cannot be said for the PMP (Production-Maintenance Partnership) concept introduced in the contracts. As explained in chapter two, the immediate effects of PMP on the wages or work hours of tradespersons was limited. To restate, PMP assigned minor maintenance jobs to production workers, thereby permanently taking some maintenance jobs away from skilled tradespersons and reclassifying them as production jobs. Yet, the skilled tradespersons I talked to about it were not especially critical of the process. Max thought, with proper training, workers on the line could perform the simple tasks as described in the contract. However, he was concerned about the boundaries between workers during everyday work. The PMP arrangement made it unclear whether the worker on the line, the team leader, or anybody else in charge should try to perform a task s/he was not capable of doing. In such situations, it was also not clear who would take responsibility. For Max and many other tradespersons, the "ancient" demarcation of production and maintenance was there for a reason.

³¹¹ However, as we learned from the contract negotiations between the UAW and the FCA, AWS was taken advantage of by management at the FCA. This is why I argued earlier that the connective bargaining framework is not as comprehensive as it used to be. The FCA also has about 47% of its workforce in lower tier positions and significantly differs from GM, which has less than 20% of lower tier workers in its workforce.

The division of labor should be clear, and PMP potentially created room for error or worse in management's pursuit of efficiency and reduced labor costs.

According to Cole, PMP revealed was a basic contradiction between two management mentalities: that of increasing flexibility and that of increasing quality. Increasing quality could be costly, while increasing flexibility could undermine quality. Cole thus observed a rupture between management's twin commitments. Cole also believed that with proper training, workers on the line could perform certain tasks, but he was suspicious of the commitment to training for this purpose, since there has been a clear retreat from training new apprentices to enter the skilled trades. Cole believed the effects of this transition will unveil itself in the long run.

Since PMP was not as controversial as the other changes on the floor for the tradespersons, it has not met with resistance. This is why it has survived as the only pre-bailout mandate in the field of skilled trades. Concomitantly, I did not observed much reaction to it during my interviews, with one exception. Burt, one of the few younger generation skilled tradesmen, was very conscious and critical of it. To paraphrase: "They are already stealing our jobs." Stealing is a very strong word, and in theory he is right. As I discussed in chapter two, the jobs that were declassified as skilled trades jobs and reclassified as production jobs will most likely not come back. Even though PMP's effect will be minimal compared to cross training and outsourcing, it will have some effect due to this permanence. That said, Burt's criticism was, according to my observations and interviews, an isolated one, with little chance of mobilizing workers. Not surprisingly, PMP did not make it onto the agenda of the 2015 contract negotiations, while AWS was discussed at length.

4.5. Conclusion to Chapter 4

As a particular subset of the workforce, skilled tradespersons enjoyed bargaining power resulting from their relative autonomy on the floor that harkens back to the establishment of the skilled on the shop floor since the 1980s. However, the bailout significantly reduced this bargaining power and entailed an extensive transformation. With the support of Team Auto, management was able to impose an elimination of the lines of demarcation, to introduce a multi-skilled teams approach, to change work rules, and finally to reorganize the training system. This was accompanied by a major technological retooling, which can only be compared to the one in the 1980s. The labor process on the assembly line and the machine floor changed drastically. On the machine floor, tradespersons were required to perform more complex tasks on a more frequent basis. New technologies, which were different in characteristics, also required significant formal and on-the-job training. However, this time, management simultaneously pursued a headcount reduction. Unlike the transformation that bumped the status of the tradespersons in the 1980s, this one enforced a dual pressure: flexibility (in terms of skills and other work rules) and a reduction of the workforce.

In Chapter 2 I argued that given the content and scale of the intervention on the machine floor, it was impossible to extract such concessions without government intervention. As I discussed in this chapter though, this major transformation is impossible to understand solely through an analysis of the contracts. Technological retooling of this scale was entirely absent in the documents, yet it had a profound impact on the floor. The ethnographic study of relations on the shop floor grants an opportunity to assess three effects of this great transformation.

First, contractual mandates, such as forming multi-skilled teams, were not as easy as to implement as imagined by Team Auto and management. As I showed, skills on the floor were not as transferable as management wanted them to be. New machinery and technological challenges made it even harder to implement and improve the skill composition of the workforce. Among the

various obstacles to this aim, the demographics of the skilled trades workforce appear the most important. Tradespersons were significantly older than anybody else on the floor (mid-50s across GM and 53 in 2014 at Tonawanda Powertrain). Many tradespersons did not have any incentive to go through gruesome training processes to excel in other trades, which could take up to four or five years. As stated, additional training also posed a paradoxical problem of vulnerability to layoffs. The more a worker is cross-trained, the more likely s/he could get laid off. Therefore such policies were met by a certain suspicion and resistance by workers. As a result, despite the existence of multi-skilled trades teams, management was far from attaining the level of flexibility on the floor that it had desired.

The characteristics of this resistance still need to be identified. Despite the ubiquity of criticism of the changes, the tradespersons I talked to on the floor had only a few tools to counter this transformation. The most commonly used one was to refuse to sign up for cross-training and retraining programs. Another tactic was the continuous expression of frustration with AWS, which was a practice that management eventually abandoned at Tonawanda Powertrain. This was made possible because tradespersons allied with some managers, who equally disliked the new work schedules, and were able to transform their frustration into a solution. The decades- long negotiation framework was designed to leave as little room as possible for day-to-day acts of resistance, thus the dissent contractually had few channels. Yet, as I showed above, contractual changes are not automatically implemented on the floor. Finally, the contract itself and the ratification vote gave another opportunity for tradespersons to vocalize their opposition.

Second, the urgency of the challenges raised by new technologies had to be addressed quickly. In response, management hired fourteen electricians off the street who had the necessary experience and knowledge to respond to the demands of the retooling. A rather unorthodox form

of responding to the crisis, this choice raised questions about the apprenticeship programs, which have been practically defunct for the last decade. Training programs at Tonawanda Powertrain only offered cross training. This resonated negatively on the production side. New hires, who wanted to pursue promotion within the plant to get off the assembly line, but who also did not want to leave the protection and job security provided by the union, were no longer given the chance to switch to trades. This further deepened the divide between the production and maintenance departments.

Finally, contractual changes were not translated to or applied on the floor automatically. Especially since the 1980s, when the difference between locals deepened, locals developed habits to apply some contractual mandates automatically while ignoring others. Accordingly, AWS was tried at Tonawanda only for a short time, while PMP was implemented very quickly. Local management and unions can negotiate over certain issues. At Tonawanda, management did not insist on AWS, however as I showed in chapter three, they were eager to hire temporary workers on a permanent basis for longer periods than other locals. Also, there was more willingness to hire contractors and outsource certain jobs. Within the GM network, there were plants with no temporary employees but stricter AWS practices. The differences among locals were seen as the source of competitive edge in the larger post-bailout context, where whipsawing had become the norm. In the next and concluding chapter, I summarize the arguments of this study and reflect on their implications for solidarity.

CHAPTER 5

CONCLUSION

This study aimed to understand a key moment of transformation in the automobile industry in the U.S.: the 2008 economic crisis and the subsequent reorganization imposed by the bailout. Following pioneer studies by Ely Chinoy and Ruth Milkman, I employed an ethnographic perspective, which privileges workers' perspectives on the shop floor in order to more rigorously determine the main contours of this change. The findings revealed in this study have proven this methodological choice to be necessary for critical engagement with the existing literature, which has so far fallen short of explaining the recent radical transformation of the industry. Just like Chinoy and Milkman, I observed various forms of alienation and dissatisfaction on the floor. However, through attention to the specificities of the conjuncture in the 2009 bailout of the auto industry, my study went beyond these pioneering works and observed four interrelated dynamics that I argue serve as primary features of reindustrialization in the U.S. These dynamics surround the role of the state, space, technology and the labor process.

The State. My analysis of contracts in a historical perspective in Chapter Two showed the importance of the federal government's involvement in shifting the power balance between labor and management. Already in a concessionary position since the 1980s, as Katz argues, labor was pushed even further to accept a much larger set of concessions under the emergency conditions of the bailout. To some extent, this altered the paradigm of collective bargaining. The scale of this change is best expressed by Team Auto member Ron Bloom who joined the team to represent workers' interests, during a private conversation with Andrew Harrocks, FIAT's representative during the bailout negotiations. They were discussing the negotiations in the 2009 bailout.

Harrocks approached Ron Gettelfinger, then president of the UAW, for a handshake once the deal was sealed. Gettelfinger's response was quite emotional. When Harrocks later recounted this exchange to Bloom, Bloom responded: "You'll have to forgive Ron [Gettelfinger] (...) That handshake you asked for was the undoing of seventy years of UAW bargaining." 312

My research demonstrates the critical importance of the federal government's position. The "historic sacrifice" of UAW members, as it is often referred to by the architects of the deal in the Obama administration, entailed the transformation of the employer-centered private welfare system into an employee-centered system. The government directly intervened in the negotiations, even with regard to the most industry-specific issues, such as work rules and job descriptions, by establishing parity with transplants. It also played a key role in truncating labor's ability to bargain by eliminating the right to strike until 2015. The ethnographic components of my study also show that the state operated on many other levels. Several testimonies of workers, especially those of the higher tier, conveyed enthusiasm for more local government involvement in keeping the company competitive through subsidies and incentives. Though this topic has been neglected by earlier studies on the industry, the state's involvement on multiple levels should now be seen as a must that is encouraged by both workers and management, which contributes to a very particular understanding of development. State(s) have become key actors in the reindustrializing Rust Belt.

Space. In this study, I have shown how the spatial context of the Rust Belt not only provided an ideal background for such a spectacular change in the auto industry but also how the region became an integral part of the reindustrialization process. Buffalo's preceding economic decline and its distressed labor market are important factors, however the ideological readiness for

³¹² Ingrassia, *Crash Course*: p. 252.

reindustrialization enabled a smooth transition, even though the changes imposed represented "the undoing of seventy years of UAW bargaining." I have argued that the generational transition, which is ignored in all other studies of the bailout, was only possible in the context of the Rust Belt.

Technology and the labor process. My ethnographic approach also allowed me to illustrate the massive reorganization on the shop floor. The entire GM plant network (all forty plants) has undergone a massive technological transformation worth about \$18 billion since the bailout. This is likewise absent in other analyses of the bailout. I showed how this reorganization changed the dynamics on the floor for different groups of hourly workers. Workers on the assembly line saw the labor process become more manual following a partial elimination of automation from the line. Contrary to what reductionist approaches to work and technology preach, this change was met by differently by workers, partly depending on their location in the plant. Workers' testimonies show their frustration with the dullness of work, repetition and alienation while at the same time showing their appreciation for certain aspects of the job and the union. This simultaneity echoes Chinoy's and Milkman's findings. However, unlike Chinoy's and Milkman's workers, the new hires and other lower tier workers at Tonawanda are not the prisoners of prosperity. On the contrary, they are the first generation of unionized workers in reindustrializing America.

Having enjoyed privileges of different kinds since the inception of the UAW, skilled tradespersons were arguably the most resilient group until the bailout and were thus targeted more directly than others. Management prioritized the dismantling of traditional work rules and job descriptions during the bailout. Not surprisingly, this is also absent in popular accounts of the bailout process. The technological retooling that I discussed in detail in chapters three and four showed how it altered the status of tradespersons on the floor. After conceding to major

imperatives of flexibilization, this group of workers retained the privileges of the higher tier, but they effectively lost the privileged position they once had with regard to their control over labor process, autonomy on the floor, and control over apprenticeship programs. Thus, "the aristocrats on the floor" became subject to more flexibility and less autonomy.

Finally, I have shown the possible cracks and potential opportunities for organizing in the reindustrializing auto industry. All these processes associated with the bailout left a significant imprint on organized labor, as it forced workers to question basic categories, such as working class, solidarity, union and organizing. The parameters of collective bargaining changed, and the bailout instituted a tiered system. As I have shown, different generations respond to these changes depending on structurally shaped groupings that are also internally diverse. These differences and competing approaches point to the potential paths that unionized labor can take. Additionally, the surprising events that occurred as part of the 2015 negotiation process provide a unique opportunity to observe new directions in the industry. Below, I will briefly comment on the 2015 negotiations and will then conclude with some comments about the future of the industry.

The 2015 Negotiations

After I conducted my research, the industry went through another cycle of national negotiations in 2015. I'd like to reflect on this process in light of my findings above by posing several pertinent questions. Will the auto industry become an isolated one with limited impact on other industries, or will it return to its trendsetter position in the post-war era? Is the contractual/collective bargaining framework still relevant for organizing? How does it integrate with the new ways of organizing? We already saw the huge impact of social media—especially Facebook—during the 2015 negotiations at FCA. Was that an isolated event or a potentially game-changing development for organizing? How will the unions react to the competition, and what strategies, if any, will they

adopt to counter the effects of changing technologies, trade agreements and managerial demands for flexibility?

The auto industry still enjoys a higher status in manufacturing in most other industries. Wages are higher not only in the Detroit Three but also in transplants compared to other industries, particularly with respect to the auto parts sector. However, following the bailout, the unionized leg of the industry is no longer in a position to set trends in terms of employment, wages, benefits, and the collective bargaining process. The bailout played a key role in this loss, as this is when the union forfeited many of its advantages over transplants. Today, the main difference between union and non-union shops is the level of penetration of temporary workers in the workforce. Some transplants like Nissan rely heavily on temporary workers hired through agencies or contractors. This ratio was 4% at FCA, the most aggressive of the Detroit Three in taking advantage of flexible labor conditions in the contract. FCA demanded that the cap be raised to as high as 8% during the 2015 negotiations, however it failed to obtain that percentage.

Aside from the level of penetration of the temporary workforce, UAW has lost significant ground in other crucial areas, such as post-retirement benefits, job security, and control over the labor process. This brings us to the second question. Is the collective bargaining framework still relevant? The 2015 negotiation process illustrated that collective bargaining remains important, especially when the union has the right to strike, which was suspended by the bailout in 2009 until 2015. As the history of the auto industry has shown, the strike was a particularly powerful weapon during the earlier days of the industry, and this remains the case. Having enjoyed a period of high volume and high profit since the recession, the Detroit Three were very vulnerable against the

strike threat. The initial negotiations with FCA³¹³ produced a tentative agreement that was announced to the public in a very unusual way by UAW president Dennis Williams and FCA CEO Sergio Marchionne. The rationale behind this announcement was to show the strength of labor-management cooperation, but soon afterwards, the deal was voted down by a 2 to 1 majority among the membership. The membership was dissatisfied about a variety of issues, from the tier gap to the vagueness of product commitments in certain plants. This rejection and the threat of a strike, which is constitutionally mandated once tentative agreements are rejected, sent the leadership back to the bargaining table. The leadership eventually bargained for a better contract, which showed the importance of the collective bargaining process and the voting system in effect.

What made the rejection of the FCA contract important was not just a procedural detail; it was the way workers organized against it. Workers, especially entry-level workers, organized their rejection using social media. This brings us to the third question: How does the collective bargaining framework integrate with new ways of organizing? UAW has a very bureaucratic way of preparing the collective bargaining process. Roughly a year prior to the negotiations, commissions in locals start gathering and determining their list of concerns and demands. The representatives of the locals then submit their lists to the International. The main strategy is determined at the bargaining convention, which was held in March in 2015, with the participation of delegates. UAW bargaining committees then determine a strategy with the leadership. Negotiations produce a tentative agreement and locals are given about a week to discuss and vote.

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³¹³ UAW usually chooses a target company and negotiates with it first. Traditionally this has been the one in the best financial shape, in order to make sure the union can obtain the best possible contract. Once the agreement is reached, the other two are forced to match the conditions in the first contract. In 2015, the UAW picked FCA. This was surprising to many experts on the subject, as it was to me, since FCA was in the worst shape among the three. But it was also the company with the highest proportion of entry-level workers (47%), and the choice was rationalized by the union in terms of an interest in focusing on the concerns of entry-level employees.

This pattern was followed step by step this year. I asked an experienced union leader about the mood at the convention in an interview afterwards. The response was quite telling. To paraphrase: "There used to be opposition at the Conventions; there was more debate. There are new faces in the group now, but they do not know much about the procedures, and they fail to make their voices heard."

After my initial observations about the uneventful convention, I was expecting a rather ordinary negotiation process. Instead, we observed the exact opposite. Workers, especially new hires, quickly organized through social media, which I also followed through my Facebook account, and in less than one week, they were able to organize a sizeable block against the tentative agreement. This block was not anticipated by union leadership in the one year prior to the vote, and the main reason for that this was the fact that the block did not exist. It formed quickly after the details of the tentative agreement were made public.

The initial response of the leadership to this grassroots organizing, which seemed much more efficient than the union's old preparation process, was to dismiss it completely. In a rather embarrassing statement, UAW president Dennis Williams called the leaders of the social media organizing "outside agitators." Williams' response caused further reactions among the membership. Soon after, the International responded to the new reality, and before sending the second tentative agreement to the membership for a vote, they hired a New York City based PR company to communicate better with the membership on social media. The second tentative agreement was approved by the membership, but UAW faced similar results both at GM, where the skilled trades rejected the tentative agreement, and at Ford.

 $[\]frac{314}{http://www.autonews.com/article/20151005/OEM01/151009917/uaws-williams-calls-out-outside-agitators-says-more-info-coming-on}$

What do all these events mean and what can they say about the future of unionism? This brings us to the final question asked above. How will the union react to the current situation? This instance showed that the union failed to address the demands of new hires. More importantly, it failed to acknowledge the will to organize through social media, which has proven to be very effective. The language of "outside agitators" from the leadership did nothing but hurt their credibility. As I showed so far, there are other challenges that have to be addressed, and the leadership does not seem to have a clear strategy to do so. The will of new hires to organize through social media opens up new possibilities to tackle hard questions, such as the competition between locals, the level of flexibility, and other related issues. There will be a chance to assess the nature, limit and vision of such organizing media in the long run. So far it has to be celebrated as another and perhaps more efficient medium of organizing. Workers will need such media in the extremely tough conditions of a reindustrializing U.S.

Final comments on the near future of the industry

In 2009, the Paris-based Gerpisa collective, a network of scholars studying the trends and trajectories of the global automobile industry, published a book called *The Second Automobile Revolution*. The second automobile revolution refers to a transition from fossil fuel based internal combustion engines to electrically powered engines. According to the contributors, this transition was imminent and forced by both the limited nature of oil production and man-made global warming, which is mostly attributable to excessive fossil fuel use. The year of 2009 was also a critical one for the industry, since global consumption fell significantly, especially in major

³¹⁵ One of the first reactions to this form of organizing in the media was to identify a disconnect between union leadership and the membership: http://www.detroitnews.com/story/business/autos/ford/2015/11/18/uaw-ford-local/75991308/

³¹⁶ Freyssenet, *The Second Automobile Revolution*.

markets such as the U.S. and Europe. Despite this positive projection of transitioning to electrically-powered automobility, six years after its publication what one sees is a very incremental move towards electric cars. In Japan, where they are most popular, electric cars account for less than 10% of the market share, while in the U.S. and Europe they are below 4%. ³¹⁷ Major carmakers such as GM are still losing money on their electric models, such as the Chevy Volt, despite generous public subsidies. Besides, electric-only carmakers such as Tesla have been unable to post profits yet. ³¹⁸ Research on electric mobility is not as ample as was expected; more importantly there is a lack of public policy promoting a large-scale transformation to electric mobility, at least in the short run. Therefore, the fate of the electric car and the so-called revolution does not reflect the trajectory of the industry today. ³¹⁹

What happened since the bailout, and what seems to be determining in the near future, was a more traditional response to the crisis: a focus on short-term profitability. In the U.S., this meant a shift towards sports utility vehicles. This had a direct impact on the state of labor relations on the ground. After two very low-volume years in 2008 and 2009 in the U.S., the car market picked up steadily and returned back to its 16-17 million units per-year level, from around 10 million units in 2009. This is the historic level Marchionne mentions in his "confessions," which I referred to in the Introduction. Unfortunately this growth and the soaring profits that accompanied it were not

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³¹⁷.Compiled from www.statista.com.

³¹⁸ The inability of Tesla to produce profits and their dependence on incentives raises a huge concern about the future of the brand as well as the future of electrically-powered plants. However, its market value, "nearly \$28 billion—1½ times that of Fiat Chrysler Automobiles NV with around 1% of its unit sales," is still very high and shows the hope, if not the trust in the future of electric cars. See, http://www.wsj.com/articles/tesla-motors-cant-maintain-ludicrous-speed-1446491548

³¹⁹ As of 2015, there are around 80 million electric cars on the road globally (including hybrid and fully electric cars), this number is expected to rise very incrementally and reach 88 million units by 2020. Considering the annual capacity of roughly 70 million units sold in a year worldwide, the growth of the electric car market is miniscule. Source, www.statista.com.

due to the expanding electric car market but to the infamous gas-guzzler utility vehicles. In the time period between 2009 and 2015, the U.S became the largest utility vehicle market in the world. In 2014, 8.5 million light trucks were sold in the U.S., compared to 7.9 million passenger cars. The balance on the production side was even more tilted, as 7.4 million light-trucks were manufactured in the U.S. in comparison to 4.6 million passenger cars. More importantly, the Detroit Three became completely dependent on profits coming from light trucks. Ford, the most dependent, owes 90% of its profits to the lucrative light truck market, where profits per vehicle are much higher than passenger cars.³²⁰

The changing car market has a direct influence on the ways in which production evolves in the U.S. Manufacturers, especially the Detroit Three, plan to concentrate their lucrative light truck business in the U.S. while finding new homes that will give them an edge in passenger car production. Mexico appears to be the most feasible destination thanks to its logistical position, cooperative local states, repressive labor regime, and finally the trade deals that it is part of, such as NAFTA and soon the TPP.³²¹ However, despite popular sentiment against such investment abroad, ³²² migration to Mexico is not absolute, at least in the medium term. The U.S.'s share of production within NAFTA is estimated to fall from its current level of 72% to 68% by 2020. This share, in spite of this minor fall, confirms the U.S. will remain at the center of North American automobile production. Mexico, in the meantime, is expected to go up from 3.4 million units per

³²⁰ The profit per vehicle for passenger cars can go as low as \$500, whereas for trucks, it is between \$3,000 and \$10,000 depending on the model.

³²¹ Mexico's role in the future of labor relations was one of the most important bargaining items of the 2015 negotiations. See, http://www.autonews.com/article/20151116/OEM01/311169978/detroit-shifts-car-output-to-mexico

³²² A famous statement was made by Republican Presidential hopeful Donald Trump, who criticized Ford for investing in Mexico. See, http://www.autonews.com/article/20150812/OEM01/150819960/donald-trump-bashes-ford-in-mich.-speech

year to 5.5 million units according to the most optimistic scenario. However, the shift in Mexico is fueled more by more plant migration from Canada than from the U.S. As noted earlier, the change in the U.S. is less about the volumes than the kind of vehicles assembled, as U.S. production moves towards light trucks—especially among the Detroit Three. This adds to its vulnerabilities in the long run. The estimates of the scholars from the Gerpisa group may have been too optimistic in expecting a transition to electrical mobility sooner, however, in the long run, it is also too optimistic to expect long-term steady profits from light trucks and sports utility vehicles. Such dependence on fuel-inefficient cars, which appears to be the chief problem of the Detroit Three, only makes them more vulnerable in the face of a possible economic slowdown, rising oil prices, consumer consciousness and intensifying competition. Considered together with the other structural challenges raised by FCA CEO Sergio Marchionne, such as the low profitability and high capital investment costs, we see an industry constricted by many factors all at the same time. As labor in the industry is subject to ongoing pressure, its role in this complex web of relations will be critical, requiring constant attention to changes in shop floor relations.

BIBLIOGRAPHY

- Alexander, C., and A. Haley-Lock. "Underwork, Work-Hour Insecurity, and a New Approach to Wage and Hour Regulation." *Industrial Relations: A Journal of Economy and Society*, no. 54 (2015): 695–716.
- Ames, Greg. Buffalo Lockjaw: A Novel. Hachette Books, 2009.
- Appelbaum, Eileen, and Rosemary L. Batt. *Private Equity at Work: When Wall Street Manages Main Street*. New York: Russell Sage Foundation, 2014.
- Aronowitz, Stanley, and William DiFazio. *The Jobless Future*. Minneapolis: University of Minnesota Press, 2010.
- Automotive News "Six Superstars Ponder the Future of an 'Irrational' Auto Industry." *Automotive News*, August 3 2015.
- Bacon, David. *The Children of NAFTA: Labor Wars on the U.S./Mexico Border*. Berkeley: University of California Press, 2004.
- Barley, Stephen R., and Gideon Kunda. *Gurus, Hired Guns, and Warm Bodies: Itinerant Experts in a Knowledge Economy*. Princeton: Princeton University Press, 2004.
- Barnard, John. American Vanguard: The United Auto Workers During the Reuther Years, 1935-1970. Detroit: Wayne State University Press, 2004.
- Baxter, Charles. The Soul Thief: A Novel. New York: Vintage, 2009.
- Besser, Terry L. *Team Toyota: Transplanting the Toyota Culture to the Camry Plant in Kentucky* Albany: SUNY Press, 1996.
- Boyle, Kevin. *The UAW and the Heyday of American Liberalism*, 1945-1968. Ithaca: Cornell University Press, 1995.

- Braverman, Harry. Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century. New York: Monthly Review Press, 1974.
- Brenner, Neil. New State Spaces: Urban Governance and the Rescaling of Statehood. Oxford: Oxford University Press, 2004.

Brenner, Robert. The Economics of Global Turbulence. London: Verso, 2006.
. "The Political Economy of the Rank-and-File Rebellion." In <i>Rebel Rank and File: Labor Militancy and Revolt from Below in the Long 1970s</i> , edited by Aaron Brenner, Robert Brenner and Cal Winslow. London: Verso, 2010.
Briody, Elizabeth K., Robert T. Trotter II, and Tracy L. Meerwarth. <i>Transforming Culture:</i> Creating and Sustaining a Better Manufacturing Organization. New York: Palgrave Macmillan, 2010.
Brynjolfsson, Erik, and Andrew McAfee. <i>The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies</i> . New York: Norton, 2014.
Burawoy, Michael. "The Anthropology of Industrial Work." <i>Annual Review of Anthropology</i> 8 (1979): 231-66.
———. Global Ethnography: Forces, Connections, and Imaginations in a Postmodern World. Berkeley: University of California Press, 2000.
———. Manufacturing Consent: Changes in the Labor Process under Monopoly Capitalism. Chicago: University of Chicago Press, 1979.
. "Manufacturing the Global." Ethnography 2 (2001).

Cappelli, Peter H. "Skill Gaps, Skill Shortages, and Skill Mismatches: Evidence and Arguments for the United States." *ILR Review* 68, no. 2 (2015): 251-90.

- Chinoy, Ely. *Automobile Workers and the American Dream*. 2 ed. Urbana: University of Illinois Press, 1992. 1955.
- Connolly, James J. After the Factory: Reinventing America's Industrial Small Cities. Lanham: Lexington Books, 2010.
- Covarubbias, Alex V. "The Mexican Auto Industry: From Crisis to Greater Region-Centric Influence." *Norteamérica* 6, no. 2 (2011).
- Cowie, Jefferson, and Joseph Heathcott, eds. *Beyond the Ruins: The Meanings of Deindustrialization*. Ithaca: ILR Press, 2003.
- Cutcher-Gershenfeld, J. "Bargaining When the Future of an Industry Is at Stake: Lessons from UAW-Ford Collective Bargaining Negotiations." *Negotiation Journal* 27, no. 2 (Apr 2011): 115-45.
- Cutcher-Gershenfeld, Joel, Dan Brooks, and Martin Mulloy. *Inside the Ford-UAW Transformation: Pivotal Events in Valuing Work and Delivering Results*. Cambridge: MIT Press, 2015.
- Deitz, Richard. "Rebounding from the Great Recession: An Interview with Richard Deitz." *The Buffalo News*, August 3 2013.
- Denning, Michael. "Wageless Life." New Left Review, no. 66 (2010): 79-97.
- DePillis, Lydia. "This Is What a Job in the U.S.'S New Manufacturing Industry Looks Like." *Washington Post*, March 9 2014.
- Dillaway, Diana. *Power Failure: Politics, Patronage, and the Economic Future of Buffalo, New York.* Amherst: Prometheus Books, 2006.
- Dollinger, Sol, and Genora Johnson Dollinger. *Not Automatic: Women and the Left in the Forging of the Auto Workers' Union*. New York: Monthly Review Press, 2000.
- Durand, Jean-Pierre, and Nicolas Hatzfeld. *Living Labour: Life on the Line at Peugeot France*. Basingstoke: Palgrave Macmillan, 2003.

- Dziczek, Kristin, Debbie Maranger Menk, and Yen Chen. Contribution of General Motors' Manufacturing Plants to the Economies of Ten States and the United States in 2013 and 2014. Center for Automotive Research, 2015. http://www.cargroup.org/?module=Publications&event=View&pubID=119.
- Edwards, Richard. Contested Terrain: The Transformation of the Workplace in the Twentieth Century. New York: Basic Books, 1975.
- Feldman, Shelley, Charles C. Geisler, and Gayatri A. Menon. *Accumulating Insecurity: Violence and Dispossession in the Making of Everyday Life*. Athens: University of Georgia Press, 2011.
- Fine, Michelle, and Lois Weis. *The Unknown City: The Lives of Poor and Working-Class Young Adults*. Boston: Beacon Press, 1998.
- Fisher, Bruce. Borderland: Essays from the US-Canadian Divide. Albany: SUNY Press, 2012.
- Florida, Richard L. The Rise of the Creative Class: Revisited. New York: Basic Books, 2012.
- ——. Who's Your City?: How the Creative Economy Is Making Where to Live the Most Important Decision of Your Life. New York: Basic Books, 2008.
- Flynn, Patricia M. Facilitating Technological Change: The Human Resource Challenge. Cambridge: Ballinger, 1988.
- Foucault, Michel. *The Birth of Biopolitics: Lectures at the College De France, 1978-79.* Basingstoke: Palgrave Macmillan, 2008.
- Fox, Radhika, and Miriel Axel-Lute. "To Be Strong Again: Renewing the Promise in Smaller Industrial Cities." Oakland: PolicyLink, 2008.
- Francis, Ann. "Journeys of the Uninvited: A Feminist Oral History of Skilled Tradeswomen in the Auto Industry." The Fielding Institute, 2000.
- Freyssenet, Michel, ed. *The Second Automobile Revolution: Trajectories of the World Carmakers in the 21st Century*. Basingstoke: New York, 2009.

- Gallo, Vincent. "Buffalo '66: A Movie." 1998.
- Gier, H. G. de. *Paradise Lost Revisited: GM & the UAW in Historical Perspective*. Working Paper Series in Management. Nijmegen: Nijmegen School of Management, Institute for Management Research, Radboud University, 2010.
- GM Tonawanda Engine *GM Tonawanda Engine: A Celebration of 75 Years*. Tonawanda: HomeRun Creative Serveices, 2013.
- Goldman, Mark. City on the Edge: Buffalo, New York, 1900 Present. Amherst: Prometheus Books, 2007.
- ——. High Hopes: The Rise and Decline of Buffalo, New York. Albany: SUNY Press, 1983.
- Gomberg-Muñoz, Ruth. *Labor and Legality: An Ethnography of a Mexican Immigrant Network*. New York: Oxford University Press, 2011.
- Goolsbee, Austan D., and Alan B. Krueger. *A Retrospective Look at Rescuing and Restructuring General Motors and Chrysler*. Cambridge: National Bureau of Economic Research, 2015.
- Gordon, Colin. *Dead on Arrival: The Politics of Health Care in Twentieth-Century America*. Princeton: Princeton University Press, 2003.
- Graham, Laurie. *On the Line at Subaru-Isuzu: The Japanese Model and the American Worker*. Ithaca: ILR Press, 1995.
- Green, William C., and Ernest J. Yanarella, eds. *North American Auto Unions in Crisis: Lean Production as Contested Terrain*. Albany: State University of New York Press, 1996.
- Greer, Ian, and Marco Hauptmeier. "Management Whipsawing: The Staging of Labor Competition under Globalization." *ILR Review* (2015).
- Gritsch, Maria F. "A Strike against Globalization: Unionized Auto Workers' Capacity to Resist." PhD Dissertation, UCLA, 2006.
- Gunnarsson, Sturla, and Robert Collison. "Final Offer." National Film Board of Canada, 1985.

- Hagerty, James R., and Alistair MacDonald. "As Unions Lose Their Grip, Indiana Lures Manufacturing Jobs." *The Wall Street Journal*, 21 March 2012.
- Hardy, Melissa A, Lawrence E Hazelrigg, and Jill S Quadagno. *Ending a Career in the Auto Industry: 30 and Out.* New York: Plenum Press, 1996.

Harrison, Bennett. Lean and Mean. New York: Basic Books, 1994.

Harvey, David. A Brief History of Neoliberalism. Oxford: Oxford University Press, 2005.

———. Spaces of Global Capitalism. London: Verso, 2006.

- Hatton, Erin. *The Temp Economy: From Kelly Girls to Permatemps in Postwar America*. Philadelphia: Temple University Press, 2011.
- ------. "Temporary Weapons: Employers' Use of Temps against Organized Labor." *ILR Review* 67, no. 1 (2014): 86-110.
- High, Steven C., and David W. Lewis. *Corporate Wasteland: The Landscape and Memory of Deindustrialization*. Ithaca: Cornell University Press, 2007.
- Ingrassia, Paul. Crash Course: The American Automobile Industry's Road from Glory to Disaster. New York: Random House, 2010.

Jenkins, Tamara. "The Savages: A Movie." 2007.

- Johnson, Derrick, and Lance Compa. *Choosing Rights: Nissan in Canton, Mississippi, and Workers' Freedom of Association under International Human Rights Standards*. 2013. http://dobetternissan.org/wp-content/uploads/2013/10/Compa-SUMMARY_ENGLISH.pdf.
- Jürgens, Ulrich. *Breaking from Taylorism: Changing Forms of Work in the Automobile Industry*. Cambridge: Cambridge University Press, 1993.
- K'Meyer, Tracy Elaine, and Joy L. Hart. *I Saw It Coming: Worker Narratives of Plant Closings and Job Loss*. New York: Palgrave Macmillan, 2009.

- Kalleberg, Arne L. Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s. New York: Russell Sage Foundation, 2011.
- Katz, Harry C. "Afterword: Whither the American Labor Movement?". In *Rekindling the Movement: Labor's Quest for Relevance in the Twenty-First Century*, edited by Lowell Turner, Harry Charles Katz and Richard W. Hurd. 339-49. Ithaca: ILR Press, 2001.
- ——. Shifting Gears: Changing Labor Relations in the U.S. Automobile Industry. Cambridge: MIT Press, 1985.
- Katz, Harry C., and Owen Darbishire. *Converging Divergences: Worldwide Changes in Employment Systems*. Ithaca: ILR Press, 2000.
- Kawamura, Tetsuji, ed. *Hybrid Factories in the United States: The Japanese-Style Management and Production Systems under the Global Economy*. Oxford: Oxford University Press, 2011.
- Kay, Tamara. *NAFTA and the Politics of Labor Transnationalism*. Cambridge: Cambridge University Press, 2010.
- Klein, Jennifer. For All These Rights: Business, Labor, and the Shaping of America's Public-Private Welfare State. Princeton University Press, 2003.
- Kraus, Neil. Race, Neighborhoods, and Community Power: Buffalo Politics, 1934-1997. Albany: SUNY Press, 2000.
- Laurell, A. C. "Three Decades of Neoliberalism in Mexico: The Destruction of Society." *International Journal of Health Services* 45, no. 2 (Apr 2015): 246-64.
- Lee, Ching Kwan. "The Power of Instability: Unraveling the Microfoundations of Bargained Authoritarianism in China." *American Journal of Sociology* 118, no. 6 (2013): 1476-508.

- Linhart, Robert. The Assembly Line. Amherst: University of Massachusetts Press, 1981.
- Linkon, Sherry Lee, and John Russo. *Steeltown U.S.A: Work and Memory in Youngstown*. Lawrance: University of Kansas Press, 2002.
- Locke, Richard M, Thomas A. Kochan, and Michael J. Piore. *Employment Relations in a Changing World Economy*. Cambridge: MIT Press, 1995.
- Longworth, Richard C. Caught in the Middle: America's Heartland in the Age of Globalism. New York: Macmillan, 2008.
- Lopez, Steven Henry. Reorganizing the Rust Belt: An inside Study of the American Labor Movement. Berkeley: The University of California Press, 2004.
- Lowenstein, Roger. While America Aged: How Pension Debts Ruined General Motors, Stopped the Nyc Subways, Bankrupted San Diego, and Loom as the Next Financial Crisis. New York: Penguin, 2008.
- Marchione, Sergio. Confessions of a Capital Junkie: An Insider Perspective on the Cure for the Industry's Value-Destroying Addiction to Capital. 2015. http://www.autonews.com/Assets/pdf/presentations/SM_Fire_investor_presentation.pdf.
- Martin, James, and Thomas D Heetderks. *Two-Tier Compensation Structures: Their Impact on Unions, Employers, and Employees*. Kalamazoo: W.E. Upjohn Institute for Employment Research, 1990.
- McAlinden, Sean P. *The Meaning of the 2003 UAW-Automotive Pattern Agreement*. Ann Arbor: Center for Automotive Research, 2004. http://www.cargroup.org/?module=Publications&event=View&pubID=49.
- McGahey, Richard, and Jennifer S. Vey. *Retooling for Growth: Building a 21st Century Economy in America's Older Industrial Areas*. Washington, D.C.: Brookings Institution Press, 2008.
- Milkman, Ruth. *Farewell to the Factory: Auto Workers in the Late Twentieth Century*. Berkeley: University of California Press, 1997.

- ——. *L.A. Story: Immigrant Workers and the Future of the U.S. Labor Movement.* New York: Russell Sage Foundation, 2006.
- Milkman, Ruth, Joshua Bloom, and Victor Narro. Working for Justice: The L.A. Model of Organizing and Advocacy. Ithaca: ILR Press, 2010.
- Milkman, Ruth, and Ed Ott. New Labor in New York: Precarious Workers and the Future of the Labor Movement. Ithaca: ILR Press, 2014.
- Mirowski, Philip. Never Let a Serious Crisis Go to Waste: How Neoliberalism Survived the Financial Meltdown. London: Verso, 2012.
- Moore, Michael. "Roger & Me." 1989.
- Munnell, Alicia H., and Annika Sunden. *Coming up Short: The Challenge of 401(K) Plans*. Washington, D.C.: Brookings Institution Press, 2004.
- Newman, Katherine S. *Chutes and Ladders: Navigating the Low-Wage Labor Market*. New York: Russell Sage Foundation, 2006.
- ———. Laid Off, Laid Low: Political and Economic Consequences of Employment Insecurity. New York: Columbia University Press, 2008.
- Noble, David. Forces of Production: A Social History of Industrial Automation. New York: Alfred A. Knopf, 1984.
- Ono, Y., and D. Sullivan. "Manufacturing Plants' Use of Temporary Workers: An Analysis Using Census Microdata." *Industrial Relations: A Journal of Economy and Society*, no. 52 (2013): 419–43.
- Osborne, Peter. The Politics of Time: Modernity and Avant-Garde. London: Verso, 1995.
- Pedersen, Laura. Buffalo Gal: A Memoir. Golden: Fulcrum Publishing, 2008.
- Piore, Michael J., and Charles F. Sabel. *The Second Industrial Divide: Possibilities for Prosperity*. New York: Basic Books, 1984.

- Rattner, Steven. Overhaul: An Insider's Account of the Obama Administration's Emergency Rescue of the Auto Industry. Boston: Houghton Mifflin Harcourt, 2010.
- Robinson, David. "Manufacturing Remains Surprisingly Muscular." *The Buffalo News*, September 21 2013.
- Rutherford, T. D., and M. S. Gertlert. "Labour in 'Lean' Times: Geography, Scale and the National Trajectories of Workplace Change." *Transactions of the Institute of British Geographers* 27, no. 2 (2002): 195-212.
- Rutherford, T. D., and J. Holmes. "Manufacturing Resiliency: Economic Restructuring and Automotive Manufacturing in the Great Lakes Region." *Cambridge Journal of Regions Economy and Society* 7, no. 3 (Nov 2014): 359-78.
- ——. "'We Simply Have to Do That Stuff for Our Survival': Labour, Firm Innovation and Cluster Governance in the Canadian Automotive Parts Industry." *Antipode* 39, no. 1 (Jan 2007): 194-221.
- Safford, Sean. Why the Garden Club Couldn't Save Youngstown: The Transformation of the Rust Belt. Cambridge: Harvard University Press, 2009.
- Saint-Paul, Gilles. *Innovation and Inequality: How Does Technical Progress Affect Workers?* Princeton: Princeton University Press, 2008.
- Sallaz, J. J. "Manufacturing Concessions: Attritionary Outsourcing at General Motor's Lordstown, USA Assembly Plant." *Work Employment and Society* 18, no. 4 (Dec 2004): 687-708.
- Sennett, Richard. The Craftsman. New Haven: Yale University Press, 2008.
- Shotwell, Gregg. Autoworkers under the Gun: A Shop-Floor View of the End of the American Dream. Chicago: Haymarket Books, 2011.
- Siemiatycki, E. "Forced to Concede: Permanent Restructuring and Labour's Place in the North American Auto Industry." *Antipode* 44, no. 2 (Mar 2012): 453-73.
- Sites, William. "Primitive Globalization? State and Locale in Neoliberal Global Engagement." *Sociological Theory* 18, no. 1 (2000): 121-44.

- Standing, Guy. Work after Globalization: Building Occupational Citizenship. Northampton: Edward Elgar, 2009.
- Sullivan, Teresa A., Elizabeth Warren, and Jay Lawrence Westbrook. *The Fragile Middle Class: Americans in Debt.* New Haven: Yale University Press, 2000.
- Taylor, Alex. Sixty to Zero: An inside Look at the Collapse of General Motors--and the Detroit Auto Industry. New Haven: Yale University Press, 2010.
- Thompson, Paul, and Chris Smith, eds. Working Life: Renewing Labour Process Analysis. London: Palgrave Macmillan, 2010.
- Tsing, Anna. "The Global Situation." Cultural Anthropology 15, no. 3 (2000): 327-60.
- Turner, Lowell, and Daniel B. Cornfield, eds. *Labor in the New Urban Battlegrounds: Local Solidarity in a Global Economy*. Ithaca: ILR Press, 2007.
- Venville, Malcolm. "Henry's Crime: A Movie." 2010.
- Vlasic, Bill. Once Upon a Car: The Fall and Resurrection of America's Big Three Auto Makers-Gm, Ford, and Chrysler. New York: William Morrow, 2011.
- Voss, Kim, and Rick Fantasia. *Hard Work*. Berkeley: University of California Press, 2004.
- Warren, Elizabeth. Chapter 11: Reorganizing American Business. New York: Wolters Kluwer, 2008.
- Weaver, Andrew, and Paul Osterman. "Skills and Skill Gaps in Manufacturing." In *Production in the Innovation Economy*, edited by Richard Locke and Rachel Wellhausen. Cambridge: MIT Press, 2014.
- Weeks, Kathi. *The Problem with Work: Feminism, Marxism, Antiwork Politics, and Postwork Imaginaries*. Durham: Duke University Press, 2011.
- Weis, Lois. Class Reunion: The Remaking of the American White Working Class. London: Routledge, 2004.

- Welch, David. "Go Bankrupt, Then Go Overseas: For Delphi, Chapter 11 Is a Globalization Gambit. If It Works, Rivals May Copy It." *Business Week*, April 24 2006, 52-57.
- Western New York Regional Economic Development Council. *The Buffalo Billion: Investment Development Plan*. Buffalo, 2013.

 http://uploads.oneregionforward.org/content/uploads/2013/06/Buffalo-Billion-Investment-Development-Plan.pdf.
- Wilkinson, Barry. The Shopfloor Politics of New Technology. London: Heinemann, 1983.
- Wilmarth, A. E. "Turning a Blind Eye: Why Washington Keeps Giving in to Wall Street." *University of Cincinnati Law Review* 81, no. 4 (2013): 1283-446.
- Womack, James P., Daniel T. Jones, and Daniel Ross. *The Machine That Changed the World*. New York: Free Press, 1990.