Labor on Display: Ford Factory Tours and the Romance of Globalized Deindustrialization

by

Wendy Lynnette Michael

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy (American Culture) in the University of Michigan 2014

Doctoral Committee:

Associate Professor Kristin Ann Hass, Chair Professor Howard Brick Professor Bruce A. Pietrykowski Professor Penny M. Von Eschen

Preface

In 1989, I began working on the assembly line at a transplant manufacturing facility owned by Mazda. At first it was exciting as I finally had a "real" job at the age of 30, even though I was hired in as a temporary worker, the promise of a permanent position made it seem solid. But I had never worked in a factory before and had no clue how demanding the job was. The first night – afternoon shift ran from 7 pm until 3:30 a.m. when the line wasn't running overtime – was such an eye-opener. I stepped onto a moving platform and rode down the line with the car I was working on and stepped off again after spending my time bent over, attaching straps into the trunks of Ford Probes and Mazda 6s, and then run - and I do mean run - back to the parts rack to grab more parts and step up to repeat the process on the next car. 2 It was hot, sweaty, and frustrating because it was so difficult to keep up with the pace of the line. The other new hire, a man about my age, left at lunch and never returned (another eyeopener!). As I battled to complete each car, electric wagons with visitors would ride down the aisle and observe me and my coworkers as we labored on the line. The line workers would yell insults at the visitors, an indication of how much they disliked being watched while performing their everyday work activities.

¹ What I mean by "a real job" is one with wages high enough for my family of four to no longer have to struggle to pay our rent but we would also have a small amount of disposable income.

² I don't remember how much time I had per car, but what I do remember is that we worked 10 hours that first night and made just over 600 vehicles per shift.

By 2004, I had left that job and had just begun my first semester of graduate school. Working at an academic conference, I was responsible for taking a group of conference attendees to the newly opened Ford Rouge Factory Tour. Imagine my shock and outrage at the permanent tour set-up where museum patrons could, at their leisure, gawk from a raised walkway at the workers below. I knew from my experience working on the line that those people had to be uncomfortable being on display. I also knew from my experience that they likely believed they had no choice but to comply with this performance as the threat of losing their reasonably compensated factory jobs to other states or other countries had become a daily reality of their working lives.

What probably bothered me most about the 2004 tour were comments from visitors up on the catwalk. Many noted that the line did not look like it was moving very fast and workers did not appear to be rushed or struggling to perform their respective operations. To me, these comments were all part of the rhetoric of what I saw as a war against unionized automotive workers. These experiences lead me to an intensive examination of factory tours and their meanings to corporations, the American public, and American labor.

Table of Contents

| Preface | ii |
|---|-----|
| List of Figures | vii |
| Abstract | ix |
| Chapter 1 Henry Ford's Great American Production | 1 |
| Neoliberalism, Cultural Production and the Marginalization of Class | 6 |
| Deindustrialization and the Need for Public Relations | 15 |
| Producing Local, National, and Global | 22 |
| Naturalizing the Nation | 26 |
| Bodies of Labor | 32 |
| Conclusion | 38 |
| Chapter 2 Ford at the Fair: The Problem of Selling Progress in 1934 | 41 |
| The Detroit Industry Murals | 51 |
| World's Fairs and the Century of Progress Exposition | 68 |
| The Beautiful Factory: Ford at the Fair | 77 |
| Public Responses | 86 |
| Conclusion | 92 |

| Chapter 3 Gateway to the Rouge and the Logics of | f Deindustrialization and Globalization 94 |
|--|--|
| Legislating Labor Rights | 94 |
| Ford's Doctrine of Mass Production | 99 |
| Gateway to the Rouge | 109 |
| Within an Industrial City | 122 |
| Return to the Rotunda | 128 |
| Back to Work! Modern Times and the Cl | nallenge to Ford's Doctrine of Mass |
| Production | 131 |
| Unionization, Ford Motor Company, and | d the Unseating of Labor139 |
| Conclusion | 144 |
| Chapter 4 Ford Rouge Factory Tour: Obscuring De | industrialization and Globalization 146 |
| Sentimental Matter | 147 |
| Job Loss and Public Anxiety | 151 |
| Industrial Mobility | 153 |
| Tour Narratives Reimagine the Rouge | 155 |
| The Legacy Theater and Ford Motor Cor | npany's Story of the Rouge158 |
| The Art of Manufacturing: Disney Style | 161 |
| Constructing Labor on the Walking Tour | 165 |
| The Tour Frames Labor | 172 |

| | The Virtual Display: Touring the Rouge from the Internet | . 176 |
|-----------|--|-------|
| | General Motors Bowling Green Assembly Plant Tour | . 184 |
| | Local Toyota and Valued Labor | . 188 |
| | Conclusion | . 193 |
| Bibliogra | aphy | . 195 |

List of Figures

| Figure 1: Charles Sheeler; Criss-Crossed Conveyors. Ford Rouge Plant 1927 | 56 |
|--|-----|
| Figure 2: The Detroit Industry Murals - North Wall | 59 |
| Figure 3: The Detroit Industry Murals - South Wall | 62 |
| Figure 4: Quadricycle in the Henry Ford Room at Chicago | 80 |
| Figure 5: Presenter in the Ford Rotunda | 82 |
| Figure 6: Court of the World | 83 |
| Figure 7: Interior of Ford Exhibit at the Century of Progress Exposition; 1934 | 85 |
| Figure 8: Ladle Hooks in Open Hearth Building | 107 |
| Figure 9: Stamping Press | 107 |
| Figure 10: Rotunda in Dearborn, Michigan | 109 |
| Figure 11: Dioramas inside Rotunda | 111 |
| Figure 12: Globe of the World with Henry and Edsel Ford | 117 |
| Figure 13: Rotunda interior showing mural panels. | 119 |
| Figure 14: Edsel Ford, Charles Chaplin, and Henry Ford, 1923 | 133 |
| Figure 15: The Tramp in the Machine | 137 |
| Figure 16: Portraits hanging above the Legacy Theater | 158 |
| Figure 17: Last stop before the Walking Tour of the final assembly line | 165 |
| Figure 18: Pre 2004 tour visitors experience an up-close and personal Rouge | 166 |
| Figure 19: Image from Rouge Tour Website | 177 |

| Figure 20: Image from Corvette Factory Tour website | . 185 |
|---|-------|
| Figure 21: Toyota Visitor Center | . 189 |

Abstract

This dissertation examines twentieth and early twenty-first century American industry's use of factory tours and exhibitions to construct the U.S. as a postindustrial nation, to frame labor as resistant to forward progress, to celebrate deindustrialization as the ultimate form of progress, to portray labor as always robust and immune to the consequences of deindustrialization at the very moment that it restructured production processes in the United States and the world at a very high cost to American labor.

Drawing on scholarship in American studies, Museum studies and Labor studies, this dissertation analyzes the representation of labor by American corporations, such as Ford Motor Company, at World's Fair exhibitions and on factory tours. Scholarship on World's Fairs, Museum displays, and factory tours interrogate the representation of race and gender in public exhibitions, however there is little work scrutinizing labor in these settings. An examination of the Ford Rotunda exhibit at the widely attended and wildly successful 1934 Chicago World Fair introduces the first case, where the deeply loved exhibit made a dramatic argument for technology as the solution to national and personal economic crises by representing industrial technology as glorious and labor as secondary. Ford worked to produce meanings to fashion a particular vision of progress that obscured labor and the specific tensions in employer/labor relationships.

Inspired by the success of the fair, Ford Motor Company decided to bring the Rotunda home from the fair in 1936 and dramatically redesign and expand its exhibits with beautiful visions of global Ford, while adding tours of the River Rouge Industrial Complex, which may well have been a useful way to deflect the public eye from the company's seeming disregard for the thousands of workers it had thrown into poverty through Depression layoffs. The Rotunda and its tour emphasized traditional values and a doctrine of mass production as a beginning of the articulation of the logics that support deindustrialization and globalization.

In 2004, Ford Motor Company reinvented the Rouge factory tour in response to a dramatic acceleration of the movement of manufacturing jobs out of the United States with another polished celebration of technology that works to obscure deindustrialization, globalization and the disappearance of the laboring body it puts on display in sharp contrast to the rhetoric of globalization previous exhibits loudly declared. I use Ford tours and exhibits to examine historical moments in time when the industrial economy and the cultural experiences of working people collide, driven by the same conviction that culture is a vital part of the success of neoliberalism.

Chapter 1

Henry Ford's Great American Production

Witness the celebration of the innovation of manufacturing in America - where history and the future merge. Experience this spectacular new attraction at The Henry Ford.

The Henry Ford Website 2004

In 2004, in a moment of radical change in the industrial economy in the U.S. and in the lives of working people, Ford Motor Company opened a shiny, animated factory tour that is part museum exhibit, part amusement park ride, and part performance art. In 1929, another challenging year for the industrial economy in the U.S., Henry Ford himself oversaw the dedication of the Edison Institute, which would eventually become the Henry Ford Museum and Greenfield Village, a museum dedicated to preserving the memory of the agrarian past which was transformed by the dramatic changes wrought by the Ford Motor Company and the cars it produced. Today, in Dearborn Michigan, the Ford Rouge Factory Tour begins at the gates of the Henry Ford museum - linking an idea about the future industrialization required to an idea about the future deindustrialization requires. The tour promises to take visitors to a place "where history and the future merge."

Tickets to the tour must be purchased inside the museum – the ticket desk stands in a large airy hall with huge columns, kind of like what Roman ruins must have felt like before they became ruins, likely inspired in 1929 by a colonial fashion in architecture that aspired to emulate both early American and classical empires. After purchasing tickets, visitors wait outside for a bus to the Ford Rouge Complex. The bus stop faces the exterior of the museum building, a loving replica of Philadelphia's Independence Hall. For Ford, there was a distinct connection between the ideals embodied in that iconic piece of eighteenth century architecture and the project of his museum. He was reinscribing old values in a new context, but this link is likely lost on the older couples and families with little kids who take the Rouge tour. When the bus pulls up – it is covered with a semi-transparent film with "Ford Rouge Factory Tour" in large letters on the side, along with images of industrial robots and workers who are dressed in 1930s style work attire, signaling a distinct change of mood that will accompany a coming change of venue. The covered windows on the bus work nicely as advertisements, but also make viewing out of the bus windows difficult and obscure the world (which includes shuttered industrial sites) to be seen between Ford Motor Company's two visions.

Inside the bus, visitors are encouraged to watch one of the three or four televisions during the short journey they have embarked on. Once everyone boards, the doors close and the bus is on its way. The monitors turn on and a video begins. It narrates the journey, pointing out places here and there along the way that had some role to play in the making of Detroit as the Motor City. The TVs tell visitors, "Driving though the one and a quarter mile wide and three quarters of a mile long Factory complex you see a maze of buildings, large and small, connected

by roads and a waterway that feeds them with parts and raw materials."³ When the bus arrives at the Rouge tour hospitality center visitors are emptied into a cramped entryway flanked by a gift shop and the colonial architecture of the museum is left behind. Visitors crowd together in front of double doors with the sign "Station 1" in bright blue neon. Here they wait below a Diego Rivera-style mural and a gigantic likeness of Henry Ford. A video begins on two monitors above. This video is an introduction to yet another video that marks the beginning of the factory tour.

Inside the Legacy Theater are three large movie screens broadcasting a montage of "rare" black and white images and film clips with a narrative of the story of Henry Ford, his automobiles, the Ford Motor Company and the Ford Rouge Complex. In the promise of the tour website, this film invites you to "witness the celebration of the innovation of manufacturing in America." It also "gears" visitors up for the rest of the tour and leaves them with "a clearer understanding of the profound impact the Rouge has had – and continues to have – on the art of manufacturing." Thus prepared, visitors are directed to Station 2, yet another theater, with another film showing.

The Art of Manufacturing Theater has "360 degree" screens surrounding swiveling chairs. The film demonstrates the process of creating a truck from raw materials to the finished product. Special effects include gusts of heat puffed against the audience when a blast furnace

³ McLaughlin, Harold J. "Ford Rouge Factory Tour F-150 Truck Final Assembly Plant July 12, 2004." *Jack's – World*. http://jacks-world.blogspot.com/2006/04/ford-rouge-factory-tour-f-150-truck.html

⁴ "The Great American Production." *The Henry Ford*. http://www.thehenryford.org/rouge/tourfront.htm. Accessed 3/10/2005.

⁵ Hass, Kristine. "Sharing the Legacy — the Ford Rouge Factory Tour, Station One." *The Henry Ford*. http://blog.thehenryford.org/2011/12/sharing-the-legacy-the-ford-rouge-factory-tour-station-one/

pours melted steel from a red-hot cauldron. A mist sprays the audience when parts are shown being cooled. The theater shakes with loud thunderous claps when giant stamping machines press out door, fenders, and other parts. These special effects are intended to make the movie come alive and make the audience feel like a part of the production. After this film, visitors finally get closer to the factory as they move on to the next station.

Entering Station 3, the Observation Deck, tour visitors can see out across the Rouge complex at multiple buildings, both old and new. This station is the most museum-like so far.

Lining the walls are museum style glass cases displaying information about the Rouge complex.

Once visitors have examined the cases and taken in the view, they take an elevator down to the mezzanine; stop to watch a safety video; then cross a walkway over to Station 4, The Assembly Plant Walking Tour. At last visitors have the opportunity to see live assembly of Ford F 150 trucks.

The assembly line is down below the wide raised concrete catwalk that encircles it. The many skylights make it seem light and cheery, along with the brightly painted steel beams above and machinery beneath you. It is not nearly as loud as visitors might have expected, although it certainly is not quiet. Periodically along the catwalk are interactive kiosks giving a feel for the tools and machinery operating below. It is a bit uncomfortable when workers look up and see the visitors peering down at them while they work, but this is what they came here to see, so visitors continue watching. Also stationed around the catwalk are tour guides, some of whom are retired Rouge workers, there to answer any questions.

Finally, visitors leave the assembly line area to get a close look at "five historic vehicles made at the Rouge including the 20,000,000th Ford, hop in a new F-150," and visit the "Factory Store." In the gift shop – standing before Ford key chains, t-shirts, and baseball caps made in China, a couple of big questions might come to mind. Why did Ford Motor Company decide to create this tour now? What does this tour say (or not) about manufacturing and labor in an era of deindustrialization and globalization? What argument about industry now does the line make? In order to answer these questions, this dissertation begins with a short exploration of some key issues for twenty first century American manufacturing. How can we understand production now? Deindustrialization? Globalization? And labor? And how can we understand any of this in the context of liberal and neoliberal cultural and economic systems?

This tour matters because American corporations use rhetoric embracing change, where that change equals progress, although they continue to use the same old industrial practices, visibly moved to new places. This discussion of the Ford Rouge Factory Tour is in fact addressing the larger matter of how institutions, such as The Henry Ford and Ford Motor Company, influence public perceptions of their own place in the nation and in the world, through the exhibition of labor and technology. 7 I argue that twentieth and early twenty-first century American industry used factory tours and exhibitions to construct the U.S. as a postindustrial nation, to frame labor as resistant to forward progress, to celebrate deindustrialization as the ultimate form of progress, to frame labor as always robust and immune to the consequences of

⁶ "The Great American Production: The Tour." *The Henry Ford*. http://www.thehenryford.org/rouge/thetour.aspx ⁷ The Henry Ford, a nonprofit institution, is a combined collection of exhibits offered for public viewing, including Greenfield Village and The Henry Ford Museum. The Henry Ford Visitor Guide. 2005.

deindustrialization at the very moment that it restructured production processes in the United States and the world at a very high cost to American labor.

Neoliberalism, Cultural Production and the Marginalization of Class

We are in a moment of renewed scholarly interest in business and industry, rather than groups exploited by capitalism. A recent New York Times article declares,

After decades of 'history from below,' focusing on women, minorities and other marginalized people seizing their destiny, a new generation of scholars is increasingly turning to what, strangely, risked becoming the most marginalized group of all: the bosses bankers and brokers who run the economy.⁸

Although the need to examine the actions and histories of the "bosses, bankers and brokers," seems quite clear, the conclusion that scholarship risked making these groups "the most marginalized" of all seems like something of a stretch. The risk was more one of keeping these groups and the power they wield invisible rather than one of marginalization. What this new trend in scholarship does very well is to expose the practices of these crucial groups. Some excellent examples of this new work are Freaks of Fortune: The Emerging World of Capitalism and Risk in America by Jonathan Levy; To Serve God and Wal-Mart: The Making of Christian Free Enterprise by Bethany Moreton; and Debtor Nation: The History of America in Red Ink by Louis Hyman. These important works tend to emphasize history from the perspective of those running industries while continuing to keep an eye on truly marginalized groups. The questions raised for me by the Rouge tour are important for this scholarly conversation because

⁸ Schuessler, Jennifer. "In History Departments, It's Up With Capitalism." *The New York Times,* April 6, 2013. http://www.nytimes.com/2013/04/07/education/in-history-departments-its-up-with-capitalism.html?pagewanted=all& r=1&. Accessed May 9, 2013.

answering them requires keeping the institutions and their decision-makers up front as they navigate at the center of thinking about the industrial economy in the United States, without losing sight of the workers, particularly workers who were unable to "seize their own destiny."

Furthermore, this discussion of Ford factory tours (past and present) is in fact addressing the larger matter of the long historical development of liberalism in the United States. Social and cultural analyst Nikhil Pal Singh observes that liberalism contains an "insistent, quasi-naturalistic link between human and market 'freedom'." His insight on the "quasi-naturalistic link" is a point that needs emphasizing since even a little naturalization tends to obscure the constructed nature of liberalism. Additional problems associated with liberalism, as a cultural and economic system, according to Singh, are "political domination, exclusion, and inequality," problems especially deep because as Singh understand them, they are always linked to racial practices. It would add the problem of class divides to Singh's formation and will argue that the Ford Rouge Factory Tour looks to naturalize, and thus keep invisible, class divisions which hide many exclusions and inequalities in the U.S.

Singh also points out that liberalism, always in motion, is undergoing yet another "renovation." Political historian Lisa Duggan analyzes the new iteration, called neoliberalism. Neoliberalism unfolded over the course of decades and, she argues, is "a mode of polemic" specifically "aimed at dismantling the limited U.S. welfare state in order to enhance corporate

⁹ Ibid.

¹⁰ Singh, Nikhil Pal. "Liberalism." *Keywords for American Cultural Studies*. Edited by Bruce Burgett and Glenn Hendle. 139-145. New York and London: New York University, 2007.

¹¹ Ibid.

¹² Ibid.

profit rates."¹³ The New Deal consensus between business, government, and labor unions paved the way for visions of "an expansive, more equitable redistribution of the world's resources."¹⁴ Business, uneasy with the consensus, contested it from the start and worked over time toward dismantling it, shaping a different conception of national and world order than the one championed by the New Deal.¹⁵ Thus the conflict appeared to be over the shape of the nation – a cultural contest over meaning, not over resources. That struggle became manifest in concrete cultural productions, such as factory tours, where national histories and traditions play a role. But, as American Studies scholar George Lipsitz reminds us, "Struggles over meaning are inevitably struggles over resources."¹⁶ In sum, neoliberalism hides its actual gist, the appropriation of resources, behind cultural productions of meaning.

According to Duggan, neoliberalism intensified in the early 1970s as the response of U.S. corporations to "global competition and falling profit rates." ¹⁷ In order to raise profit rates, money needed to be diverted from social uses. She continues,

And such diversions required a supporting political culture, compliant constituencies, and amenable social relations. Thus, probusiness activism in the 1970s was built on, and further developed, a wide-ranging political and cultural project – the reconstruction of the everyday life of capitalism, in ways supportive of upward redistribution of a range of resources, and tolerant of widening inequalities of many kinds. ¹⁸

¹³ Duggan, Lisa. The Twilight of Equality? Neoliberalism, Cultural Politics, and the Attack on Democracy. Boston:

Beacon Press, 2003. x.

 ¹⁴ Ibid.
 ¹⁵ Cohen, Lizabeth. *Making a New Deal: Industrial Workers in Chicago, 1919-1939*. 2nd ed. New York: Cambridge University Press, 2008. The Taft-Hartley Act, discussed in Chapter 3, is one example of the dismantling of the New

Deal consensus supported by business.

16 Lipsitz, George. *American Studies in a Moment of Danger*. Minneapolis and London: University of Minnesota Press, 2001. 100.

Duggan, Lisa. *The Twilight of Equality? Neoliberalism, Cultural Politics, and the Attack on Democracy*. Boston: Beacon Press, 2003. x.

¹⁸ Ibid. xi.

Cultural productions, especially those created by business, would assist in creating "compliant constituencies and amenable social relations." Alongside cultural productions would be a detachment of the economic from the cultural through rhetoric defining the economic as neutral through terms of technical expertise. ¹⁹ However, neither technology nor expertise is objective or, in other words, value neutral. Both are products of human decision making, therefore the contributions of experts as advanced by neoliberalism have human choices deeply embedded within them, but are invisible to the uncritical observer. ²⁰ Duggan points out that the strategic use of language obscures neoliberal politics' reliance on identity and cultural politics. ²¹ In the end, she defines neoliberalism as a "vision of competition, inequality, market discipline, public austerity, and law and order," that uses rhetoric and cultural productions to create a submissive public, as resources are distributed upwards. ²² I strongly agree and use Ford tours and exhibits to examine historical moments in time when the industrial economy and the cultural experiences of working people collide, driven by the same conviction that culture is a vital part of the success of neoliberalism.

In the last decades of the twentieth century and into the twenty-first, global competition diminished the U.S. position as the world's largest manufacturing nation, vanquishing massive numbers of blue-collar jobs with middle-class wages to the dustbin of

¹⁹ Ibid. xiv.

²⁰ On expertise and value-neutrality see Porter, Theodore M. *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton, New Jersey: Princeton University Press. 1995. Proctor, Robert N. *Value-Free Science? Purity and Power in Modern Knowledge*. Cambridge, MA: Harvard University Press, 1991. On human choice in the innovation and implementation of technologies, see Noble, David. F. *Forces of Production: A Social History of Industrial Automation*. New York and Oxford: Oxford University Press, 1986.

²¹ Duggan, Lisa. *The Twilight of Equality? Neoliberalism, Cultural Politics, and the Attack on Democracy*. Boston: Beacon Press, 2003. xii.

²² Ibid. x.

history thus creating national anxiety over the state of the American middle-class.²³ Ford Motor Company has responded, in part, with a beautiful shiny tour that offers a different vision of twenty first century labor and production. The Ford Rouge Factory Tour makes an argument about past transformation in the industry that purports to celebrate the workers.

The Ford Rouge Factory Tour demonstrates this argument of a transformation of American manufacturing with a rhetoric suggesting that the implementation of new technology benefits workers at a time of dramatic change. But in reality, the industry resists making significant changes, either technologically or ideologically, at U.S. production facilities that might celebrate workers while they move production around the globe and continue using tried and true production practices in different countries with new workers. The Rouge tour establishes Ford's vision of the transformation of American manufacturing in which Ford Motor Company had always been and would continue to be the site, as they call it, of "Great American Production."²⁴

The idea of "production" is quite slippery here. In this context it has multiple possible meanings. Production can be about manufacturing a product – material production; for example, the automobile (or to be exact, the Ford F 150 truck). Or, production can be about organizing and presenting entertainment, including displays and exhibitions. Alongside these

,

²³ In terms of Gross Domestic Product, manufacturing's share has continued to fall since the 1950s. See the Bureau of Economic Analysis charts here:

 $http://www.nytimes.com/imagepages/2011/09/11/business/20110911_manufacture_graphic.html?scp=1\&sq=manufacturings%20share%20of%20gdp\&st=cse$

²⁴ "Ford Rouge Factory Tour." *The Henry Ford*. http://www.thehenryford.org/rouge/index.aspx. Accessed 1/14/2005.

first two meanings of production exists a third meaning: that of production as an analytical concept.

Nineteenth century historian philosopher Karl Marx used the concept of production to examine the growing industrialization and political-economics of his times, arguing that "a distinction should always be made between the material transformation of the economic conditions of production, which can be determined with the precision of natural science, and the legal, political, religious, aesthetic or philosophic – in short, ideological forms." Here he describes the social relations of material production, exposing how production is not simply a material manufacturing process existing separately from the social world. Writing on Marx, cultural critic Terry Eagleton explains the social nature of production in this way:

Production is carried on within specific forms of life, and is thus suffused with social meaning. Because labour always signifies, humans being significant (literally, sign-making) animals, it can never be simply a technical or material affair. ²⁶

Thus, production, accomplished through labor, always represents a social act; consequently, it cannot be separated from the social. In short, culture is produced; therefore production can be used to analyze it. In this dissertation, I use all three types of production to examine the Ford Rouge Factory Tour, along with past tours, former exhibits, and competitor's tours.

The Ford Rouge tour incorporates the first two meanings of production. It exhibits material production as authentic automotive manufacturing while offering educational

²⁵ Marx, Karl. "A Contribution to the Critique of Political Economy." *The Portable Karl Marx*. Translated by Eugene Kamenka. New York: Penguin Books. 1983. 160

²⁶ Eagleton, Terry. Why Marx was Right. New Haven and London: Yale University Press, 2011. 113.

entertainment for the public. Significantly, these two forms of production are part of the cultural meaning-making that occurs on the tour, which makes an argument about transformation in the past, but in reality the industry is resisting change. The tour is masking the truth about deindustrialization and globalization in U.S. manufacturing. Additionally, in contrast to Marx's project, the Tour works, not to expose the social relations of production, but rather to obscure them.

From the 1970s to the 1980s, historical scholarship expanded its view of social history by including a greater emphasis on culture. Culture, as historian Michael Denning carefully defines it is, "...a name for that habitus that forms, subjects, disciplines, entertains, and qualifies labor power." In other words, culture is synonymous with labor because forming, disciplining, entertaining, and qualifying are all acts of labor. Thus, culture is the "product and result of labor." Yet culture conceals laboring. Denning deftly points out that as a culture, we do not want to look at work. That is, we tend to represent consumption and leisure rather than labor. Limited historical research exists on the representation of labor in exhibits, expositions, and museums, resulting in a paucity of work on cultural meaning-making through displays of labor, despite substantial past scholarly attention devoted to labor and production. A close reading of the Ford Rouge Factory Tour brings the critical concepts of labor and production back into the forefront of American cultural history.

This moment in historical scholarship included a move away from the social history focus on institutions to a more nuanced cultural history. This scholarship considered not only

²⁷Denning, Michael. *Culture in the Age of Three Worlds* London and New York: Verso, 2004. 96.

²⁸ Ibid. 92.

how institutions disciplined populations, but also the many ways representations and assumptions determine the identities of different groups of people.²⁹ This move in scholarship marginalized class, labor, and production as *the* critical analytical concepts, as Denning points out,

And it should be clear that this turn to culture was not a turn away from political economy or politics, but a dramatic reconceptualization of them. However, the cultural turn rarely reclaimed Marx's analysis of the labor process, and it was a turn away from the classic Marxist concern with work and production.³⁰

What Denning argues here is that there were so many new avenues to pursue that older ideas were left behind – not because they did not have merit, but because a new door had suddenly opened wide. Although the space in academic scholarship for labor and class as categories has diminished over the last several decades, these two vital categories still hold as much value in social and cultural analysis today as they did in the past. The inclusion of additional cultural categories enriches intellectual discourses on class.

Two critical categories of the shift toward culture in historical scholarship opened space for in scholarly analysis are gender and race. Notably, these differentiating concepts pointed to the danger of class as a universalizing category, that is, class as an analytical concept so broad that additional differences between people in the same group may be overlooked. The backlash to this discovery pushed labor and production, essential determinants of class, into the back seat of scholarly investigations. Yet, to closely scrutinize labor and production does not mean

²⁹ Cook, Jay. "The Kids Are All Right: On the 'Turning' of Cultural History." *American Historical Review*. 117. (2012): 746-771.

³⁰ Denning, Michael. *Culture in the Age of Three Worlds* London and New York: Verso, 2004. 90-91.

³¹ Eley, Geoff, and Keith Nield. *The Future of Class in History: What's Left of the Social?* Ann Arbor: The University of Michigan, 2007.

an exclusion of the particularizing categories of culture. Gender and race intertwine throughout class and therefore must necessarily be considered in scholarship on labor. In other words, gendered and raced individuals embody labor, so these categories are integral to examinations of labor, just as labor is fundamental to analysis of culture. However, there is also a danger in dividing class by race and gender as a fragmentation into disparate parts may obscure labor's common interests. What happens to labor without a unified front? In the case of U.S. manufacturing, labor solidarity works to resist corporation's powers to shift material production from place to place and pit labor against itself. In short, without a unified front by labor, corporations easily engage in the production of deindustrialization.

Even as cultural scholarship subsumed production, labor, and class, the concept of deindustrialization received a good deal of scholarly attention. Used to examine factory closings, along with communities and workers who lost jobs because of it, deindustrialization scholarship, as I will suggest, fails to adequately address how these changes impact American perceptions of industrial work, the people who continue to perform physical labor, the meanings constructed from them, and how labor continues to define U.S. national identity. At The Henry Ford, the inclusion of laboring people as a component of the museum exhibit

2.

Bluestone, Barry and Bennett Harrison. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. New York: Basic Books, 1982. Cowie, Jefferson and Joseph Heathcott, eds. *Beyond the Ruins: The Meanings of Deindustrialization*. Ithaca: ILR Press, 2003. High, Steven. *Industrial Sunset: The Making of North America's Rust Belt, 1969-1984*. Toronto: University of Toronto Press, 2003. High, Steven, and David W. Lewis. *Corporate Wasteland: The Landscape and Memory of Deindustrialization*. Ithaca and London: ILR Press, 2007. Sugrue, Thomas J. *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit*, Princeton Studies in American Politics. Princeton, N.J.: Princeton University Press, 1996. Zukin, Sharon. *Landscapes of Power: From Detroit to Disney World*. Berkeley: University of California Press, 1991.

³³ See Bluestone, Barry, and Bennett Harrison. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. New York: Basic Books, 1982. And Cowie, Jefferson, and Joseph Heathcott, eds. *Beyond the Ruins: The Meanings of Deindustrialization*. Ithaca: ILR Press, 2003.

provides an unusual opportunity to look at how one major corporate force in U.S. industry wants to tell the story of deindustrialization, globalization, and its impact on the nation.

Deindustrialization and the Need for Public Relations

"There is a widespread belief in Canada and the United States that plant closings are inevitable — a natural by-product of corporate capitalism" and that resisting them is "futile." "
What is missing in this "belief" is an awareness of the human decisions regarding the choices that lead to the shuttering of factories. Contrary to popular belief, deindustrialization is not endemic to the final thirty years of the twentieth century but has been part of wage labor since the start of the Industrial Revolution. Historian Jefferson Cowie argues: "The seeds of deindustrialization were in every instance built into the engines of industrial growth itself."
My examination of Ford exhibits in the 1930s will demonstrate that the initial stages of deindustrialization did indeed exist during the Great Depression. Contemporary factory tours demonstrate its continued presence, as my reading of the Bowling Green Assembly Plant Tour, the Toyota Motor Manufacturing, Kentucky, Inc. (TMMK), and the Ford Rouge Factory Tour establish. Clearly, to do this well, I need to critically interrogate deindustrialization as a concept.

I argue that deindustrialization is an uneven process including industrialization along with the movement of capital within and outside the nation, that is, movement regionally and globally. Such movement results in job attrition and loss, yet includes continuing labor in manufacturing. It is naturalized, which obscures the human element in the mobilization of

³⁴ High, Steven, and David W. Lewis. *Corporate Wasteland: The Landscape and Memory of Deindustrialization*. Ithaca and London: ILR Press, 2007. 7.

³⁵ Cowie, Jefferson, and Joseph Heathcott, eds. *Beyond the Ruins: The Meanings of Deindustrialization*. Ithaca: ILR Press, 2003. 15.

capital. Finally, its social components exist alongside economic ones. Together, these elements constitute deindustrialization in the U.S.

In the early 1980s, economists Barry Bluestone and Bennett Harrison produced some of the seminal thinking on deindustrialization. They defined it as "a widespread, systematic disinvestment in the nation's basic productive capacity." This definition falls short in acknowledging the pattern of moving manufacturing from region to region inside the U.S. When manufacturing facilities move from the North to the South, for example, investment remains within the nation even as it leaves particular communities. Therefore, Bluestone's and Harrison's definition does not include a regional element; it aims attention only at the global component of deindustrialization. Regional movement of manufacturing challenges their implication that deindustrialization is exclusively a disinvestment in the nation as a whole.

Disinvestment in U.S. productive manufacturing occurs as a result of capital mobility, which is the movement of capital by manufacturers away from a particular geographic location, such as closing a factory in Detroit to open a new one in Kentucky in order to produce the same product, usually with lower capital costs, such as reduced wages. Capital mobility also includes using production-produced capital for non-production investments in the financial industry and in foreign investment.³⁸ In other words, capital mobility is the capacity of corporations to move investment out of production in one place, whether a factory or a community, or away from

³⁶ Bluestone, Barry, and Bennett Harrison. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. New York: Basic Books, 1982. 6.

³⁷ Cowie, Jefferson. *Capital Moves: RCA's Seventy-Year Quest for Cheap Labor*. New York: Cornell University Press, 1999.

³⁸ See Bluestone, Barry, and Bennett Harrison. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. New York: Basic Books, 1982. 6. Cowie, Jefferson. *Capital Moves: RCA's Seventy-Year Quest for Cheap Labor*. New York: Cornell University Press, 1999. Cowie, Jefferson, and Joseph Heathcott, eds. *Beyond the Ruins: The Meanings of Deindustrialization*. Ithaca: ILR Press, 2003.

production altogether. When corporations move money out of production and into financial sectors, production facilities begin to age without maintenance and the lack of reinvestment results in deterioration of factories. ³⁹ Such weakened facilities become uncompetitive. Rather than reinvesting in the adulterated plants, corporations simply relocate to new facilities, usually in a different state or outside the nation altogether.

Historians Jefferson Cowie and Joseph Heathcott observe the social impacts of deindustrialization and argue that it is a process consisting of two phases; industrialization and deindustrialization.⁴⁰

Only a small part of these meanings [of deindustrialization] emerges from the loss of manufacturing employment. The broader meanings emerge from the de-linking of investment and place, the deinstitutionalization of labor relations machinery, de-urbanization (and new forms of urbanization), and perhaps even the loosening of the connection between identity and work. A still broader view suggests that deindustrialization and industrialization are merely two ongoing aspects of the history of capitalism that describe continual and complicated patterns of investment and disinvestment.⁴¹

Considering deindustrialization as a process sheds further light on the expanding and contracting nature of industry. As manufacturing moves from place to place, the abandonment produces decimated communities left behind through the removal of employment, while communities where corporations temporarily settle new production facilities begin reaping benefits lost by the former locations. Thus, there is an uneven pattern of growth and decline that repeatedly swells and falls with capital mobility, a pattern of deindustrialization and industrialization. Clearly, the process of deindustrialization is not simply about economics.

³⁹ Ibid.

⁴⁰ Cowie, Jefferson, and Joseph Heathcott, eds. *Beyond the Ruins: The Meanings of Deindustrialization*. Ithaca: ILR Press, 2003. 15.

⁴¹ Ibid.

Bluestone and Harrison define deindustrialization largely in terms of jobs lost due to capitalist desire for increased profits made concrete through capital mobility. However, defining deindustrialization mainly as an expression of jobs lost misses some critical features of the social costs of deindustrialization such as its impact on "cultural politics, labor organization, the political and social burdens that plague former industrial communities, the environmental legacy, and changes in social identity." ⁴² In other words, as deindustrialization occurs, the outcomes appear in social constructs. Therefore, the discourse of deindustrialization consists of both economic and social aspects, including the production of manufacturing labor as a disappearing class within the U.S., as exhibited on the Ford Rouge Factory Tour. In this dissertation, I focus on the produced social aspects of deindustrialization.

The core of Bluestone and Harrison's study throws a spotlight on industrial disinvestment resulting in "throwaway" workers and communities. What they mean by "throwaway" is that these workers become permanently unemployed or underemployed elsewhere – they are not "recycled" by employers into different positions. Like Bluestone and Harrison, historian Steven High argues the crux of deindustrialization is the experiences of the abandoned workers. He understands the empty and ruined factories as sites of memory, thus producing meaning in the abandoned factory structures themselves. He states, "These physical remains serve as reminders that workers who once stood at the centre

⁴² Cowie, Jefferson, and Joseph Heathcott, eds. *Beyond the Ruins: The Meanings of Deindustrialization*. Ithaca: ILR Press, 2003. 2.

⁴³ Bluestone, Barry, and Bennett Harrison. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. New York: Basic Books, 1982.

of local life are now relegated to the periphery."⁴⁴ To support his assertions, High illustrates the meaning-making of throwaway workers through oral histories and photography, where "The oral history interviews act as a crucial counterpoint to the nostalgia that the photographs may produce. By telling us how mills and factories came to be abandoned, these plant shutdown stories remind us that this was no natural disaster."⁴⁵ Human decisions produced the devastation.

Yet even as High works to define deindustrialization in terms of throwaway workers, he relates the story of a General Motors (GM) employee who continues to work as manufacturing labor:

A longtime employee of General Motors, Gabriel has experienced three separate plant closings in his lifetime. The closing of his "home plant," Fisher Guide in southwest Detroit, had the most crushing effect on Gabriel and his family. He was never the same again. Until his death in 2005, he counted himself one of the "I-75 Gypsies" working in GM's Pontiac plant. These are the folks who have closed out plants up and down Interstate 75. Not only were these plant-closing veterans alienated from the company, they felt let down by their union as well. In its broad outlines, then, Gabriel's plant shutdown story was typical: an eloquent denunciation of capitalist greed and union indifference. 46

This account demonstrates that workers continue to labor, but in a changed environment where they must become mobile in ways similar to capital and manufacturing. In communicating this story of deindustrialization, High tells the tale of a worker who is continually re-purposed, becoming a mobile laborer in a mobile industry.⁴⁷

46 11 1 446

⁴⁴ High, Steven, and David W. Lewis. *Corporate Wasteland: The Landscape and Memory of Deindustrialization*. Ithaca and London: ILR Press, 2007.

⁴⁵ Ibid. 13.

⁴⁷ I also found myself a mobile laborer as the auto companies moved workers from plant to plant, consuming their labor, rather than paying the costs of layoffs in unemployment wages. Ford Motor Company moved me from Auto

Similar to the itinerant workers in High's account, those viewed on the tour continue to labor in manufacturing, although in a more fixed way. Since they work at a plant used by Ford Motor Company to produce a sense of stability, these workers' jobs are less likely to fall prey to the mobile call of capital anytime soon - although it is always possible that the company will discard them in the future.

High's analysis of ruins, workers, and memory, develops a definition of deindustrialization as abandonment, barely leaving space for those workers still engaged in American manufacturing. This dissertation shows Ford Motor Company reviving a factory to make a particular argument about deindustrialization. Contrary to finding meaning only in ruins, the tour produces meanings that are powerful tools in the maintenance of the idea of a corporation as a happy source of innovation at a renovated section of the River Rouge complex. The Henry Ford and Ford Motor Company replaced ruins with new buildings, used as part of the museum's tour and as a fully operating factory. They are new buildings amid a deindustrialized mixture of dilapidated structures and functioning industry.

Despite the reality of deindustrialization through capital mobility, the tour displays stability by indicating that manufacturing continues and will continue in the iconic complex. In short, the tour elaborates its industry's position in the nation as stable since it continues within national borders and the implementation of "cutting-edge" technologies make assembly work less blue-collar-like and more white-collar-like. Thus, it illustrates increased technological

Alliance International to Woodhaven Stamping Plant. My husband moved from Auto Alliance to Michigan Truck to Dearborn Truck in his time working for Ford Motor Company. And most of the friends I have who are hourly workers have experienced this same mobility. Working at 2 or more auto factories is not unusual for today's auto laborers.

innovation as positively affecting the nature of work. I will come back to this shift in perception of the type of citizen-worker constructed by technology on the tour later in this dissertation.

So here, rather than naturalizing plant closings, the tour naturalizes technological progress, which it implies is "good" for U.S. workers, that their jobs are less physical and more intellectual, while making no mention of the shifting of auto manufacturing facilities through capital mobility, resulting in fewer U.S. manufacturing jobs. The outcome is an unequal tradeoff of quantities of jobs for quality jobs. The question becomes, which workers will remain in the workforce performing the technological jobs? Bluestone and Harrison point out that "newly introduced production techniques and skill requirements often mean that the higher-wage jobs created are not available to those who lose their jobs in more traditional lines of work." ⁴⁸ In the case of future work, as produced on the tour, it is not only lack of the essential knowledge skills, but also need for fewer workers to perform technological labor that will put those who would traditionally hold the upgraded jobs out of work. So, deindustrialization puts manufacturing workers at risk of losing their jobs while imposing further costs on remaining laborers. Another cost paid by Ford Rouge workers is their commodification as museum objects while they labor at automobile assembly as part of an exhibit. Indeed, by turning the everyday process of vehicle assembly into a museum display commodified workers and their labor become a symbolic practice of nation building, namely, the significant performance of continuing industrial power.

Additionally, the contemporary Ford Rouge tour couches its meaning-making of deindustrialization in terms of investment in technological progress which clouds any

⁴⁸ Bluestone, Barry, and Bennett Harrison. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. New York: Basic Books, 1982. 89.

disinvestment in U.S. manufacturing. Here, the company points out to the public, it does not throw workers away, but rather improves them – Ford invests in its workforce. Now, according to the tour, they engage in undemanding, clean technological work instead of arduous, dirty physical labor as a result of company investment in technology. However, the addition of technology and technological work, as displayed on the tour, does not completely eliminate the need for physical labor in the production process. Furthermore, the rationalization of manufacturing through the implementation of new technologies frequently results in the elimination of workers over time since machinery undertakes much of the labor; hence fewer U.S. workers have the opportunity to gain employment in manufacturing. Job attrition as a result of manufacturers' inclusion of technology in factories is thus another aspect of deindustrialization.

Always intricately intertwined with deindustrialization, is globalization, which began early in the process of industrialization, when inventors and innovators influenced, shared, and stole technological designs across empires and oceans. During the boom years of U.S. industrialization, global connections involved exploitation of foreign lands and labor for raw materials. Over time, in efforts to control labor, corporations leaned more heavily on deindustrialization and accordingly, global connections expanded.

Producing Local, National, and Global

A common assumption today is that most industrial manufacturing takes place outside the United States by technologically less advanced, gendered, and racialized "others." Although much work has moved, significant manufacturing still occurs within the United States. Belying

the premises of deindustrialization is Ford's Dearborn Truck Plant and its assembly line workers, whose displayed physical bodies on the Ford Rouge Factory Tour demonstrate the continued presence of manufacturing within the geographic boundaries of the nation. Like deindustrialization, globalization is a social process characterized by dynamic relations, fluidity, and motion. The process itself is not new, only the label: "globalization." ⁴⁹

Countries all across the globe have had interactions with each other for hundreds of years. But what exactly is globalization? In academic terms, it is a theoretical framework, but one whose exact nature has hardly been pinned down. What is clear is that globalization is a process that has cultural, economic, and technological aspects, just a few among many attributes. Global Studies scholar Manfred Steger agrees that globalization is always a process writing, "The term *globalization* applies to a *set of social processes* that appear to transform our present social condition of weakening nationality into one of globality." Steger continues:

Indeed, any affirmation of globalization implies three assertions: first, we are slowly leaving behind the condition of modern nationality that gradually unfolded from the eighteenth century onwards; second, that we are moving towards the new condition of postmodern globality; and, third, we have not yet reached it. 50

What Steger claims here is that the term globalization promotes ideas of "development" or progress and transformation tied to international connections.⁵¹

Cultural Studies scholar Arjun Appadurai asserts, "globalization is itself a deeply historical, uneven, and even *localizing* process." ⁵² What makes globalization so localizing is its

⁴⁹ Steger, Manfred B. *Globalisms: The Great Ideological Struggle of the Twenty-First Century*. 3rd ed. Lanham: Rowman & Littlefield Publishers, 2008.

⁵⁰ Ibid.

⁵¹ Ibid.

undefined geographical breadth which contrasts against local boundaries, both geographical and social, thus bringing the local into greater focus. Where Appadurai and Steger differ is on the impact of the globalization process. The former sees it as highlighting the global, while the latter views it as emphasizing the local. But how does the process of globalization influence material production in the United States? Globally? And what about the local nature of labor?

Historians Charles Bright and Michael Geyer argue that what they call the "territories of production" created in the U.S. and organized into "regimes of mass production" were never contemporary with territorial boundaries. ⁵³ In other words, these territories of production, located locally within the U.S., have always been transnational, not bound within strict geographical national limits. They argue this was a result of corporations being tied up within lines of communication and transportation. ⁵⁴ According to Bright and Geyer, national boundaries have always been ephemeral for corporations. Many large corporations, once thought to be quintessentially American are now so large and globally active that it is increasingly difficult to call them simply "American." Ford Motor Company, owner of the site of the Rouge tour, is one such multinational corporation. Boundaries are drawn and redrawn in countless ways on the tour. They are variously visible and invisible in the role of the corporation, the workers, the consumers, and their connections to others through the product and the process.

⁵² Appadurai, Arjun. *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis and London: University of Minnesota Press, 1996.

 ⁵³ Bright, Charles and Michael Geyer. "Where in the World is America? The History of the United States in the Global Age." In *Rethinking American History in a Global Age*, edited by Thomas Bender, 63-100. Berkeley: University of California Press, 2002.
 ⁵⁴ Ihid.

In addition, Bright and Geyer also observe in their examination of the dynamic relation of the process, "Globalization takes shape through myriad overlapping channels and circuits, which certainly create connectivity, but a connectivity that often has the effect of lesser, not greater, awareness and concern." These connections produce blurring and redrawing of boundaries between the local and global, as well as between domestic and foreign labor. The veiling aspect of global relations appears in tensions of job competition. Rather than recognizing their common interests, which should pull workers together in solidarity, global workers instead compete with each other for limited work opportunities.

Globalization, in this way, pits global workers against one another. Labor scholar Beverly Silver argues that globalization is a contradictory process that often opens up as well as closes down potential for labor's strength and bargaining power, locally and globally. On the one hand, labor in newly industrializing countries, facing Fordist style mass production regimes find strength in solidarity and tend to rebel in ways similar to the automotive strikes of the 1930s and 1940s in the United States. On the other hand, labor on the deindustrializing side of the process, such as Ford Rouge tour workers, find their bargaining power weakened as a result of three actions implemented by globalizing corporations. They are: "process innovations," such as the implementation of labor reducing technologies; the promotion of "responsible unionism and the institutionalization of collective bargaining," to gain cooperation of union leaders; and the relocation of production. ⁵⁶ In short, U.S. manufacturers have a long history of global interactions and of taking advantage of the tensions between workers, whose ability to

^{ວວ} Ibid.

⁵⁶ Silver, Beverly J. *Forces of Labor: Workers' Movements and Globalization since 1870.* New York: Cambridge University Press, 2003.

recognize the potential and actual connections afforded by globalization are limited. I will examine each of these actions in this dissertation. A comparison of Ford manufacturing displays of the 1930s - 1940s with contemporary tours unveils the impacts of these management responses, as part of the globalization process, on remaining U.S. automotive workers.

Naturalizing the Nation

Despite the globalization of Ford Motor Company's operations and capital – the company is insistent that the story they are telling is an American story told by Americans to Americans for Americans. A characterization of national identity and the nation will give a clearer understanding of the cultural effects resulting from deindustrialization. The idea of "the nation" powerfully constructs those who live within nationally defined borders. It influences how people who live outside one nation perceive those inside another. Furthermore, the character of a nation shapes internal perceptions of those outside its own borders. How does an abstract entity such as "the Nation" do these things? Through compelling cultural meaningmaking.⁵⁷ Cultural meaning-making of a nation is a set of "symbolic practices" that define a politically bounded geographical space and produce selected inhabitants unified as citizens.⁵⁸ These symbolic practices can be as diverse as an oral pledge of loyalty given to a flag to the discarding of "Old World" clothing before emerging from a giant "melting pot" to a museum visit. Culture is a dynamic process, closely linked to expressions of "the Nation," where

⁵⁷ Evans, Jessica. Introduction to Representing the Nation: A Reader; Histories, Heritage and Museums. Edited by David Boswell and Jessica Evans, 1-8. London and New York: Routledge, 1999. ⁵⁸ Ibid. 2.

membership rests on a presumed shared identity within the national community.⁵⁹ Icons, metaphors, heroes, rituals and narrative, define nations.

A critical contributor to scholarship on nation and nationalism, Benedict Anderson, defines "the Nation" as an "imagined political community." Importantly, he points out that this imagined community is "always conceived as a deep, horizontal comradeship" -- despite inequalities. ⁶⁰ This last notion puts concepts of class, race, and gender outside the imagined community's recognition of its own unequal treatment of economic, political, or social difference.

From where does the power of this imagined community derive? Historian Eric

Hobsbawm claims that invented traditions allow ideologies of nations to gain power either

from an actual or fabricated past. He defines invented traditions as:

A set of practices, normally governed by overtly or tacitly accepted rules and of a ritual or symbolic nature, which seek to inculcate certain values and norms of behavior by repetition which automatically implies continuity with the past. [And] where possible, they normally attempt to establish continuity with a suitable historic past. ⁶¹

Invented traditions then, presume a common past, just as "the Nation" presumes a common identity. Historian Thomas Bender agrees, stating that "[a] common history, which involved both common memories and a tacit agreement to forget certain differences, was

⁵⁹ Boswell, David and Evans, Jessica, eds. *Representing the Nation: A Reader; Histories, Heritage and Museums*. London and New York: Routledge, 1999. Edgar, Andrew, and Peter Sedgwick, eds. *Cultural Theory: The Key Concepts*. London and New York: Routledge, 1999. Williams, Raymond. *Keyword: A Vocabulary of Culture and Society*. New York: Oxford University Press, 1976.

⁶⁰ Anderson, Benedict. *Imagined Communities: Reflection on the Origin and Spread of Nationalism*. London and New York: Verso, 1983. 6-7.

⁶¹ Hobsbawm, Eric and Terence Ranger. *The Invention of Tradition*. Cambridge: Cambridge University Press, 1983. 1.

intended to provide a basis for a shared national identity."⁶² In other words, the geographically, politically, and culturally bounded nation creates a space for a common identity among those who belong as citizens through a perceived shared history.

Hobsbawm continues, demonstrating that the problem with deriving authority from a "historic past" is the problem of who recorded that past. What he aptly establishes is that those whose experiences form "historic events" are not often the ones who record such events, but rather, someone else; most often, people trained in archiving and chronicling. ⁶³ The difficulty here is that these "trained" recorders may come from different classed, raced, and/or gendered backgrounds than those whose experiences they record. Such differences influence how and what is chosen to document and save, particularly because recorders often have a stake in the shape of the hegemonic discourse. Consequently, Hobsbawm argues for the value of writing history "from below" as a way to offset the power claimed by past histories that exclude events and traditions of marginalized members of a nation. ⁶⁴ Indeed, inclusion in accounts and representations of the past are essential in claiming a voice in the building of a national identity.

In the field of American Studies, the category of the nation has recently become less compelling than the category of the transnational; I argue that in order to comprehend the transnational, it is essential to first understand the national, as the two are intricately

⁶² Bender, Thomas. *A Nation among Nations: America's Place in World History*. New York: Hill and Wang, 2006. 4. ⁶³ See Hobsbawm, Eric and Terence Ranger. *The Invention of Tradition*. Cambridge: Cambridge University Press, 1983. And Trouillot, Michel-Rolph. *Silencing the Past: Power and the Production of History*. Boston: Beacon Press, 1995.

⁶⁴ Since I worked in the automotive industry for many years, my perspective is from below; I apprehend the autoworkers' viewpoints, which often conflict with those of scholars, historians, and museum curators.

connected. Tom Nairn, nationalism theorist, locates the nation within a larger cosmopolitan sphere, allowing space for both the national and the global. He argues that nationalism is a global phenomenon that must necessarily be examined in a transnational context. In particular, he links the growth of nationalism with transnational industrialization. 65 That is. as transnational and global ties increase through sharing industrial methods and processes, nations become more aware of their own borders and identities. By accepting industrial methods from "advanced" nations, "backwards" nations discover that "a sort of imperialism [is] built into 'development'." 66 In other words, those who control industrial technology have power over those who desire it. This "imperialism" forces less developed nations to fight against technological advancement even though they aspire for the potential benefits from new technologies. Nairn's theorization is useful in understanding why labor and the working-class would rail against the introduction of labor-saving technologies. The imperialism that nations struggle over is, on a different scale, found at the level of labor relations. But to develop his argument further, it must now address deindustrialization. I show that deindustrialization weakens links to nationalism, by disrupting the presumption of a shared identity. The effects of deindustrialization obscure the once stark lines between blue and white collar workers, creating a class anxiety, which is why multi-national corporations such as Ford Motor Company felt a need to persuade Americans of their good intentions – to improve the nature of labor in the nation through technology. This desire is not new, as my examination of past exhibits will demonstrate.

⁶⁵ Nairn, Tom. "Scotland and Europe." In *Becoming National: A Reader*, edited by Geoff Eley and Ronald Grigor Suny, 79-105. New York and Oxford: Oxford University Press, 1996. ⁶⁶ Ibid. 82.

Nationalism scholar Anthony Smith turns the argument concerning the category of the nation toward examining national origins and their mythic status. He argues that origin myths are not quite spiritual principals or imagined communities, but national sentiment. ⁶⁷ National sentiment acknowledges that the nation is an emotional construct and a historical social process. Smith states that national sentiment "appears more like the institutionalization of a 'surrogate religion' than a political ideology." ⁶⁸ The essence of Smith's argument is that nationalism takes the emotive sensibilities associated with religion and naturalizes them as a fundamental part of the national culture, which conceals their constructed nature. Indeed, the Ford Rouge Factory Tour exploits national sentiment through the inclusion of the Ford Rouge complex in a museum exhibit, where its history has become the history of the nation: its origins, like the nation's revolution, were about achieving "total self-sufficiency by owning, operating, and coordinating all the resources..." and labor is just another "resource." ⁶⁹ Its civil war was about the liberation of capital and its present is unfolding as America of the future. National sentiment on the tour achieves authenticity through its connections to The Henry Ford and its museum and their construction of what it means to be part of the nation of the United States of America.

As art historian Carol Duncan explains, "historically, the modern institution of the museum grew most directly out of sixteenth-, seventeenth-, and eighteenth-century princely collections." Similar to religious spaces, museums are places of ritual that produce "potent

⁶⁷ Smith, Anthony. "The Origins of Nations." In *Becoming National: A Reader*, edited by Geoff Eley and Ronald Grigor Suny, 106-131. New York and Oxford: Oxford University Press, 1996.
⁶⁸ Ibid. Pg. 125.

⁶⁹ Duncan, Carol. "From the Princely Gallery to the Public Art Museum: The Louvre Museum and the National Gallery, London." In *Representing the Nation: A Reader; Histories, Heritage and Museums*. Edited by David Boswell and Jessica Evans, 304-331. London and New York: Routledge, 1999.

symbolic meanings."⁷⁰ In his insightful essay on museums as institutions of power, cultural historian Tony Bennett elaborates:

For the emergence of the art museum was closely related to that of a wider range of institutions – history and natural science museums, dioramas and panoramas, national, and later, international exhibitions, arcades and department stores – which served as linked sites for the development and circulation of new disciplines (history, biology, art history, anthropology) and their discursive formations (the past, evolution, aesthetics, man) as well as for the development of new technologies of vision. ⁷¹

What Bennett describes above are "institutions of exhibition," which make-up what he calls "the exhibitionary complex." These institutions were:

...involved in the transfer of objects and bodies from the enclosed and private domains in which they had previously been displayed (but to a restricted public) into progressively more open and public arenas where, through the representations to which they were subjected, they formed vehicles for inscribing and broadcasting the messages of power (but of a different type) throughout society.⁷³

The Ford Rouge Factory Tour, as part of The Henry Ford, is linked to the meaning-making space of museums. Additionally, as a "public ceremonial space," museums have the power to build new meanings in objects they display while distorting, downplaying, obscuring, and qualifying old meanings.⁷⁴ Through the display of technology and labor on the tour and in the space of the iconic Ford Rouge complex, workers become "trophies of the past." Like the

^{/0} Ibid. 305-306.

⁷¹ Bennett, Tony. "The Exhibitionary Complex." In *Representing the Nation: A Reader - Histories, Heritage and Museums*. Edited by David Boswell and Jessica Evans, 332-362. London and New York: Routledge, 1999. ⁷² Ibid.

⁷³ Ibid. 333.

⁷⁴ Duncan, Carol. "From the Princely Gallery to the Public Art Museum: The Louvre Museum and the National Gallery, London." In *Representing the Nation: A Reader; Histories, Heritage and Museums*. Edited by David Boswell and Jessica Evans, 304-331. London and New York: Routledge, 1999.

machines, displayed workers are objects with "cultural-historical" value.⁷⁵ From the tour's perspective, the meaning ascribed to the workers is that of organized labor, whose historical radical and rebellious behavior lead to important victories for workers, now tamed by deindustrialization and its counter-part, globalization. The tour distorts the history of tension between labor and the corporation, sending a strong message: "Resistance is futile."⁷⁶

Bodies of Labor

When Ford created its first major exhibition at the Chicago Century of Progress

Exposition in 1934, the globalization of work meant using foreign labor to extract raw materials for export to the U.S. and its great manufacturing centers. By the time of the construction of the 2004 Ford Rouge Factory Tour, the meaning of the globalization of work changed to mean using foreign labor to not only extract raw materials, but to also produce the finished goods.

Standard thinking is that the U.S. had moved into a postindustrial era – a nation developed beyond industries requiring physical labor and where work evolved into mental labor.

Historian Howard Brick writes, "Most generally, the term 'postindustrial society' suggests that mechanical industry has been displaced from its former role as a central and constitutive element of social, economic, or cultural affairs. And this postindustrial society aims to "idealize and preserve the present," while at the same time, it seeks to "criticize and open prospects for surpassing the present." To put it another way, a postindustrial society

⁷⁵ Ihid

⁷⁶ Star Trek: First Contact. United States: United International Pictures, 1997. Film, 111 minutes.

⁷⁷ Brick, Howard. "Optimism of the Mind: Imagining Postindustrial Society in the 1960s and 1970s." *American Quarterly* 44.3 (1992): 348-380.

⁷⁸ Ibid.

represents the present as a standard of excellence worth defending, yet it also could be enhanced. The supplanted mechanical industry encapsulates tangible production and requires technologies and, in many instances, physical human labor. Indeed, the idea that the U.S. has become a postindustrial society brings with it an understanding of a naturalized "decline in the old working class [of manual labor], and the rise of 'white collar' (or non-manual) classes."

Yet manual labor continues to occur, as Cowie and Heathcott point out, "The industrial age is alive and well, even if the locations have changed, and even if the rules of investment have shifted." Contemporary manual labor in the U.S. often has added mental elements. The compounding of manual and mental labor blurs the once stark class divide between the two types of labor and brings us to Michael Denning's claim that, "The unity and division between mental and manual labor is ... the starting point of any labor theory of culture [and] a labor theory of culture matters because it reminds us that laborers in the culture industry are obscured." Exhibits normally focus on objects while hiding any labor associated with them.

The Ford Rouge Factory Tour also puts objects, in the form of machines and technology, at the center but does not completely remove labor; it materializes workers but continues to highlight technology over bodies.

On Ford Factory tours and in Ford exhibits, workers interact with cutting-edge technologies in their production of vehicles, whether assembling the new 1934 Ford V8 engine at the World's Fair, or using large computer consoles at the contemporary Ford Rouge Factory

⁷⁹ Edgar, Andrew, and Peter Sedgwick, eds. *Cultural Theory: The Key Concepts*. London and New York: Routledge, 1999. Williams, Raymond. *Keyword: A Vocabulary of Culture and Society*. New York: Oxford University Press, 1976.

⁸⁰ Cowie, Jefferson, and Joseph Heathcott, eds. Introduction to *Beyond the Ruins: The Meanings of Deindustrialization*. Ithaca: ILR Press, 2003.

⁸¹ Denning, Michael. *Culture in the Age of Three Worlds*. London and New York: Verso, 2004. 92-93.

Tour. These types of displays blur distinctions between traditional manual and mental labor, or rather, between blue collar and white collar work. In both of the above examples manufacturing workers appear to perform labor that is closer to white collar (mental and middle-class) work than blue collar (manual and working-class) since they are working with innovative technologies, long associated with science and engineering, and therefore, intellectual labor. This association confuses divisions between the two types of labor and transforms the image of manual laborers into mental workers, while creating a new imaginary of unified workers who are nearly white collar and postindustrial. The exhibits and tours examined work to synthesize the two types of labor. Denning emphasizes that, "It is not surprising that many of the most powerful utopian images in the socialist tradition are images of the union of mental and manual labor..." Hence corporate exhibits and tours show labor in a utopian context.

On the Rouge tour, the utopian image of blue collar work conflated with white collar work constructs a new imaginary in the eyes of the public. This reimagined worker, treated by the corporation as an interchangeable cog in the machinery, also appears homogenous on the tour - even though the workers exhibited are a mixture of men and women, of color and white - to tour visitors, they are just "workers." Such a representation is problematic, not only because their differences as people are erased, but also because the contemporary exhibit constructs a visual narrative where nearly extinct unionized industrial workers are no longer a threat to corporations due to the utopian image of homogenized labor performing manual labor fused with mental labor.

⁸² Denning, Michael. *Culture in the Age of Three Worlds*. London and New York: Verso, 2004. 93.

But the reimagined tour workers are not representative of all manufacturing labor in the U.S., as most do not labor in a utopian context, that is, manual and mental labor continue to be largely separate functions of industrial work. Additionally, labor competes locally, regionally, and globally for scarce jobs thus generating "new racial enmities and antagonisms." 83 The historical make-up of the shrinking unionized industrial work in the United States is traditionally a white male strong-hold. However, most global industrial workers are neither white nor male. By moving assembly production outside of the U.S., manufacturers have been able to break down this stronghold of white male skilled unionized workers, and participate in both a feminization and racialization of industrial work.⁸⁴ As the Ford Rouge Factory Tour conceals the racial and feminine nature of global manufacturing labor, it also works to diminish the laboring bodies along the tour route.

Each tour component works to erase workers even though the physical setting features a conspicuous display of their bodies. I argue that workers on the Ford Rouge Factory Tour are re-presented as artifacts of a lost industrial age, part of the materialization of work, where bodies of individual workers are displayed and packaged as historical objects for public consumption, but are defined by others – the museum, their employer and their union. 85 This materialization of work through displayed worker bodies illustrates a national notion that the nature of the American economy is changing from an industrial base to a largely technological platform, where American citizens perform white-collar, non-physical mental labor. This belief

⁸³ Lipsitz, George. American Studies in a Moment of Danger. Minneapolis: University of Minnesota Press, 2001. 12.

⁸⁴ Ong, Aihwa. "The Gender and Labor Politics of Postmodernity." In *The Politics of Culture in the Shadow of Capital*, edited by Lisa Lowe and David Lloyd, 61-97. Durham & London: Duke University Press, 1997.

⁸⁵ Winter, Jay. Remembering War: The Great War Between Memory and History in the Twentieth Century. New Haven and London: Yale University Press, 2006.

ignores Americans still eng in manufacturing, physical labor, and the growing number of Americans in the service industry.

This dissertation is written in four sections that examine different ways U.S. labor has been put on display in the seventy year period between 1934 and 2004, with a focus on Ford Motor Company representations of automotive assembly workers. Chapter One, the introduction, raises the questions driving this research. It sets out the key terms that will be explored throughout: production, deindustrialization, globalization, and the nation.

Chapter Two sets the stage for those that follow with an analysis of Ford's exhibit at the 1934 Century of Progress Exposition in Chicago. It is about Ford's conception of progress and its concealment of tensions in the representation of labor. But before heading to the fair, I begin with the Detroit Industry Murals painted by Diego Rivera. These murals convey a very different picture of what it meant to work in a place of mass production. I use a close reading of some of the panels and Rivera's own thoughts to read against Ford's idea of progress. Moving to the fair exhibit, I bring in brochures published by the Century of Progress Exposition for fairgoers and those put out by Ford Motor Company to promote its exhibit. Last, I explore public responses to the Century of Progress Exposition through the unrest of that particular moment in history, published commentary from *The Forum and Century*, and a film titled, *A Century of Progress*. These public reactions form a powerful critique against Ford's vision of progress arguing that a vision of progress through increased corporate profits did not benefit the majority of the nation.

Chapter Three moves with the main exhibit building, the Ford Rotunda, from the Fair to Ford's home of manufacturing, Dearborn, Michigan. Here, Ford began an optimistic new exhibit revealing his mighty River Rouge assembly operations as the way to national recovery, as well as demonstrating where and how laboring Americans should work. Through brochures, pamphlets and company newspapers, I analyze the Rotunda tour and its cultural meaningmaking. But once again, the citizenry and labor did not necessarily agree with Ford's vision for the future. The same year as the opening of the Rotunda tour, Charlie Chaplin's film, *Modern Times* opened to the public, showing an alternate version of the meaning of mass production for labor. One year later, the novel, *The Flivver King*, written by Upton Sinclair, came out. The story it told of working on Ford's assembly line also attached a more pessimistic meaning to mass assembly. Reading the film and novel against the Rotunda tour exposes what meanings the Rotunda tour made about globalization and controlling labor.

Chapter Four returns to the Ford Rouge Factory Tour. On the tour, visitors move through several stations before viewing the assembly line. A black and white film in the Legacy Theater narrates the historical past according to The Henry Ford and Ford Motor Company.

After that, visitors experience a Disney-like production of automotive assembly in the Art of Manufacturing Theater. The last station before the Assembly Line Walking Tour is the Observation Deck, a museum style viewing area. A comparison of the 2004 Ford Rouge Factory tour and past tours one illuminates changes in the framing of workers on the assembly line.

This is where I argue that the meaning-making of the tour produces a meaning of the nation while obscuring its global activities that resulting in the deindustrialization of the U.S. through a representation of labor and technology. Ultimately, the tour produces a narrative of change

equaling national progress, while concealing how corporate actions of deindustrialization and globalization combat change in the process of using mass production techniques to control labor.

Conclusion

As public anxiety over the curtailment of industrial manufacturing within U.S. borders heightened in the early twenty-first century, multi-national corporations looked for new ways to mitigate a potential backlash by American consumers. Appropriating established symbolic practices of exhibits and expositions in garnering public approval, Ford Motor Company, along with The Henry Ford, created a cultural meaning-making tour exhibiting auto workers on the job. This "Great American Production" obscures massive industrial job losses resulting from the continuous movement of capital by corporations as they perpetually look to increase profits through deindustrialization and globalization.

This dissertation focuses on the Ford Rouge Factory Tour, its distinctive elements, and its social and historical contexts. It also explores the Ford Exhibition at the 1934 Century of Progress World's fair, late 1930s tours of the original factory complex, and contemporary factory tours run by rival automotive companies, General Motors and Toyota. It also examines opposing perspectives of the particular vision of national progress produced by the various tours. Each chapter examines the shifting significance of labor in national identity and the relevance of work in the United States during the twentieth and twenty-first centuries as part of cultural meaning-making due to deindustrialization and globalization. At the same time,

these chapters demonstrate a resistance exhibited by industrial manufacturing corporations to implement significant technological and ideological deviations from their Fordist practices.

A comparison of past exhibitions and tours with the contemporary tour illuminates differences in the framing of workers on the assembly line. Where preceding tours covered the working factory built for production, the contemporary tour shows visitors a functional assembly line built as part of a museum exhibit. This difference alters the experience of viewing workers and their manipulation of industrial machines from an up close and personal one to one that is virtually framed and distant, erasing all hints of the personal context of labor as well as any suggestions of the global, especially its effect on the shrinking number of manufacturing workers employed in America. Therefore, the master narrative produced by the museumization of the tour is of industrial power linked to national progress achieved through contemporary technological innovation. The tour creates an "American production" of shared national identity at a place of American power, the iconic Ford Rouge industrial manufacturing complex.

Driving toward the future with a utopian vision of technology, the Ford Rouge Factory

Tour validates connections between history and the everyday lives of American industrial

workers. It does so through visual representations, using a combination of historical video

footage and photographs with the actual daily activities of the workers. Those connections

contribute to the redrawing and blurring of boundaries between culture and labor. The muddy

demarcation between white collar and blue collar work contributes to cultural confusion of the

identity of the American worker, while at the same time; they strengthen the shared identity of

| the museum | attending public. | The production of | of culture, | place, a | and power | flows in and | l around |
|------------|-------------------|-------------------|-------------|----------|-----------|--------------|----------|
| | | | | | | | |
| the tour. | | | | | | | |

Chapter 2

Ford at the Fair: The Problem of Selling Progress in 1934

Dear Mr. Ford:

.... I am going to sacrifice so I can run one of the attractive V-8's some day. I talk so much of your display that my neighbors say I must have fallen in love with your factory and I did ...

Mrs. Corene Kopp wrote to Henry Ford in September of 1934, along with hundreds of others, to express the excitement and enthusiasm felt by many who visited the Chicago "A Century of Progress" International Exposition that summer. In the midst of the Great Depression, thirty-nine million visitors were able to scrape up enough money to pay the fifty cent entry fee. 86 Attending the fair meant immersing oneself in a forward-looking dream, no doubt a pleasant respite from the realities of everyday life during the Depression, when skilled workers were lucky to work two or three days a week. Colorful lighting gave the fair an idealistic atmosphere aiding visitors in setting aside their worries while in attendance. So thoroughly did the fair achieve the goal of convincing visitors the best was yet to come, it eclipsed memories of previous world's fairs. The Chicago Daily Tribune noted the response of

⁸⁶ The University of Chicago Library, "A Century of Progress: The 1933-34 World's Fair." The University of Chicago Library Digital Activities and Collections. http://century.lib.uchicago.edu/home.html.

Clarence B. Douglas, special representative of the war department and veteran of three previous world fairs, including the Columbian Exposition of 1893, who called the Century of Progress fair "the greatest exposition in the nation's history." He also stated, "Chicago, through A Century of Progress, is leading the country out of the depression."⁸⁷ His comments reflected fairgoers' enthusiasm about the fair and optimism about potential national recovery as well as his faith in the power of the fair to do the impossible. The forward-looking aspects of the Chicago fair forecast economic progress. Additionally, the fair indicated that the march of American national progress, deeply in question during the Depression, would stabilize. The fair promised a kind of progress that would renew faith in the economic system: the economically stricken middle-class would regain social status lost in the depression and poverty stricken white Americans would be able, once again, to set themselves apart from poor non-whites. Futuristic buildings sat side-by-side with robotic dinosaurs at the fair, further demonstrating the evolution of the American nation from its "crude" roots to the sophisticated, cosmopolitan people they had become. And finally, the fair vociferously presented technology as the redeeming quality that would advance the nation on every front.

This chapter examines the Ford exhibit at the widely attended and wildly successful 1934 World's Fair, in which the deeply loved exhibit made a dramatic argument for technology as the solution to national and personal economic crises by representing industrial technology as glorious and labor as secondary. Ford worked to produce meanings to fashion a particular vision of progress that obscured labor and the specific tensions in employer/labor relationships, while illuminating his product.

⁸⁷ "He's Seen Four World's Fairs; Call This Best." *Chicago Daily Tribune*. July 4, 1933.

Of course, the problem of labor would have been difficult to obscure in 1934. A quick study of the newly complete *The Detroit Industry* murals at the Detroit Institute of Arts makes the terms of this challenge clear as do the impassioned responses of laborers and their supporters. Labor sympathizers produced films about the fair contrasting gay fairgoers with Depression-stricken workers. Journalists in national periodicals voiced concerns over the relationship with labor exhibited by manufacturers at the fair. Such depictions and commentary regarding corporate intentions ran contrary to Ford's paternalistic vision of well-cared-for workers and a nation benefitting from the industrial technology highlighted in his exhibit at the exposition. This chapter starts with a reading of the murals, moves to Ford at the fair, and ends with a film titled: *A Century of Progress*.

Anxieties over employer/labor relationships were, of course, manifest in labor strikes and rallies by the newly unemployed in the early years of the Great Depression. Through the 1933 and 1934 summer seasons of the Chicago Exposition, those tensions were kept hidden in exposition exhibits. The fair's organizers and financiers "read like a *Who's Who* of Chicago power brokers," with Charles and Rufus Dawes taking charge of planning the exposition. Both brothers were highly successful businessmen with lucrative interests in oil and banking. The older brother, Charles was Vice President of the United States under Calvin Coolidge and he used his business and political connections to collect guarantees of more than \$12,000,000 towards the fairs construction by November 1929, no small sum just after the October stock market crash. The Dawes brothers and financier Julius Rosenwald owned a third of the note

_

⁸⁸ Rydell, Robert W. *World of Fairs: The Century of Progress Expositions*. Chicago and London: The University of Chicago Press, 1993. 119.

between them. In addition to the above, "major utilities, railroads and oil companies, along with leading mercantile establishments guaranteed the remaining issues." 89

Along with their large role in financing the fair, the Dawes brothers were major decision makers in organizing the exposition. Rufus became the exposition president and Charles was chair of the finance committee, later to become a behind-the-scenes power. Lenox Lohn, a former military man who taught at West Point and was editor of a leading engineering journal agreed to serve as the fair's general manager at Charles Dawes' request. "Lohr was responsible only to the President and had direct control over all operating departments. He named all department heads, approved all expenditures, and signed all contracts." Like previous world's fairs, this was a project of industrialists who wanted to make an argument about corporate leadership and American progress.

The control by American elites of the fair lead to specific representations of marginalized and excluded segments of the population. Scholarly literature on world's fairs discusses the responses of African Americans and women concerning their representations at world's fairs, but leaves out the standpoint of American labor. ⁹¹ Laborers erected the buildings, landscaped the grounds, worked the exhibits, and were represented by the fairs in a particular way, yet histories detailing the organization and management of the American elite who

⁸⁹ Ibid.

⁹⁰ Richard J. Daley Library Special Collections and University Archives. The University of Illinois at Chicago. A Century of Progress records; COP6.

http://www.uic.edu/depts/lib/specialcoll/services/rjd/findingaids/COP6f.html#ref3 Accessed 9/20/13.

⁹¹ African Americans wanted to work at the fair, but were systematically excluded by fair organizers. See Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs in the United States*. Washington and London: Smithsonian Institution Press, 2000, and Wilson, Mabel O. *Negro Building: Black Americans in the World of Fairs and Museums*. Berkeley, Los Angeles, and London: University of California Press, 2012, for more information on the exclusion of African Americans (with a very few exception, such as concession workers dressed in tradition "plantation" wear) from working at world's fairs.

planned the fairs obscure labor both working and on display at the fair, even though labor tensions were common. The World's Columbian Exposition, held in Chicago in 1893, was plagued with labor unrest. Strikes and threats of strikes by thirty different trade unions during construction of Fair buildings are an excellent example of labor tensions and World's Fairs. Early April in 1893 was a particularly volatile moment in the employer/labor relationship at the Columbian fair. Carpenters walked off the job amid calls for an eight hour day and arbitration. 92 Within a week, allied unions called for a strike supporting the Carpenters' Union and 4,000 workers walked off the job. 93 Fair administrators quickly brought in strikebreakers from nearby towns and cities. Concessions on both sides brought the strike to an end by 9 pm that evening. 94 Corporate exhibits at the Chicago Century of Progress fair, including the Ford exhibit, also attempted to gloss over any labor tensions through a focus on progress and technology.

The 1934 world's fair, although consciously designed to celebrate Chicago's centennial, was also very much about technological and national progress. It made an argument for capitalism in a moment of crisis, which boiled down to selling consumerism, production, and control of labor. Corporations with exhibitions at the fair wanted to sell their products and capitalism itself. At the time, they believed the best way to accomplish that task was by selling progress to consumers. And the American public at the fair wanted to buy progress. But how could an intangible idea like progress be sold? The businesses involved in the fair determined that technology was the key. This fair shouted "We are Modern!" Americans believed they

⁹² "Ordered to Walkout: Thirteen Hundred Fair Carpenters Will Strike." *Chicago Daily Tribune*, April 4, 1893. 2. ProQuest Historical Newspapers. Accessed 6/17/2013.

⁹³ "It Came Off as Predicted: Strike at the World's Fair Calls Out Four Thousand Men." *Chicago Daily Tribune*, April 11, 1893. 2. ProQuest Historical Newspapers. Accessed 6/17/2013.

⁹⁴ Ibid.

were modern because technological advances had profoundly shaped their everyday lives, whether urban or rural, rich or poor, or white or blue collar. In the short span of time since the turn of the 20th century, Americans had experienced the first airplane, motion pictures with sound, and affordable automobiles. But since progress at the fair was also about capitalism, it likewise meant the fair was about production and profits. And production, in order to produce profits, required labor. But labor was a problem. Real people suffering through economic catastrophe and workers enduring harsh factory conditions can be unruly and unwilling to be part of a narrative that works against their best interests, even if it is packaged as the answer to the problem of economic instability in the form of a glimmering world's fair.

Ford was selling progress at the fair and visitors to his exhibition were quite receptive, as Mrs. Kopp noted in her letter:

Dear Mr. Ford:

My husband and I visited the Century of Progress and I want to congratulate you on your marvelous exhibit, the attraction of the Fair in every respect. We spent hours watching your skillful men, never realizing before that a factory could be so beautiful.

My husband and I bought a Ford in 1917 and the most enjoyable days were spent with our two children in riding and taking care of it, but it looks funny now. As soon as work picks up, we sure must have a new V-8.

My son went to mechanical school. He was only twenty-one years old when he finished and couldn't get a job because he seemed so young so he went to work at a steel mill as a patent doubler and has been there ever since. At present he is only working two or three days a week, but if I can get enough money together, I want him to visit the Fair just to see your educational display.

I am going to sacrifice so I can run one of the attractive V-8's some day. I talk so much of your display that my neighbors say I must have fallen in love with your factory and I did.

Hope you appreciate this little letter of congratulation as much

as I enjoyed your interesting display.

Yours for a prosperous year.

Mrs. Corene Kopp

Granite City III

P S Just took a chance on a V-8 given away at Pontoon Beach.

Here's hoping!

Will this beautiful building still remain at Chicago after the Fair

closes?95

Mrs. Kopp's enthusiasm bubbles through when she "congratulates" Ford for the "marvelous exhibit." She found the prospect of progress exciting. For fairgoers like Mrs. Kopp, their personal vision of progress included the ability to purchase the latest technological marvel, such as the innovative Ford V-8; however, the Depression seriously impaired citizens' ability to achieve their visions. Mrs. Kopp's letter notes this tension when she points out that she and her family cannot engage in adequate consumption unless industrialists such as Ford produce work opportunities when she states, "As soon as work picks up, we sure must have a new V-8." This letter also alludes to the working-classes' concern of whether or not they can trust industrialists to stick it out with the workers during difficult economic times when she asks, in her post script, if the building - symbolizing work - will stay in Chicago once the fair closes. Although Mrs. Kopp had faith in the vision Ford was selling, it was difficult for her to reconcile that with her lived experience, as she calls attention in the story to her son's inability to secure work utilizing his education. Her story does not fit with the model of progress being sold at the fair.

ar

⁹⁵ Kopp, Corene. Letter. "1934 Ford Exposition." Accession 6. Subject Files Box 36. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1934.

Yet Ford clung tightly to the idea that he, as an industrialist, did and would indeed continue to have a benevolent, if intrusive, relationship with employees. Ford's vision of the employer/labor relationship was a carry-over from the previous decade. He wanted to adhere to a relationship that labor had not experienced since the 1920s.

The relationship with labor Ford desired to continue was that of welfare capitalism. 1920s welfare capitalism was the tendency of American corporations to offer incentives in order to convince workers to labor more "efficiently." ⁹⁶ Thus, they raised workers' expectations of what employers had the ability to offer- that is, "job security, high wages, and benefits." ⁹⁷ Since these benefits relied on company success, employers hoped workers would realize that their fortunes would rise with those of the company, making them more willing to keep efficiency and production high. Hence, through welfare capitalism, employers hoped to cultivate a relationship based, to some degree, on common interests. 98 However, as the Great Depression began and extended into the next decade, employers determined it necessary to lower wages, drop benefits, and decrease the number of workers employed, thus changing their relationship with labor from one of shared goals, to one filled with opposition and struggle. Indeed, although Ford announced a wage increase following a meeting with President Herbert Hoover in November after the 1929 stock market crash, Ford Motor Company began laying-off workers in the fall of 1929. In the spring before the crash, Ford employed over 128,000 workers and by August of 1931, had only 37,000. Those who were still employed

_

⁹⁶ On 1920s welfare capitalism, see Cohen, Lizabeth. *Making a New Deal: Industrial Workers in Chicago, 1919-1939.* 2nd ed. New York: Cambridge University Press, 2008. 208. And Montgomery, David. *Workers' Control in America*. New York: Cambridge University Press, 1979.

⁹⁸ Cohen, Lizabeth. *Making a New Deal: Industrial Workers in Chicago, 1919-1939*. 2nd ed. New York: Cambridge University Press, 2008. 161.

worked fewer than three days a week.⁹⁹ Additionally, hourly wages had dropped from an average of 92 cents per hour in 1929 to 59 cents per hour by 1933.¹⁰⁰ Workers quickly realized that, while their affluence was indeed attached to those of the company, employers felt no sense of loyalty to the labor that produced their products. Worker and employer interests were no longer closely tied and gains in wages and benefits now had to be fought for. Employers thus changed their attitude toward labor, away from welfare capitalism with a greater eye toward control over coercion. It is the tension of this relationship that Mrs. Kopp alludes to with her question and is reflected in the Ford exhibit.

Throughout the 1920s and 1930s, workers found themselves increasingly threatened by rampant unemployment. Several factors contributed to the large unemployed labor pool. First, employers concluded that machinery was more compliant than labor, so manufacturers increased their use of machines and technology in the workplace, creating growing technological unemployment. Second, the decade saw unprecedented numbers of farmers moving into urban areas looking for factory work as agricultural labor found itself displaced by increasing use of machines in farming. These two factors are an incipient example of disinvestment in labor and investment in technology that creates throwaway workers of deindustrialization. Finally, World War I had opened factory doors to black workers and women, especially unskilled black workers from the rural agricultural South. Demand for this

Ω

⁹⁹ Bernstein, Irving. *The Lean Years: A History of the American Worker 1920-1933*. Baltimore, Maryland: Penguin Books, 1966. 252 - 255.

¹⁰⁰ Peterson, Joyce Shaw. *American Automobile Workers, 1900-1933*. Albany, New York: State University of New York Press, 1987. 130-131.

¹⁰¹ Bix, Amy Sue. Inventing Ourselves Out of Jobs? America's Debate over Technological Unemployment 1929-1981. Baltimore and London: The Johns Hopkins University Press, 2000.

"class" of labor fell off by mid-decade, adding to the pool of unemployed workers. ¹⁰² Not only did black and women workers become throwaway labor, but along with those whose jobs were replaced by machinery, they would also function as mobile labor, moving from factory to factory whenever possible. A scarcity of jobs and an excess of available labor created instability for the employed as well, who were constantly under pressure to perform or be let go to join the mobile workforce. Consequently, all labor felt the effects of the severe unemployment. As a result, the labor/employer relationship experienced further strain.

It is clear that both labor and employers were unsure about the place of labor in the changing manufacturing industry throughout the 1920s, thus they put the employer/labor relationship under constant scrutiny. ¹⁰³ Should workers be considered easily replaceable? Or would their value be greater if turnover was kept low and individual workers be retained for long periods? These questions continued to highlight the changing nature of the employer/labor relationship into the 1930s. The Ford exhibit at the Century of Progress Exposition displayed Ford Motor Company's vision of that relationship, even though there was an ambivalence toward labor, along with expectations that technology was the path to national progress. Prior to the 1933/34 World's Fair in Chicago, a different perspective on the labor/employer relationship was on display in Detroit as part of murals painted by Mexican muralist, Diego Rivera at the Detroit Institute of Arts. The murals are more complicated than the exhibit in some ways. They are more thoughtful about labor but they, like the exhibit, can not escape the central problem of how to understand and represent labor. Rivera worked to

¹⁰² Bernstein, Irving. *The Lean Years: A History of the American Worker 1920-1933*. Baltimore: Penguin Books, Inc., 1966.

¹⁰³ Ihid

produce a vision of national progress through a deeply naturalized manufacturing and industrial economy where industrial muscle was the driving force and power behind progress – although in the end, his painting, and Ford's vision were not so far apart.

The Detroit Industry Murals

Ford Motor Company's investment in representing the promise of technology as progress did not begin at the Century of Progress Exposition but was on display even earlier in other venues. In 1932, one place where connections between technology, progress, and labor were on show for public viewing was at the Detroit Institute of Arts, in the Detroit Industry Murals, created by artist Diego Rivera. The murals pictured industrial uses of technology and revealed Rivera's mixed feelings about technology. The murals produce an argument for a powerful racially inclusive working-class that largely excludes women. Finally, the Detroit Industry Murals lay bare labor-management tensions of the times; they practically sing with this tension.

The choice of Diego Rivera by William Valentiner, director of the Detroit Institute of Arts, and Edsel Ford, then president of the Arts Commission of the City of Detroit as well as of Ford Motor Company, at first seems rather odd. Detroit was a stronghold of capitalism and Rivera an avowed Communist. According to Rivera's autobiography, he met Valentiner in San Francisco, where Rivera "mentioned a desire which I had to paint a series of murals about the industries of the United States...depicting in color and form the story of each industry and its

division of labor."¹⁰⁴ And later when Rivera and Edsel Ford met in 1932, they discovered they "shared an interest in American industrial design."¹⁰⁵ Also, Rivera had a "delight in machinery for its own sake and for its meaning to man-his self-fulfillment and liberation from drudgery and poverty."¹⁰⁶ Therefore the artist was "predisposed to view Ford's technological achievements positively," thus making him a more likely candidate for such a commission.¹⁰⁷

In 1931, William Valentiner was finally able to offer the commission to Rivera to paint murals representing the development of industry in Detroit. Valentiner hoped to make the Detroit Institute of Arts, along with the city of Detroit, into a "major cultural center" and the inclusion of work by Rivera would greatly assist in achieving that vision. Work on the murals did not begin until 1932. Rivera arrived in Detroit just one month after the Ford Hunger March, where 3,500 – 5,000 laid-off Ford workers had marched from Detroit to the Rouge only to be suppressed by Dearborn police and Ford security, which fired shots into the crowd, killing five workers. Work on the murals thus began at a time when Ford Motor Company "desperately needed to rebuild a positive relationship with the public." The Detroit art museum was a key site for this recovery.

۸,

¹⁰⁴ Rivera, Diego. *My Art, My Life: an Autobiography*. New York: The Citadel Press, 1960. 178. In contrast to Rivera's autobiography, states that the idea for the mural came from William Valentiner, rather than from Rivera. Rubyan-Ling, Saronne "The Detroit Murals of Diego Rivera." *History Today. 46.* April 1996, 4. ProQuest Research Library. 34. Accessed 6/23/13.

¹⁰⁵ Downs, Linda Banks. *Diego Rivera: The Detroit Industry Murals*. New York and London: W. W. Norton & Company, 1999. 23.

¹⁰⁶ Rivera, Diego. My Art, My Life: an Autobiography. New York: The Citadel Press, 1960. 183.

Rubyan-Ling, Saronne "The Detroit Murals of Diego Rivera." *History Today. 46.* April 1996, 4. ProQuest Research Library. 34. Accessed 6/23/13.

¹⁰⁸ Downs, Linda Banks. *Diego Rivera: The Detroit Industry Murals*. New York and London: W. W. Norton & Company, 1999. 23.

¹⁰⁹ Ibid. 31.

¹¹⁰ Ibid. 29.

Modern museums evolved out of princely collections from the sixteenth, seventeenth, and eighteenth centuries. These collections, arranged inside glass cases, hung on walls, and displayed in halls or galleries designed expressly for them, framed the figure of the prince as authoritative and powerful. Art Historian, Carol Duncan explains that as they became public institutions, museums organize social rituals and cultural artifacts that are ideologically beneficial to modern states. In other words, public museums frame the state and the nation in much the same way that princely galleries framed the monarchy, as a display of power.

Cultural historian Tony Bennett expands Duncan's assertions and argues that museums and other institutions of exhibition form a "complex of disciplinary and power relations" where the "messages of power" were inscribed and broadcast into the public arena. Importantly, Bennett expands Foucault's analysis of public spectacle moving into a private, enclosed carceral domain of surveillance into places of exhibition that combine the "functions of spectacle and surveillance. In He argues that "exhibitionary forms ... simultaneously [order] objects for public inspection and [order] the public that inspected. They do so through "the arrangement of relations between the public and exhibits so that, while everyone could see, there were also vantage points from which everyone could be seen.

¹¹¹ Duncan, Carol. "From the Princely Gallery to the Public Art Museum: The Louvre Museum and the National Gallery, London." In *Representing the Nation: A Reader*. Edited by David Boswell and Jessica Evans. 304-331. London and New York: Routledge, 1999.

¹¹³ Bennett, Tony. "The Exhibitionary Complex." In *Representing the Nation: A Reader - Histories, Heritage and Museums*. Edited by David Boswell and Jessica Evans. 332-361. London and New York: Routledge, 1999. Foucault, Michel. *Discipline & Punish: The Birth of the Prison*. 2nd ed. Translated by Alan Sheridan. New York: Vintage Books, 1995.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

functions of spectacle and surveillance are combined. 117 Bennett calls this "the exhibitionary complex." 118 To put it another way, Bennett argues that institutions of exhibition have a twofold purpose in the construction of the public. First, since the public identifies with power in exhibitions, they then "become the subjects rather than the objects of knowledge." 119 At the same time, he points out that:

> In seeing themselves from the side of power, both the subjects and the objects of knowledge, knowing power and what power knows, and knowing themselves as (ideally)known by power, interiorizing its gaze as a principle of self-surveillance and hence, selfregulation. 120

Here, Bennett explains how the exhibitionary complex regulates the public, through their emotional identification with power and as bodies able to be seen by power. In a context such as a museum, then, the public's identity as part of the nation allows them to perceive themselves as owners of national objects displayed in museums; hence their interests align more closely to the interests of those who have control of power, achieving the type of relationship 1920s employers had sought to cultivate with labor. Accordingly, museums become sites of ideas about nationalism, power, and citizenship. Museums however, organize more than the viewing public.

As spaces of power, they also create meaning of objects displayed within. Historian Jan Golinski points out that as early as the eighteenth century, the power of museums shaped perceptions of their objects. He states, "Above all, order was displayed in the arrangement of individual specimens: Their rigorous placement in relation to one another made manifest the

¹¹⁷ Ibid.

¹¹⁸ Ibid. 335-337.

¹¹⁹ Ibid. 335.

¹²⁰ Ibid.

possibility of a classification that was thought to correspond to a 'natural' order in the world." ¹²¹ Although Golinski specifically analyzed placement of scientific objects in museums, his argument holds true for all museum artifacts whether they are paintings or laborers. The ordering aspect of artifacts occurs as a result of the evolution of object display from chaotic and cluttered cabinets to very specifically organized and orderly arrangements. ¹²² The arrangement of museum objects can "signal various conceptions of the order that is believed to exist in the natural world and of the human relationship to it." ¹²³ Not only do museums construct the public through the exhibitionary complex, but they also naturalize and order displayed objects. In the early 1930s, the Detroit Institute of Arts commissioning the Rivera mural sought not only to bring new art and increased patronage to the museum but worked to form public perceptions about their relationship with corporations, mass production, and labor through Diego Rivera's Detroit Industry Murals.

Located in an enormous and cavernous space, the Detroit Industry Murals fill the walls from ceiling to floor with different sizes of panels. The largest panels, on the north and south walls of the room pay tribute to industry with depictions of interior spaces of the Ford River Rouge complex. Absorbed by their labor, workers' bodies bend gracefully against the hard surfaces of immense machinery winding around and towering over them. Molten steel bursts into the scene from images of a blast furnace and foundry operations, backlighting workers and

. .

Golisnsky, Jan. *Making Natural Knowledge: Constructivism and the History of Science*. Cambridge and New York: Cambridge University Press, 1998. 97.

¹²² Duncan, Carol. "From the Princely Gallery to the Public Art Museum: The Louvre Museum and the National Gallery, London." In *Representing the Nation: A Reader*. Edited by David Boswell and Jessica Evans. 304-331. London and New York: Routledge, 1999.

Golisnsky, Jan. *Making Natural Knowledge: Constructivism and the History of Science*. Cambridge and New York: Cambridge University Press, 1998. 98.

machines. Inserted here and there among the workers are stern images of their employer, Henry Ford, his son Edsel, and other employee supervisors. Smaller panels bordering the room acknowledge other advances in science and technology with representations of medicine and airplanes, among others. The paintings give a sense of human motion contrasting against the otherwise still museum environment. Yet like a museum, Rivera's depiction of the factory is one of intense order and organization - each worker and each machine had their own job and place.

In contrast to the Rivera murals teeming with human bodies are photographs of the Ford River Rouge complex taken by modernist Charles Sheeler, whose iconic "Criss-Crossed Conveyors" of the Ford Rouge is emblematic of fascination with technology to the exclusion of the humans who build and labor with it. Thus, as art historian Terry Smith notes, "Sheeler and Rivera … become representatives of two contending artistic, cultural, social, even political orders." Smith's point is that the works produced by these two artists are disparate in style, overall content, and message. Whereas Sheeler's works celebrates the cathedral of industry



Figure 1: Charles Sheeler; Criss-Crossed Conveyors. Ford Rouge Plant 1927.

^{2/}

¹²⁴ Smith, Terry. *Making the Modern: Industry, Art, and Design in America*. Chicago: University of Chicago Press, 1993. 201.

without bodies, Rivera's naturalizes the industrial order and the powerful bodies that drive it.

The content of *The Detroit Industry Murals* painted by Diego Rivera in the Detroit Institute of Arts examines powerful bodies, but not necessarily in ways that we might expect. 125

The court where Rivera created his famous murals was once a garden space in the Detroit Institute of Arts, used by the art patrons of Detroit, described by Rivera as "Beautiful, well-dressed ladies" who later "complained about the loss of their peaceful, lovely garden, which had been an oasis in the industrial desert of Detroit." ¹²⁶ In previous works, Rivera worked toward a harmony between the building's architecture and his art, but felt doing so wasn't possible in Detroit as he was painting "a new life which was characterized by masses, machines, and naked mechanical power," which was not compatible with the baroque "refinements" of the museum's architecture. ¹²⁷ Unlike the Century of Progress fair, Rivera did not conflate the past, present, and future. He preferred to represent the present as a break with the past, and he did not see industry as overcoming nature, but rather saw the two working together in concert.

Henry Ford shared Rivera's harmonious view of nature and industry. Historian Greg Grandin states, Ford's belief "that mechanization marked not the conquest but the realization of nature's secrets and thus the attainment of the pastoral ideal that history is best understood as the progress of this realization, of the gradual liberation of humans from the soul-crushing toil; and that America has a providential role to play in world history in achieving this

¹²⁵ It is important to note here that there are many different readings of the murals, which tend to change in tone over time. My interpretation often falls against received readings of the murals.

¹²⁶ Rivera, Diego. *My Art, My Life: an Autobiography*. New York: The Citadel Press, 1960. 194.

¹²⁷ Ibid. 190.

liberation." ¹²⁸ Of course, for Ford workers, such harmony would be achieved, not during the working day, but only after. ¹²⁹

To support his belief in the accord of nature and technology, Rivera included geology and human history in the murals, themes not required by the commission, which clearly depict flows from nature ending in technology, a theme that the Ford Exhibition at the Chicago Century of Progress Exposition would repeat. ¹³⁰ In his autobiography, Rivera wrote that Edsel Ford and the Detroit Art Commission had only "one condition" regarding the artwork they were commissioning. That condition was that Rivera "should not limit [himself] to steel and automobiles but take in chemicals and pharmaceuticals, which were also important in the economy of the city." ¹³¹ Ford wanted to avoid potential charges of "partiality toward the industry served by his father and himself" and he desired a "full tableau of the industrial life of Detroit." ¹³² The inclusion of nature themes helped Rivera expand beyond the automobile industry. In order to paint a full portrait of Detroit, Rivera asked to increase the size of the commissioned murals from two walls as originally agreed, to all four of the garden walls.

Although the Detroit Industry Murals cover all four walls in the court and each wall contains elements contrasting workers with management or engineers, the North and South Walls, with their large center panels, best portray Rivera's criticisms of differences between the working lives of labor and management. The charge leveled against industrial manufacturing by

¹²⁸ Grandin, Greg. Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City. New York: Picador, 2009.

¹³⁰ Downs, Linda Banks. *Diego Rivera: The Detroit Industry Murals*. New York and London: W. W. Norton & Company, 1999

¹³¹ Rivera, Diego. *My Art, My Life: an Autobiography*. New York: The Citadel Press, 1960. 182.

¹³² Ibid.

the murals concerns the relationship between labor and management, where management holds all the control and power over the technology and the workforce, which he portrays as strong, muscular, diverse, and working in harmony. Although Rivera was clearly taken with the technologies used at the Rouge complex, an additional critique put forth by the paintings is the manner in which technology overshadows labor. Together, these visual criticisms in the Detroit Industry Murals forcefully lay bare the true messiness of everyday work experienced by 1930s manufacturing labor.

The largest panel on the North Wall of the murals renders the processes of forging and manufacturing components of the interior aspects of Ford automobiles, most prominently, the 1932 Ford V8 engine. The new V8 and the technologies of mass production would later become crucial components of the Ford Exhibition at the Chicago Century of Progress Exposition.

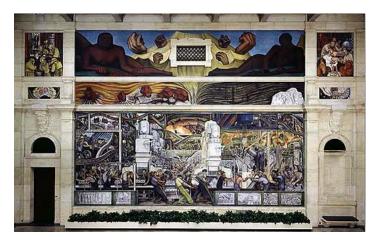


Figure 2: The Detroit Industry Murals - North Wall

Downs, Linda Banks. *Diego Rivera: The Detroit Industry Murals*. New York and London: W. W. Norton & Company, 1999. See for greater details on Rivera's fascination with industrial machines.

When looking at the largest panel of the North Wall, titled "Production and Manufacture of Engine and Transmission," the eye is immediately drawn to the enormous silver multiple spindle machines (used to ream engine blocks for valve parts) towering god-like over the workers. Although these and other machines and technologies at first appear to dominate the panel, it is actually the workers who are in the foreground, especially those performing the important motor assembly operations in the lower third of this panel section.

Rivera composed the workforce of many races on this panel, but particularly in the foreground. They are all male with strong, muscular bodies, working in concert with each other and with the surrounding, towering machines. Thinking about the representation of bodies, feminist scholars Ava Baron and Eileen Boris observe that, "There is a deep connection between particular kinds of work and the bodily characteristics of the workers required to perform that work. The class, gender, and racial characteristics of workers and the work they do have reinforced each other." ¹³⁴ In painting strong, muscular physiques of these workers, Rivera demonstrates the strength of the working-class, through an affirmation of factory workers as powerfully constructed. However, his North Wall portrayal of labor excludes women both from the mural panel and from factory labor. No women are visible on the panel and the bodily characteristics Rivera used to portray the type of workers "required to perform that work" are brawny, male, and composed of multiple races.

Art historian Linda Bank Downs observes that "Rivera viewed Detroit's multiracial workforce as the indigenous people of the city's industrial culture and as such its link to the

¹³⁴ Baron, Ava and Eileen Boris. "'The Body' as a Useful Category for Working-Class History." *Labor: Studies in* Working-Class History of the Americas, 4.2 (2007).

civilization of the future."¹³⁵ In other words, Rivera was not simply painting workers of Detroit, but he was encompassing all potential industrial workers across the globe, united in their labors. Hence globalization was a pivotal piece of the murals. Despite Rivera's optimism about global labor unity, even his murals disconnect the seemingly cohesive workers.

The reality of work in Detroit's automotive industry was far from Rivera's idealistic depiction of labor harmony. Ford's workforce was diverse; however it was not unusual for jobs to be segregated by race, gender, or ethnicity. The practice of segregating jobs by race has strong roots in the northern migration of southern blacks during World War I, as historian Steve Babson puts it, "Detroit's employers needed black workers – but only to fill those jobs so stigmatized by low wages or harsh working conditions that native-born whites generally avoided the work." He continues, "In the past, employing newly arrived immigrants had often been cheaper. Now blacks would fill the same role." Consequently, the type of work allowed for divisions of workers by race and ethnicity. But despite the apparently cohesive workforce painted by Rivera, even he segregated workers visually through beams, floors, ceilings, or conveyors, creating partitions between groups of workers in the North Wall panel mural.

An example of Rivera's separation of workers is in his rendering of the blast furnace operations, work usually relegated to blacks and immigrants due to its unpleasant nature.

Workers there were subjected to intense heat and thick clouds of soot-filled smoke. Although Ford's Rouge plant was better integrated than most auto factories of the time, "nearly half of

¹³⁵Downs, Linda Banks. *Diego Rivera: The Detroit Industry Murals*. New York and London: W. W. Norton & Company, 1999. 128.

¹³⁶ Babson, Steve. *Working Detroit: The Making of a Union Town*. Detroit: College of Urban, Labor, and Metropolitan Affairs and Wayne State University Press, 1986. 41.

Ford's black employees were still concentrated in the foundry." ¹³⁷ Blast furnace processes, separated by conveyors and wall and floor beams, are pictured in the top third of the panel, distinctly apart from the motor assembly plant operations. Additionally, the perspective makes blast furnace workers appear much smaller than workers in the foreground, which contributes to a rendering of blast furnace workers as less vital to the assembly process than assembly line workers. Hence, blacks and immigrants who generally hold blast furnace jobs are also less than the while male workers that normally filled line work positions.

Yet the North Wall panel asserts that mass production workers nonetheless wielded strength together in their varied work positions and races, articulated through his portraits of physically powerful labor. It is a utopian vision of many races working together in social harmony, but a masculine world with a gendered exclusion of working women.

The North Wall panel represents a strong multiracial male working-class and a close reading of the South Wall continues this discussion. The large South Wall panel largely pictures



Figure 3: The Detroit Industry Murals - South Wall

¹³⁷ Ibid. 42.

assembly operations of the exterior aspects of an automobile, such as the body. Together, these two panels map out much of Rivera's arguments regarding industrial manufacturing, labor, and management.

Although Rivera painted a racially diverse workforce working together, women workers were physically separated by the painter and in their day to day work. The only representations of female labor on the two largest panels are on the South Wall. Women sewing upholstery are on the upper right corner of the panel. There are also additional women workers painted into the lower right predella panel, shown leaving for the day, walking across the bridge over Miller Road. Such minimal rendering of women workers indicates that a) gender was a less important issue to Rivera than race and b) fewer women than men were employed at the Rouge complex as laborers in the early 1930s. 138 The embodiment of women workers contrasts sharply with his depictions of male workers. Much like the blast furnace labor, he locates women workers in a small section in the right upper corner of the panel. They are further diminished against the size of the stamping press in the foreground. Their bodies are not strong and muscular, nor do they work in concert with the prominent technologies, but engage in the smaller, more detailed work of sewing. Instead, they are seated with their heads bent over their work. This is a more subdued representation of labor than his vibrant male workers, so his murals continue to reinforce identity of the laboring body as male, "represented by bulging biceps and prodigious strength," thus excluding women as an important part of Rivera's powerful working-class. 139 Through his depictions of bodies, Rivera naturalized industrial order.

¹³⁸ Ibid. Women workers are also featured in the smaller East and West Walls.

¹³⁹ Baron, Ava and Eileen Boris. "'The Body' as a Useful Category for Working-Class History." Labor: Studies in Working-Class History of the Americas, 4. 2 (2007). 24.

Like on the North Wall, conveyors, beams, and floors divide the South Wall panel into disparate sections, once again dividing the massive workforce into disparate parts. Not only are the South Wall workers divided, but they are also closely supervised. First, workers are supervised by their employer. Rivera included the image of Edsel Ford in the bottom, right-hand corner (as well as images of Henry Ford in the predella panels along the bottom of each mural). 140 Edsel Ford is standing with his arms crossed and appears to be looking directly back at the viewer. A 1933 article from The New Republic indicated that he "looks scared," hinting that somehow he feared the many workers laboring around him. 141 Yet the look on Edsel Ford's face could also be one of intensity, rather than fear, as if he is focused on something of importance, such as the production processes surrounding him. Second, Rivera included a portrait of Henry Ford's assistant in charge of production, M.L. Bricker as a stern faced manager overlooking work on body panels in the left side of the South Wall panel. In life, Mr. Bricker held a reputation for speeding up the assembly line. 142 The inclusion of his portrait as part of the mural substantiates the sense that the laboring of the workers was strictly controlled by Ford management. Third, a very large group of tourists stand and watch the assembly process in the center of the South Wall, indicating that even in the early 1930s tourists were guided into the factory to view the production process, which included viewing the workers. The final observers of the workers in the South Wall panel are the public at the Detroit Institute of Arts, who are as dwarfed by the panels as the represented workers are diminished by the towering technologies and constant surveillance.

¹⁴⁰ Predella panels are usually found around the bottom of an alter.

¹⁴¹ Wilson, Edmund. "Detroit Paradoxes." *The New Republic,* July 12, 1933. 230-33.

¹⁴² Downs, Linda Banks. *Diego Rivera: The Detroit Industry Murals*. New YorkLondon: W. W. Norton & Company, 1999. 148.

Both North and South Wall depictions of labor show all the workers deeply engrossed in their particular part of the production process. None of them looks out of the panels, but are focused on the job at hand, giving the workers an industrious appearance. Contrary to the way he painted labor, Rivera pictured management boldly looking out of the panels at the viewers. Such a portrayal indicates the amount of control over their own "job" held by those in charge — they could look away from an individual operation in order to survey the entire process, which is deeply in contrast to that of the average worker who could not afford to look away from his or her job in a factory where the assembly line created constant motion and dictated the pace of the work. Thus, Rivera's depictions comment on how labor has absolutely no say in the production process, let alone in performing their individual jobs.

Additionally, in the murals, not only are human managers overlooking labor's efforts, but machines as well. Rivera was aware of the grinding pace for labor created by new technologies and machines employed in the factory. The North and South Wall panels both contain images of gigantic machines and multiple conveyors towering above and winding through the ranks of workers. On the right side of the South Wall panel Rivera painted a colossal stamping press nearly filling the panel from top to bottom, dominating the panel and the workers near the bottom. According to Downs:

Rivera saw the stamping press and its function as parallel to the cosmic function of Coatlicue [Aztec goddess of creation and war], who through her tremendous power creates humanity and in return demands human sacrifice to maintain universal order. 143

. .

¹⁴³ Downs, Linda Banks. *Diego Rivera: The Detroit Industry Murals*. New York and London: W. W. Norton & Company, 1999. 144.

By modeling his image of the stamping press after an Aztec god, Rivera also imbued that piece of machinery with god-like qualities, elevating it above the humans tending it.

The sheer size and quantity of machines and technologies in the murals indicates an overshadowing of labor by machines, even though capitalism was built on the backs of labor. As Karl Marx put it, "Capitalist production, therefore, develops technology, and the combining together of various processes into a social whole, only by sapping the original sources of all wealth-the soil and the labourer." To put it another way, the use of machines and technology obscures the value of labor in capitalist production. Although Rivera worked to foreground human labor in the Detroit Industry Murals, the finished effect puts labor at the feet of god-like machines and technologies run by the company.

The *Detroit Industry* murals did work to shine a spotlight on the unity of labor as the path to national progress and a workers' utopia, in contrast to Ford's exhibit during the summer of 1934 in Chicago at the Century of Progress Exposition, where the focus was on technology, instead of on labor, much like it was in the Sheeler photographs of the River Rouge complex. Rivera's murals succeeded in materializing work and highlighting human bodies. It was a persuasive representation of a unified workforce, revealing their potential power to challenge the disciplined factory system and corporate power even as it worked to divide them. But in the end, the placement of Rivera's murals inside the Detroit Institute of Arts instead displayed an ordered and obedient labor force to the public within parameters of a naturalized hierarchy with management at the top of the industrial order, then dominant machines, followed by a

.

¹⁴⁴ Marx, Karl. Translated by Ben Fowkes. *Capital: A Critique of Political Economy, Volume I.* New York and London: Penguin Books, 1976. 492.

physically strong, racially diverse male labor, with marginalized female labor at the bottom. Supervision by stern management of this naturalized and compliant labor force gave a sense of orderly labor, even though their represented unity and muscular bodies should have given them power. But Ford's technology would ultimately work to discipline labor, rather than liberate them from toil, threatening to destroy their humanity and freedom. Messages of disciplined labor would be produced two years later at Ford's exhibition at the Chicago Century of Progress Exposition.

World's Fairs and the Century of Progress Exposition

The Ford Motor Company exhibit at the 1934 Century of Progress Exposition in Chicago displayed an industrial system, and its attending assembly line, as utopian. The Century of Progress exposition was not the first world's fair to make an argument regarding the role of industry, labor, and technology in shaping society; it was the latest part of a succession of fairs that naturalized and ordered objects, including bodies, for public observation. The first world's fair was in 1851 and they continue globally into the present and have been key sites for the articulation of the interests of the industrialists who have been the driving forces behind them.

London's Great Exhibition of the Works of Industry of All Nations, often called the Crystal Palace Exposition of 1851, was arguably the first world's fair. 145 Organized by Prince Albert and "cultural reformer" Henry Cole, the Crystal Palace Exposition, so named after its enormous glass and iron building, was, according to Robert W. Rydell, notable historian of World's Fairs, "in some ways a union of trade or industrial expositions ... and art exhibitions." ¹⁴⁶ In a time of rapid industrialization, technology and art came together at the Crystal Palace Exposition. In fact, social critic and philosopher Walter Benjamin suggests "industrial exhibitions [were] secret blueprint for museums." ¹⁴⁷ He links industrial exhibitions to

¹⁴⁵ Rydell, Robert W. World of Fairs: The Century of Progress Expositions. Chicago and London: The University of Chicago Press, 1993. And Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, Fair America: World's Fairs in the United States. Washington and London: Smithsonian Institution Press, 2000. And Wilson, Mabel O. Negro Building: Black Americans in the World of Fairs and Museums. Berkeley, Los Angeles, and London: University of California Press, 2012. And also Boisseau, T.J. and Abigail M. Markwyn, eds. Gendering the Fair: Histories of Women and Gender at World's Fairs. Urbana, Chicago, and Springfield:. University of Illinois Press, 2010. ¹⁴⁶ Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, Fair America: World's Fairs in the United States.

Washington and London: Smithsonian Institution Press, 2000. 14. ¹⁴⁷ Industrial exhibitions were the public displays of inventors', innovators', and manufacturers' products offered for sale or for manufacture. Benjamin, Walter. The Arcades Project. Translated by Howard Eiland and Kevin Mc Laughlin. Cambridge, MA. and London: Belknap Press of Harvard University Press, 1999. 176.

the practice of museums displaying objects. Thus, he saw museums as complicit in promoting the consumption of "things" to the public. Indeed, as historian David Nye points out, "Since the Crystal Palace Exposition of 1851, fairs had served as focal points for new technologies, and they offered the most effective way to reach a large public." ¹⁴⁸ In addition to selling to the public a desire to own objects, world's fairs "have reflected profound concerns about the future and deflected criticism of the established political and social order." ¹⁴⁹

Rydell successfully argues that, "Like the Crystal Palace Exhibition, the fairs that were staged in its aftermath served to stave off political unrest at home and to build support for specific national imperial policies." ¹⁵⁰ In the U.S. the 1876 Philadelphia Centennial International Exhibition and The World's Columbian Exposition of 1893 in Chicago are only two of many excellent examples of world's fairs whose meaning-making included optimistic visions of the future and while obfuscating present problems. Both were held during tumultuous times. The Philadelphia Centennial ran when the post-Civil War U.S. was still working to define a new national identity in the reunited Union and the World's Columbian Exposition took place when intensified industrialization disordered social relations. These historical moments in time came with economic depressions and recessions that stirred up labor unrest, which emerged in strikes of all sorts - from shoemakers, to laundresses, to miners and rail workers. ¹⁵¹ World's

.

¹⁴⁸ Nye, David E. *Electrifying America: Social Meanings of a New Technology, 1880-1940.* Cambridge, MA and London: The MIT Press, 1995. 33.

Rydell, Robert W. World of Fairs: The Century of Progress Expositions. Chicago and London: The University of Chicago Press, 1993. 5.

¹⁵⁰ Rydell, Robert W., John E. Findling, and Kimberly D. Pelle. *Fair America: World's Fairs in the United States.* Washington and London: Smithsonian Institution Press, 2000. 8.

Some examples are the New England Shoemakers' Strike (1860); Troy New York, Collar Launderesses' Strike (1869); Coal miners' strikes (1875); Great Railroad Strike (1877); Union Pacific Railroad Strike (1884); and Buffalo Switchmen's Strike (1892).

fairs would serve as a "shapely actualization of order, an order invested in a clearly demarcated race, gender, and class hierarchy." 152

The 1876 Philadelphia Centennial, organized to celebrate the nation's first 100 years, would work to define the nation through notions of race. Wealthy capitalists, the nation's elite, and the U.S. government made up fair administrators and financiers. This group of people exercised authority over who would and would not be represented at the fair. Visual culture scholar Mabel O. Wilson demonstrates that "[racial] social order was evident in exhibition content, in pavilion placement, and in plans of the fairgrounds themselves," as well as in "admission policies and who could move freely around the grounds and within the exhibition halls." ¹⁵³ Only ten years after the abolition of slavery, attempts by black Philadelphians to include their contributions to the "founding of the nation" were "thwarted" by fair administrators, sending a message that "the freedoms and privileges guaranteed with citizenship were still inaccessible." ¹⁵⁴ Rydell agrees, noting that the "more Anglo-Saxon" nations had preferential placement of their exhibits, especially within the Main Building and Machinery Hall, the two largest buildings at the fair. 155 In short, black Americans were largely excluded from participation and non-white foreigners were relegated to less visible positions within the fairgrounds and buildings. Exclusion and poor exhibit placement by race built a racial hierarchy at the Philadelphia Centennial.

¹⁵² Nye, David E. *Electrifying America: Social Meanings of a New Technology, 1880-1940.* Cambridge, MA and London: The MIT Press,1995. 34.

¹⁵³ Wilson, Mabel O. *Negro Building: Black Americans in the World of Fairs and Museums*. Berkeley, Los Angeles, and London: University of California Press, 2012. 25.

¹⁵⁵ Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs in the United States.* Washington and London: Smithsonian Institution Press, 2000. 23.

Not only did this fair produce meanings regarding race, but likewise, meanings about gender. Women too were relegated to the sidelines. The Centennial Exhibition administrators did allow a Women's Pavilion to be built, elevating women slightly above black citizens, but it was only included after a committee of women raised enough money to pay for it. This building put "women's arts and inventions" on display, but only the works of white women, as black women were completely excluded. White women were allowed to participate, but not as equals to white men at the fair and black women were not represented at all. Not only were representations of race and gender unequal at the fair, but class representations were similarly included in the hierarchy of the fair.

The main attraction of the 1876 fair was the Corliss Engine, a marvelous technology that powered all of Machinery Hall. Although the engine itself was located in Machinery Hall, the steam used to power it came from a boiler housed in a separate building. ¹⁵⁸ By separating the steam operations from the engine itself, fair developers hid the labor necessary to run the engine from fairgoers' eyes. The Corliss engine appeared to be tended by one lonely engineer, a professional, rather than a laborer. ¹⁵⁹ The sweaty, physical labor required to run the engine was hidden in ways comparable to the exclusion of black contributions. Only elite occupations such as inventor and engineers were seen to have furnished value to the nation, not the backs and

. .

¹⁵⁶ Boisseau, T.J. and Abigail M. Markwyn, eds. *Gendering the Fair: Histories of Women and Gender at World's Fairs*. Urbana, Chicago, and Springfield: University of Illinois Press, 2010. 151.

Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs in the United States.* Washington and London: Smithsonian Institution Press, 2000. 23-24.

¹⁵⁸ Ferguson, Eugene S. "Power and Influence: The Corliss Steam Engine in the Centennial Era." Annals of the New York Academy of Sciences, 424 (May 1984): 225–246.
¹⁵⁹ Ihid.

hands of laborers who were relegated to such a low position in the hierarchy they were not even visible.

Similarly, the World's Columbian Exposition of 1893 in Chicago, staged to celebrate the four hundredth anniversary of Columbus landing in the New World, ¹⁶⁰ continued building hierarchical distinctions between citizens and others living in the United States. Dubbed, the "White City," this fair articulated a vision of the nation as one civilized and led by elite white men during a time of increasing U.S. economic expansion in foreign lands, massive immigration, continued efforts by African Americans for equal national inclusion, challenges by women to the cult of domesticity, and violent labor strikes. ¹⁶¹ Its neoclassical architecture extended the roots of the nation to ancient civilization and its elevation of electrification as a technology of the future, was "placed quite consciously at the apex of an evolutionary framework." ¹⁶² In other words, this nation stood higher on the steps of the progress of civilization.

Much like at the 1876 Philadelphia Centennial, black Americans were denied their own Pavilion to display African American achievements. As a compromise, fair managers agreed to schedule a special day for black artists and musicians to perform, in what was called "Colored People's Day." Once again, African Americans were excluded from full participation in the fair. Wilson states that "black history (and presence at the various world's fairs) would prove to

¹⁶⁰ Note: Buildings from this fair were burned down at the height of the Pullman Strike. It is speculated that Pullman strikers set the fires. Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs in the United States*. Washington and London: Smithsonian Institution Press, 2000.

¹⁶¹ Ibid. 40. And Nye, David E. *Electrifying America: Social Meanings of a New Technology, 1880-1940.* Cambridge, MA and London: The MIT Press, 1995. 33.

¹⁶² Nye, David E. *Electrifying America: Social Meanings of a New Technology, 1880-1940.* Cambridge, MA and London: The MIT Press, 1995. 35.

¹⁶³ Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs in the United States.* Washington and London: Smithsonian Institution Press, 2000. 40.

be a rupture in the continuity of the nation's narrative of freedom, liberty, and equality." ¹⁶⁴
Thus, the exclusion of black Americans from the fair kept the imagined national identity firmly embedded as white. Additional displays of the racist thinking of the day were prevalent all along the Midway, where mock villages of "primitive" and "savage" people "was intended to convince white fairgoers of their racial superiority." ¹⁶⁵ Women, on the other hand, had a somewhat expanded role in the Columbian Exposition, ranging from a Board of Lady Managers and an "impressive" Woman's Building. But similar to the 1876 Fair, black women faced complete exclusion due to the racist policies of the Board. ¹⁶⁶

An additional similarity between the two fairs was who could visit the fair. In his seminal work on electrification, David Nye points out that:

While attendance at a world's fair was open to all, the expense and considerable time required made a visit impossible for many working-class people. Those who traveled any distance to reach them were overwhelmingly middle- and upper-middle-class. ¹⁶⁷

Not only would the imagined national identity be one of whiteness, it was also one of middle-classness. Yet many working-class citizens labored to construct the fairgrounds and operate fair infrastructure. In these ways, local working-class people were part of the fair while being excluded from the national imaginary.

¹⁶⁵ Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs in the United States.* Washington and London: Smithsonian Institution Press, 2000. 39.

¹⁶⁴ Wilson, Mabel O. *Negro Building: Black Americans in the World of Fairs and Museums*. Berkeley, Los Angeles, and London: University of California Press, 2012. 130.

¹⁶⁶ Boisseau, T.J. and Abigail M. Markwyn, eds. *Gendering the Fair: Histories of Women and Gender at World's Fairs*. Urbana, Chicago, and Springfield: University of Illinois Press, 2010. 3-5.

¹⁶⁷ Nye, David E. *Electrifying America: Social Meanings of a New Technology, 1880-1940.* Cambridge, MA and London: The MIT Press, 1995. 34.

The meaning-making of these two fairs had a strong focus on race, gender, and class.

Citizens whose physical or economic characteristics did not fit into the national narrative desired by the white politicians, manufacturers, and social elites who "set the ideological tone for the expositions" faced battles for inclusion or near invisibility. Likewise, the 1934 Chicago Century of Progress Exposition worked to create a narrowly defined national identity, but unlike the previous fairs, this identity would rest more firmly on ideas of progress tightly intertwined with established ideas of industrialism.

The 1934 Chicago fair wanted to renew faith in a failing capitalism, as its organization by industrialists demonstrates. Rydell states, "Confronted once again with the problem of shoring up popular faith in both the American political and economic systems, leading political, business, and intellectual authorities pumped new life – and lots of money – into the world's fair medium." ¹⁶⁹ American industrialists and civic boosters built the fair on the premise that the achievement of progress would be through corporate technological innovation. ¹⁷⁰ The idea of progress produced through technology was not (and is not) a new one. Belief in technology as a major force in social progress materialized with the Enlightenment in the eighteenth century. Science and technology were perceived as "powerful agents of social change." The Industrial Revolution brought concerns and enthusiasms over the possibilities of the uses of technology for national progress in the United States. Some, Thomas Jefferson included, believed that

_

¹⁶⁸ Wilson, Mabel O. *Negro Building: Black Americans in the World of Fairs and Museums*. Berkeley, Los Angeles, and London: University of California Press, 2012. 6.

¹⁶⁹ Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs in the United States.* Washington and London: Smithsonian Institution Press, 2000. 11.

¹⁷⁰ Rydell, Robert W. *World of Fairs: The Century of Progress Expositions.* Chicago and London: The University of Chicago Press, 1993. And Rydell, Robert W., John E. Findling, and Kimberly D. Pelle. *Fair America: World's Fairs in the United States.* Washington and London: Smithsonian Institution Press, 2000.

technology should be used to improve the human condition, which would have the effect of giving the nation economic independence. Others, such as Alexander Hamilton and Tench Coxe, believed that in order to achieve economic autonomy, implementing technology in factories rather than in small shops would result in greater progress for the nation. ¹⁷¹ Thus, the Century of Progress assumption that technological innovation organized by corporations that celebrated technology is analogous to arguments put forth by industrial boosters during the early stages of the Industrial Revolution. Each of these arguments, one in the eighteenth century and the other in the twentieth, advocated less control of the production process for labor and greater control by employers, control that would be achieved through the application of machinery in the workplace. Similar to the employer/labor relationship, the connection between control of labor and technology was also on display at the Chicago exposition.

exhibits that put technology on display in the form of processes as well as products. ¹⁷² The role of corporations in planning and building world's fairs changed since the Columbian Exposition of 1893, more individual corporations were involved, and therefore it was less a story of industrialists and more one of corporations, where private enterprises had built "only 9 of the approximately 137 exposition structures." In contrast, during the run of the 1933 fair, twenty major corporations built more than simply twenty structures; they expanded their participation

¹⁷¹ Smith, Merritt Roe and Leo Marx, eds. *Does Technology Drive History? The Dilemma of Technological Determinism.* Cambridge, MA and London: The MIT Press, 1994. Also see Cowan, Ruth Schwartz. *A Social History of American Technology.* New York: Oxford University Press, 1997.

¹⁷² Rydell, Robert W., John E. Findling, and Kimberly D. Pelle, *Fair America: World's Fairs in the United States.* Washington and London. Smithsonian Institution Press, 2000. 81.

to the point of having their own miniature museum/industrial complexes. ¹⁷³ Since the Crystal Palace Exposition in 1851, world's fairs were spaces where innovators, inventors, and manufacturers exchanged technical knowledge, however by the 1930s, world's fairs functions expanded as they became places for public consumption and corporate public relations.

According to corporate public relations historian Roland Marchand, major American corporations "decisively altered the content and style of their displays. ¹⁷⁴ Rydell asserts, "From the beginning, the century-of-progress expositions were conceived as festivals of American corporate power that would put breathtaking amounts of surplus capital to work in the field of cultural production and ideological representation." ¹⁷⁵ The elaborate pavilions erected by industrialists told the stories of the companies just as they told the stories of processes and products. ¹⁷⁶ As Marchand put it, during nineteenth century fairs, corporations brought their products to world's fairs; then it brought its factory to the fair with processes in early twentieth century fairs; and by the time of the 1934 fair, corporations "sought to display its corporate image." ¹⁷⁷

But the corporations, processes, and products were not the only entities on display. The industrial exhibits also featured live people as part of the production processes. By representing live people on display "working," labor in the production process becomes a performance. The cultural work accomplished by public performance of labor at the exposition demonstrated a

¹⁷³ Ibid. 133.

¹⁷⁴ Marchand, Roland. *Creating the Corporate Soul: The Rise of Public Relations and Corporate Imagery in American Big Business.* Berkeley, Los Angeles, and London: The University of California Press, 1998. 249.

¹⁷⁵ Rydell, Robert W. World of Fairs: The Century of Progress Expositions. Chicago and London: The University of Chicago Press, 1993. 116-119.

¹⁷⁶ Marchand, Roland. *Creating the Corporate Soul: The Rise of Public Relations and Corporate Imagery in American Big Business*. Berkeley, Los Angeles, and London: The University of California Press, 1998.

¹⁷⁷ Ihid. 249.

reflection of corporations as wielders of the technological key that would push the nation forward into better times. Displayed working bodies, along with science and technology assured visitors that corporations would be pivotal in the economic turn-around through employment. Bodies of labor thus gave tours necessary authenticity, with clear cut divisions of class, race, and gender. A closer look at the Ford exhibition space during the fair opens these themes to greater inspection.

The Beautiful Factory: Ford at the Fair

Ford Motor Company's exhibition was not part of the fair during the first season. Ford did not participate in the fair until 1934, as Henry Ford discovered before the 1933 opening that General Motors intended to include a working assembly line in their exhibit. Reportedly angry, Ford pulled out of the fair altogether since he had planned a similar exhibit. However, due to the astonishing success of the fair in 1933, Ford decided to take part the following year, entering a complicated and fraught representational field for labor. Fair exhibitors aimed to sell their industrial processes alongside their products by highlighting processes used in their manufacture. At the Ford exhibit, achieving this goal included replications of labor in the form of assembly line excerpts using locally hired people to perform as labor, demonstrating the "number of industries and the variety of people entering into the building of a motor car." Only Ford's idea of labor was visible at the Ford exhibit in the exposition and this vision was very much about presenting the employer-labor relationship exclusively as Ford desired it to be – part of stable welfare capitalism, even though that relationship was part of the past, much

⁷⁰

¹⁷⁸ Findling, John E. *Chicago's Great World's Fairs*. Manchester: Manchester University Press, 1994. 136.

¹⁷⁹ "Your Part in the Ford Exposition." Ford Motor Company, 1934.

like the other relics included in the exhibit. ¹⁸⁰ In addition, the Ford Exhibit, through a contrast of historical artifacts and modern machines, trumpeted the value of manufacturing processes (and thus, the modern industrialist would make hold the power to make critical decisions for the nation) as the key element of the nation's way out of the Great Depression.

Covering eleven acres, with an astonishing four acres of indoor floor space, the Ford exhibit at the fair included the grandiose Ford Rotunda. ¹⁸¹ The notable Detroit architect Albert Kahn, who designed Ford's River Rouge plant, the General Motors building, and many other industrial sites in Detroit, was the designer. By December 31 of 1935, Albert Kahn Inc. was paid \$41,185.61, no small sum during the Depression, for work done in designing the Rotunda and its exhibits. Ford claimed The Rotunda, 900 feet long and 23 feet wide, to be the "largest single building" of the Chicago expo, with an overall cost of \$2,000,000 to erect. ¹⁸² The architectural design of the Rotunda had three parts that resembled several gears or cogs, rising twelve stories high at the center. The Rotunda gears were yet another indication of how machinery would bring the nation into a modern future. A souvenir guidebook for the Rotunda proclaims, "The structural design and interior decorations are in modern style. Predominant colors are deep blue and rustless steel." ¹⁸³ The modern style evincing national belief in industrialism as the impetus behind national growth and power, while the global blue and "rustless" steel

¹⁸⁰ Official Guidebook of the World's Fair of 1934. Chicago: The Cuneo Press, Incorporated, 1934. 135.

¹⁸¹ Ibid.

¹⁸² "Your Part in the Ford Exposition." Ford Motor Company. 1934. And Accounting Department Ford, "Departmental Communication," ed. L.E. Briggs (Folder: General File 1916-1946. Box 187. Accession 157. Controller's Office subseries, Rouge Division (Ford Motor Company) records series, Manufacturing Division (Ford Motor company) Operations records subgroup, Ford Motor Company Manufacturing records collects, Benson Ford Research Center, The Henry Ford., 1934.

¹⁸³ "A Visit to the Ford Rouge Plant." 24. Folder 951: Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford., 1937.

indicated a powerful worldwide economic presence of an American industry that would never again decay or break down as it had during the Great Depression.

The interior exhibits celebrated a modernity fueled by consumerism, imperialism, the expansion of industrialism and technological innovation contrasted with objects from the past. Rydell asserts that although Century of Progress Fair promoters valued "the marriage of science" and technology to the modern corporation" as the framework for rebuilding America, visions of imperial expansion "were never far removed from the consciousness of America's exposition organizers." As fairgoers walked along the grounds from the main entrance toward the Ford building they passed many "villages" of what were considered less civilized countries, such as an Irish, Italian, or Tunisian village. Located next to the Ford Exhibit at the fair was the Maya Temple, resplendent in yellow, green, and red "symbolic sculptured ornaments." It was a reproduced section of the Uxmal Nunnery from the Yucatan, filled with objects ranging from the Codex Tulane (a painted manuscript from Mexico) to shrunken heads and authentic Middle American women and girls in traditional costumes. The Official Guidebook for the Century of Progress Fair stated of the Maya Temple, "In its halls are relics of the artistic and engineering genius of the lost civilization of America." ¹⁸⁴ Here, fair promoter's claim the Yucatan's artistic and scientific ability for "America," common shorthand for the United States.

The juxtaposition of past and future highlighted business elites' vision of progress as disinvestment in labor – it was a move away from the use of large numbers of physical laborers toward more machine-oriented work requiring fewer workers in America – burgeoning deindustrialization. Middle-class fairgoers, blinded by the "beauty" of assembly, overlooked of

¹⁸⁴ Official Guidebook of the World's Fair of 1934. Chicago: The Cuneo Press, Incorporated, 1934. 138.

the ways such progress would reduce the amount of labor necessary for mass produced products, thus paring down the necessary number of workers needed to run manufacturing facilities, a chilling notion in a time of severe unemployment.

Throughout the exhibit, plaques, labels, and signs explained each operation and its contribution to the finished product. One sign at the Motor Assembly Display read: "Ford v-8 engine assembly – Sound design and simplicity provide ease of servicing at low cost. Simplicity of design easily accessible – nothing complicated – rapidly assembled." ¹⁸⁵ Some of the displays also contained a large letter referring back to scientific exhibits from the fair's Hall of Science. Displays there had signs explaining how the demonstrated scientific principles also had commercial applications that could be found in the Ford exhibit with the corresponding letter. 186



Figure 4: Quadricycle in the Henry Ford Room at Chicago

¹⁸⁵ Folder: Chicago Exposition, 1934: Box 2: Accession 450. Advertising records series, General Sales Department (Ford Motor Company) records subgroup, Ford Motor Company. The Benson Ford Research Center. The Henry

¹⁸⁶ Teague, Walter Dorwin. "Designing Ford's Exhibit at a Century of Progress." Folder: Chicago Exposition, 1934: Box 2: Accession 450. Advertising records series, General Sales Department (Ford Motor Company) records subgroup, Ford Motor Company Sales and Advertising records collection. The Benson Ford Research Center. The Henry Ford.1934.

Across the Rotunda's center space was a smaller wing holding a replica of Henry Ford's garage workshop where he devised his first motor vehicle. This section, known as "The Henry Ford Century Room," also included an early machine shop, along with then contemporary objects from the River Rouge Plant and historical objects from Henry Ford's museum at Dearborn.

This display illustrated "progress" from tools and pulleys driven by the steam powered engines of the past to the modern Ford-Johanssen Gage Blocks. Lectures given by tour guides of this exhibit pronounced that the objects on display showed "the impressive advances in manufacturing precision and accuracy during the past century." Nineteenth century machinery was disparagingly labeled crude and old-fashioned, while the lectures nudged visitors into the "modern" century with confirmations of contemporary superiority due to methods of "mechanical accuracy." ¹⁸⁷ This exhibit displayed advances in technology that were put to use in factories as process innovations and gave ideological support to the coming logics of globalization, as well as characterizing America as a nation with the capacity to invent and use modern technology.

¹⁸⁷ Folder: Chicago Exposition, 1934: Box 2: Accession 450. Advertising records series, General Sales Department (Ford Motor Company) records subgroup, Ford Motor Company. The Benson Ford Research Center. The Henry Ford.



Figure 5: Presenter in the Ford Rotunda

Five of the exhibit's eleven acres held gardens with an outdoor display called "Roads of the World." ¹⁸⁸ This display presented a history of highway construction since the "dawn of civilization," making a connection between Ford and the world. ¹⁸⁹ Like the rest of the displays contained in Ford's exhibit, the "Roads of the World" was an indirect marketing tool that also served to entertain middle-class fairgoers. In a letter to Henry Ford, another fairgoer wrote, "I must not forget to thank you for the Ford Gardens and the ride in a new V-8 which I certainly liked. If I ever can afford a car, believe me, it will certainly be a V-8..." ¹⁹⁰ This letter, only one among many whose writing claimed to desire to purchase a new Ford vehicle, was a testament to the advertising power of fair exhibits.

¹⁸⁸ "Ford at the Fair." In *New Ford V-8 Trucks pamphlet*: Folder: Chicago Exposition, 1934: Box 2: Accession 450. Advertising records series, General Sales Department (Ford Motor Company) records subgroup, Ford Motor Company Sales and Advertising records collection. The Benson Ford Research Center. The Henry Ford. , 1934. ¹⁸⁹ "Ford at the Fair." In *New Ford V-8 Trucks pamphlet*: Folder: Chicago Exposition, 1934: Box 2: Accession 450. Advertising records series, General Sales Department (Ford Motor Company) records subgroup, Ford Motor Company Sales and Advertising records collection. The Benson Ford Research Center. The Henry Ford. , 1934. ¹⁹⁰ La Gee, Shirley. "1934 Ford Exposition." Accession 6. Subject Files Box 36. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford.



Figure 6: Court of the World

The central section of the Rotunda is where the "Drama of Transportation" display stood. This display told a story of the evolution of wheeled vehicles, ranging from a recreation of an Egyptian chariot to the twenty-millionth Ford. Vehicles from other nations, even though they were from the past, were shown to be primitive in comparison to the contemporary Ford automobile. This display once again held up American technological advances as superior to technologies around the world. Above the vehicles hung flags from many nations. To reinforce the global argument of the display, revolving in the center was a "mammoth terrestrial globe" highlighting Ford concerns around the world.

This portion of the exhibit forged a globalized connection between Ford and the rest of the world. ¹⁹¹ Displays lined the walls of the building, demonstrating industrial processes and sub-assemblies used by automobile manufacturing facilities in the U.S. These displays introduced live performers into the exhibition. An exhibit of the motor assembly operation used

¹⁹¹ Teague, Walter Dorwin. "Designing Ford's Exhibit at a Century of Progress." Folder: Chicago Exposition, 1934: Box 2: Accession 450. Advertising records series, General Sales Department (Ford Motor Company) records subgroup, Ford Motor Company Sales and Advertising records collection. The Benson Ford Research Center. The Henry Ford. 1934.

at least two people who appeared as auto assembly workers. What sets this reproduction of an assembly operation apart from an authentic factory assembly is its isolation from a functional factory. An enactment of portions of the mass production process without the full assembly line does not adequately demonstrate the pressures and control exerted upon workers by the movement of the line itself, leaving fairgoers with a meretricious sense of the work as casual, clean, and comfortable. In her letter to Henry Ford, Mrs. Kopp noted, "We spent hours watching your skillful men, never realizing before that a factory could be so beautiful." The message was not lost on those who viewed the exhibit.

Another aspect of the motor exhibit that gave a false sense of assembly work was the clothing worn by fair performers. "Workers" at the fair wore white pants and shirts with ties. Their appearance was more like scientists, whose intellectual contributions would keep their clothes and hands clean, rather than like industrial workers, whose physical labor usually involved a greasy, oily environment, which inevitably ended with dirty clothes and hands. Such displays established technological work as "progress" away from manual labor. However, work in actual factories of the time continued to be arduous and dirty.

¹⁹² La Gee, Shirley. "1934 Ford Exposition." Accession 6. Subject Files Box 36. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford.



Figure 7: Interior of Ford Exhibit at the Century of Progress Exposition; 1934

Not only did Ford Motor Company "sell" progress and their process and product to the nation through the Century of Progress exhibit, but after, heeding the urging of fairgoers to "put [the Rotunda] into use... [as] a museum or something useful," took these themes to new levels with the development of a tour through the authentic, functioning River Rouge industrial complex in Dearborn, Michigan. After the closing of the fair in 1935, Ford dismantled and reassembled the Rotunda across the street from the Rouge complex. As part of the Chicago Fair, Ford exhibited the River Rouge factory as an integral part of the forward push toward modernity at a time in the nation's history when economic progress had faltered. At the authentic industrial complex, Ford continued exhibiting industrial progress, along with global power, as critical components of a strong nation. It continued to be a view forward, to a future aimed squarely at rationalism, science, and technology, through corporate industrialism.

¹⁹³ La Gee, Shirley. "1934 Ford Exposition." Accession 6. Subject Files Box 36. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford.

¹⁹⁴ "A Visit to the Ford Rouge Plant." 24. Folder 951: Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford., 1937.

Public Responses

But not everyone saw the exhibit as Mrs. Kopp did. The 1930s were filled with demonstrations expressing discontent with industry and government. ¹⁹⁵ From the beginning of the decade, where farmers and unemployed workers gathered in droves in protest, to the strikes of longshoremen in the middle, to industrial labor sit-down strikes toward the end, the thirties saw a nation beleaguered with frustrated, poverty ridden, often unemployed labor. By mid-decade, political and popular support appeared to be turning against the modernization of industrialists visions. Americans, deeply mired in the Great Depression, lashed back at capitalist institutions through popular culture forms such as print and film, reflecting their disillusionment with corporation. For these Americans, the Century of Progress Exposition illuminated national problems of the time. As a result, addressing it in their chosen format allowed them to enlighten the public on the plight of the worker in 1930s America.

Labor relations in industrial America were of course, quite volatile during the Great Depression. Massive unemployment caused labor to realize that their fortunes were not tied in with the fortunes of employers. Over thirty different labor strikes by auto workers, farm workers, miners, and many other categories of workers took place throughout the decade. Labor raised its voice and the federal government responded. President Roosevelt signed the National Industrial Recovery Act (NIRA) on June 16, 1933 and the American Federation of Labor quickly worked to get unorganized labor to join trade unions "in order to secure the benefits of

95 -

¹⁹⁵ Cohen, Lizabeth. *Making a New Deal: Industrial Workers in Chicago, 1919-1939*. 2nd ed. New York: Cambridge University Press, 2008.

the NIRA."¹⁹⁶ Such an organizing push increased tensions between labor and employers, bringing the confrontation to the fore of the nation's consciousness. Writers and filmmakers produced works to bring their criticisms of the Century of Progress Fair to the nation.

The Forum and Century, a literary magazine rivaling The Atlantic Monthly, Harper's Magazine, and The Saturday Evening Post, also carried strong commentaries on the state of the economy, labor, and the nation, boasting such notable contributors as John Maynard Keynes, Charles A. Beard, Stuart Chase, and Walter Lippman. This periodical included critical writing on the Chicago exposition and its larger implications. In an article for the June 1933 issue, regular contributing journalist Paul Hutchinson wrote disparagingly about the Chicago Century of Progress world's fair. This critique raises several important arguments. First, Hutchinson argued that the fair was really about selling consumers new products he made clear his opinion by calling it "ballyhoo," that is, a "show" filled with blatant advertising. Letters written by fairgoers to Henry Ford support Hutchinson's claims. One stated, "When I saw how your steel frame work was welded together and watched all the other parts actually made before my eyes and with what care they were inspected and tested, I could do nothing else but buy," thus confirming Hutchinson's assertion that exhibitions at the fair functioned as

¹⁹⁶ Bernstein, Irving. *Turbulent Years: A History of the American Worker 1933-1941.* Boston: Houghton Mifflin Company, 1970. 34-35.

¹⁹⁷ Upton Sinclair, author of influential labor-sympathetic novels, read the magazine, as his 1931 letter to the periodical evidences. Sinclair, Upton. "Letter 3 – Untitled," in *Forum and Century*. The Forum Publishing Company, 1930. *Forum and Century* described itself as a "magazine of controversy," whose goal was to "stimulate independent thinking [and] to promote sound individualism in democracy."

¹⁹⁸ Hutchinson, Paul and Winfred E. Garrison. *20 Centuries of Christianity: A Concise History*. New York: Harcourt Brace, 1959.

enormous marketing tools.¹⁹⁹ Nevertheless, he realized its importance as a potential cultural icon.

Secondly, he pointed out that the fair, even with all its sensationalism, is "the most gigantic experiment in adult education this country has known." The question is, then, what lesson did the fair have to teach? Another letter to Ford declared, "I have seen others like myself learn things concerning iron, steel, wool, cotton, etc., through your wonderful exhibit. I feel as though I had attended a college and am very grateful." ²⁰⁰ This letter attests to the fair's ability to "teach," but not all of its lessons were of a concrete nature. "It is inconceivable," Hutchinson continues, "that any person, however lacking in educational background, can walk through these miles of exhibits without taking away a definite idea of what is meant by those awesome symbols, 'machine-age civilization.'" ²⁰¹ His third argument revolves around the idea of progress, a slippery notion at the time, yet one that the fair loudly proclaimed. Hutchinson pronounced that the "basis on which the modern claim to progress rests" then, is technological process. 202 He asserted that "progress" as viewed at the fair, was all about "technique," by which he meant industrial processes, especially technological methods of production. Unlike at the 1851 Crystal Palace Exposition where products such as Colt rifles were showcased, the Chicago fair exhibited few completed goods. A Century of Progress, Hutchinson argued, instead displayed the how of a good; its production methods. What the exposition implied on a cultural level, however, was that human progress was what had really been achieved as a result of the

.

¹⁹⁹ Barth, Frank F. "1934 Ford Exposition." Box 36. Accession 6. Subject File Series. Edsel B. Ford Office papers, Benson Ford Research Center, The Henry Ford.

²⁰⁰ Doerr, Hilda Trudeau. "1934 Ford Exposition." Box 36. Accession 6. Subject File Series. Edsel B. Ford Office papers, Benson Ford Research Center, The Henry Ford.

Hutchinson, Paul. "Progress on Parade." The Forum and Century 89.6 (1993): 370.

²⁰² Ibid. 372.

human ability to invent and innovate. Hutchinson's final argument was that the "showmanship" performed in fair exhibits distorted and obscured the reality of production, a reality of "drudgery" and "monotony." In other words, the glamour exhibitors imbued in their displays obfuscated the negative impact of technological and industrial process on the people of the nation. He then continued on to question what the idea of "progress" meant for humans, who he claims were "the ultimate victim" without any power to influence either "factory or tenement." ²⁰³ Hutchinson argued that only the businessmen who have prospered from increased inventions and innovations in technology should look upon technical progress as a valuable improvement in living and working, an argument advanced by other labor sympathizers as well. He is in some way stating the obvious; the exhibit was not good for labor.

In addition to print critiques, film criticisms produced by labor sympathizers made their way into the social arena. The San Francisco Film & Photo League, a chapter of the Workers' Film and Photo League, produced a film titled *A Century of Progress* during 1933-34 that contested corporate magnates' vision of progress that Hutchinson commented on. ²⁰⁴ According to documentary film maker Carla Leshne, this film, along with others produced by the Film & Photo League at the time, logically argued against the use of technology as a marker of national progress by showing economic disparities between fair goers and the suffering working-class. It intercut images of the Chicago Fair with "dialectical representation[s] of the Depression,"

²⁰³ Ibid. 373.

²⁰⁴ The Workers' Film and Photo League produced America's first social-documentary films in 1931 and 1932. Specifically, they filmed the impact of the Great Depression on the working-class. Leshne, Carla. "The Film & Photo League of San Francisco." *Film History* 18 (2006). 361.

moving between shots of the Century of Progress exposition, closed factories, and "shots of labor organizing and Hunger Strikes." ²⁰⁵ These contrasts are striking.

The film begins with a long shot of American flags flying over the fair and then pans across the façade of a midway building with the words "Believe it or Not" displayed across the front, inviting film viewers to the ironies to come, thus setting the tone for the juxtapositions of class positions that follow. We see shots of costumed fair workers and then shots of well-dressed fairgoers. One scene of note moves from "Jinrikishas" occupied by fairgoers who paid the minimum fare of 60 cents for 30 minutes (and 30 cents for every 15 minutes thereafter) to be pulled by young men "throughout the grounds and Exposition buildings." Although the exposition guidebook calls the young men "experienced guide[s]," their clothing, white t-shirts and shorts, sets them apart from the visitors and their suits, ties, and hats, marking the young men as working-class.

The film works to produce an America that includes respectful treatment of black men, which is contrary to their treatment at the fair. Another scene depicting class distinctions with racial undertones shows white fairgoers dressed in suits throwing balls at dunk-tanks. The dunkees – that is, the men who will fall into a tank of water if the ball hits the target - are black men dressed in white coveralls. Not only does their clothing distinguish the working-class fair labor from the middle-class fairgoer, but there is a racial component of implied violence against the working-class black men in the dunk-tanks. The film follows this scene with a shot of a fair sign reading "An American Show for American People," which clearly indicates that according to

²⁰⁵ Ihi

Official Guidebook of the World's Fair of 1934. Chicago: The Cuneo Press, Incorporated, 1934. 12.

the fair's representation of them, the white working-class and working-class black people, while they are part of the show, are not included as part of the American people. In other words, only those who can afford to visit the Century of Progress are included as American citizens.

Subsequent titles carry forward the "A Hundred Years of Progress!" theme but change the wording to establish various arguments. Examples include: "In a Hundred Years ... we have built millions of homes..." which shows elegant houses and apartments and then cuts to hooverville shacks, demonstrating that not everyone enjoys the "progress" of the past hundred years. And "In a Hundred Years ... we have built factories but don't use them," shows a sculpture of a muscular working man at the fair, then cutting to factory smokestacks and panning down to an empty "Help Wanted" sign at a shuttered factory, confirming the unemployment problem. The film carries this argument forward with the title, "In a Hundred Years ... We developed the steam shovel," while cutting between idle steam shovels and a labor force hand digging soil and moving it by wheelbarrow. This particular scene shows some confusion about technology. It demonstrates that technologies, while useful in some ways, such as making work less physically demanding, also contain negative impacts, such as requiring fewer workers. Additionally, the film makes the argument that owners of expensive machinery like steam shovels would rather leave it idle than employ workers. The overarching ill-effect of technology for the film makers was that automation allowed employers to significantly decrease the work force while keeping efficiency and productivity, and thus, profits, high. Therefore the film makes the argument that progress as envisioned at the fair was unequal.

The film aptly establishes the economic disparities between the visions of the nation displayed at the corporate exhibits at the fair and the reality of everyday existence for out-of-work labor, ultimately questioning who is included in American progress. The Film and Photo League visions of the nation are quite inclusive as the film critiques Century of Progress Fair's racialized representations of the working-class. Such popular culture comments on of the Century of Progress and industrialism like the scathing article by Hutchinson and films by labor sympathizers were not able to combat the nation's need for a patriotic symbol of solidarity. A Century of Progress still seized the American imagination and forged a bond between the nation's citizens, despite its representation of class through displays of technology and labor.

Conclusion

Although Mrs. Kopp, the avid fairgoer who wrote the complimentary letter to Mr. Ford regarding his "marvelous" display at the fair, was able to fall in love with his factory, others, such as astute journalists, film makers, and displaced labor, did not find the progress being sold at the fair to be a realistic and potentially attainable dream. The vision of the employer/labor relationship on display at the fair continued to demonstrate the charged nature of the relationship, where employers such as Ford wanted to stop it from "progressing" away from the employer controlled 1920s paternalism. Yet the public dissent published in journals and shown on film established a contrasting view where labor held gainful employment alongside industrial technologies, as illustrated in the Rivera murals. The private letter, one among many, voiced approval for the hand of technological salvation held out by Ford and the other corporate exhibitions at the fair, even as it questioned the dependability of employers to stick

around. In contrast, the public vision of workers perceived an entirely different possibility for progress, one where organized labor regained some of the control employers had wrested through their implementation of industrial machines and technology.

Thus, there were limits of what the fair could do. For Ford Motor Company, it could keep the peace, maintain order with labor, and express a vision that housewives would fall in love with. But it could not actually alter the material tensions on the ground and therefore was just another part of a long public conversation Ford Motor Company has tried to have about the problem of technology and laboring bodies. The next step in this conversation was the move of the Rotunda back to headquarters in Dearborn.

Chapter 3

Gateway to the Rouge and the Logics of Deindustrialization and Globalization

"Industry does not support people – people support industry." Henry Ford

Inspired by the success of the fair, FMC decided to bring the Rotunda home and dramatically redesign and expand its exhibits with beautiful visions of global Ford while adding tours of the River Rouge Complex, which may well have been a useful way to deflect the public eye from the company's seeming disregard for the thousands of workers it had thrown into poverty through Depression layoffs. The Rotunda and its tour emphasized traditional values and a doctrine of mass production as a beginning of the articulation of the logics that support deindustrialization and globalization.

Legislating Labor Rights

After the Chicago Century of Progress fair closed in October of 1934, Ford Motor Company made plans to move the Rotunda to Dearborn, Michigan, the home of the River Rouge Industrial Complex. 1933 - 1934 had been an explosively tense year of labor/employer relations following the signing of the National Industrial Recovery Act (NIRA) in June of 1933.

Historian Nelson Lichtenstein observes that the NIRA "was to be Franklin Roosevelt's principal initiative designed to restore prosperity during the first two years of the New Deal." The act sought to "put a floor under wages and prices, and a ceiling on hours and effort." One way of achieving these goals was to establish a right of workers to organize. 7(a) spelled out this right.

That employees shall have the right to organize and bargain collectively through representatives of their own choosing, and shall be free from the interference restraint, or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection. ²⁰⁸

Labor Historian Irving Bernstein asserts that the NIRA opened "Pandora's box," as it was essentially "a broad policy of government intervention in collective bargaining." And that intervention contributed to a shift in disposition for the American working-class. American Studies scholar Lizabeth Cohen supports this view when she states, "It is very possible that the New Deal's impact should be measured less by the lasting accomplishments of its reforms and more by the attitudinal changes it produced in a generation of working-class Americans who now looked to Washington to deliver the American dream." Indeed, Section 7(a) gave ideological support by the government to workers in their struggles against employer control of the workplace.

²⁰⁷ Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002. 25-35.

²⁰⁸ Transcript of National Industrial Recovery Act (1933). *Our Documents.*

http://www.ourdocuments.gov/doc.php?doc=66&page=transcript#.

Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941.* Boston: Houghton Mifflin Company, 1970, 35.

²¹⁰ Cohen, Lizabeth. *Making a New Deal: Industrial Workers in Chicago 1919-1939*. 2nd ed. New York: Cambridge University Press, 2008. 289.

Lichtenstein persuasively argues that the problem of underconsumption, a significant feature of the Great Depression, lead to an understanding by the federal government that "A broad upward shift in working-class purchasing power was essential. This prescription made the economic and political interest of a new union movement, the only prospective institution then capable of policing an upward revision of industrywide wage standards, largely synonymous with that of the nation as a whole." 211 Section 7(a), the collective bargaining provision of the NIRA, was particularly influential in sparking a flare-up of labor organizing efforts as workers endeavored to build "the idea of social solidarity" through labor organizing. 212 From textile industry strikes in New England, to cotton industry strikes in the South, to automobile suppliers strike in Toledo, Ohio, to truck drivers strikes in Minneapolis, and to the longshoremen strike in San Francisco Bay (which became a city wide general strike), labor unions took advantage of the act to push for collective bargaining with employers across the nation. ²¹³ By November of 1934, the New York Times was reporting, "But essentially and typically, the strikes of 1933-1934 have been organizational strikes, to enforce the right to organize, and to obtain union recognition." ²¹⁴ Labor, now officially recognized by the government as a vital participant in the nation, pushed back against the once all-powerful employers in order to assert their demands for democracy in the workplace - in other words, for an industrial democracy. The NIRA brought the contradiction between American democracy, that is, "free speech, democratic participation, and masterless autonomy," and the dictatorship-like environment of the

²¹¹ Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002. 24.

²¹² Ibid. 15.

²¹³ Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941.* Boston: Houghton Mifflin Company. 1970. 217.

²¹⁴ Lorwin, Lewis L. "Danger Spots Ahead." *New York Times*, November 4, 1934. xx3.

workplace where "workers had no statutory right to free speech, assembly or petition" to the fore of the national consciousness.²¹⁵

Of course, employers resisted against organizing employees. After the NIRA went into effect, many companies, in an effort to resurrect welfare capital-style policies, installed company unions. But employees quickly realized the tendency of these unions to side with management and so they worked to join pro-labor unions. ²¹⁶ Additionally, employers continued to apply punitive measures against workers who joined or organized for unions, such as "discharge, layoff, demotion, transfer, forced resignation, and division of work." ²¹⁷

Although the NIRA gave workers the legal right to organize, it had no teeth, hence continued company actions against unionization. President Roosevelt established the National Labor Board (NLB) as the enforcement arm of the act, however it was "without legally derived powers, and experimental in nature." ²¹⁸ Its responsibilities included hearing employee complaints, determining union jurisdictions, and conduction of on-site elections. ²¹⁹ However, the NLB had no legal powers – its role was one of mediation rather than enforcement. ²²⁰ What was needed was a law that would give workers "a voice, and sometimes a club, with which to resolve their grievances and organize themselves for economic struggle," especially once the

²¹⁵ Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002. 30-31.

²¹⁶ Cohen, Lizabeth. *Making a New Deal: Industrial Workers in Chicago, 1919-1939.* 2nd ed. New York: Cambridge University Press, 2008. 294.

²¹⁸ Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941.* Boston: Houghton Mifflin Company, 1970. 173.

²²⁰ Ibid. 173. And Zieger, Robert H. and Gilbert J. Gall. *American Workers, American Unions*. Baltimore and London: The Johns Hopkins University Press, 2002. 77.

Supreme Court ruled that large sections of the NIRA were unconstitutional, resulting in many companies immediately lowering wages and increasing the length of the workweek. ²²¹

The National Labor Relations Act of 1935 (NLRA), often called the Wagner Act, attempted to stem the backward slide. It worked to balance the power of organized employers by reinforcing the right of workers to organize with legally mandated enforcement. The NLRA sanctioned workers' rights to join unions and participate in collective bargaining, once again establishing a limited industrial democracy for workers. It also proscribed company run unions while it defined election procedures for choosing union representation. Finally, it legitimated a revamped board to enforce the law designated the National Labor Relations Board (NLRB). The logic supporting the NLRA was that "higher wages and industrial democracy could flow from agreements worked out between workers and managers at a *single* firm or work site."

(Emphasis mine)²²⁴ An unanticipated consequence of this particular method of reasoning in the ruling was the division of labor, not by race or gender, but by the division of workers' unions from one another, thus precluding labor unity on a national level and, at the end of the day, resulting in weaker labor unions.

. .

²²¹ Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002. 36. And Roof, Tracy. *American Labor, Congress, and the Welfare State, 1935-2010*. Baltimore: The Johns Hopkins University Press, 2011. 23.

²²² Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941*. Boston: Houghton Mifflin Company, 1970. 324.

²²³ Ibid. And Roof, Tracy. *American Labor, Congress, and the Welfare State, 1935-2010*. Baltimore: The Johns Hopkins University Press, 2011.

²²⁴ Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941*. Boston: Houghton Mifflin Company, 1970. 442.

²²⁵ Cowie, Jefferson. *Capital Moves: RCA's Seventy-Year Quest for Cheap Labor*. New York: The New Press, 1999. 192.

Even with the newly legislated act, labor and employers carried on their struggle in the changing climate of work. The New York Times continued warning late in 1934 of "Danger Spots Ahead. More specifically, the big danger spots ahead are the same that have been in sight for many months: automobiles and iron and steel." One of the company's responses to this "danger" would be tours of the River Rouge Complex.

Ford's Doctrine of Mass Production

The story Ford Motor Company is telling, in this moment of crisis is, in part, a response to the explosion of labor organizing and work stoppages. The story they tell in this context turns out to be a global story of Ford. At the Rotunda, questions regarding Ford's domestic responsibilities become clouded by a focus on Ford's global reach. Careful readings of the Rotunda alongside publicly distributed pamphlets and internal company memos expose the public relations inclination to put a spotlight on globalization that belied Ford's "constructive [domestic] social effort" and encouraged the seeds of deindustrialization to germinate. 227 Ford Motor Company worked to persuade the public that "social responsibility" was an important company concern at the Rotunda and on its tours of the Rouge complex. In other words, contrary to the above quote, the industry was working hard to appear to support workers and community. A 1937 complimentary tour pamphlet proclaimed:

And so the roll of Ford wage earners swells to the hundreds of thousands; the numbers who look to Ford for a part of their livelihood must total in the millions. All this implies a great social responsibility. How carefully that responsibility is

_

²²⁶Lorwin, Lewis L. "Danger Spots Ahead." *New York Times*, November 4, 1934. xx3.

Ford Motor Company. "The Rotunda: Suggestions for Its Utilization." Folder Dearborn-Exhibits-Opening Rotunda: Box 19: Accession 554: Clarence W. Olmstead records series, Exhibition records subgroup, Ford Motor Company Public Relations records collection, Benson Ford Research Center, The Henry Ford.

discharged is best illustrated by the plant itself-and the product. ²²⁸

The pamphlet points out how the company directly supported "hundreds of thousands," through employment while it overlooks the plight of the many thousands treated with indifference earlier in the decade through lay-offs, wage cuts, and restrictions placed on the number of work hours. This pamphlet does not read as if it was written in the context of a global economic collapse. The reality was that in the spring of 1929, Ford Motor Company employed 128,142 workers but by August of 1931, had only 37,000. Those able to hold onto a job at Ford were working fewer than four days a week by 1931. 229 Additionally, hourly wages dropped from the 1929 average of 92 cents per hour to 59 cents per hour by 1933, a stark contradiction to any claim of social responsibility. 30 Ford was already disguising its disinvestment in the nation's productive capacity, that is, the early logics of deindustrialization, while producing a narrative of employment and direct investment in social responsibility as defined by the company.

The logics were embedded in the installation of the Rotunda building from Ford's exhibit at the Century of Progress fairgrounds to Dearborn in 1935, which transformed how the public would tour the complex, beginning an era of mass viewing of the Rouge and those who worked within its boundaries. Ford learned from its experiences at world's fairs and expositions that this type of venue could powerfully influence the public both in sales and in ideology. FMC's

יי

Ford, Motor Company. "Visit the Rouge Plant of the Ford Motor Company." Folder 951: Box 53 – U-V Folder: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1936.

Bernstein, Irving. *The Lean Years: A History of the American Worker 1920-1933.* Baltimore, Maryland: Penguin Books, 1966, 255

²³⁰ Peterson, Joyce Shaw. *American Automobile Workers, 1900-1933.* Albany: State University of New York Press, 1987. 130-131.

understandings in the power of expositions and exhibits comes from not only their participation at Chicago, but also in preceding international expositions as Edsel Ford later expressed when he said "...the Ford Motor Company has been a big exhibitor in the country's principal fairs – at St. Louis [1904], Chicago [1934], Dallas [1936], Cleveland [1936-1937], Miami [1937]; at the California Pacific International Exposition in San Diego in 1935 and 1936 and now at New York [1939], and, once more, San Francisco [1939]."²³¹ Experience assisted Ford Motor Company in taking advantage of the meaning-making ability of the Rotunda to underscore hard work as a traditional value and at the same time, define the nature of that work and the workers who should perform it.

The essential character of work Ford Motor Company modeled through the Rotunda and its tour demonstrated a particular vision in which labor would be subservient to the needs of the assembly line and to the needs of mass production by both working at the point of production and by purchasing its product. This representation displayed what might be called a dogma of mass production. The roots of the expression of this doctrine began for Ford, not at the Rouge, but rather at the Highland Park factory, a critical site of production in its own right. Indeed, "many businessmen made special trips to Detroit as though to a shrine." 232 Additionally, the public toured the factory, as Highland Park "entertained" as many as 11,900 visitors "in a single month." 233

²³¹ Ford, Edsel. Box 23 – U-V Folder: Accession 554. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center.

²³² Nye, David E. *American Technological Sublime*. Cambridge, MA and London: MIT Press, 1994. 130.

²³³ Ford Motor Company. *Ford Factory Facts*. Detroit: Ford Motor Company, 1915.

The Highland Park plant drew so many visitors because it was where Henry Ford and his team of engineers first implemented the moving assembly line and integrated it into the process later called Fordism. Marxist theoretician Antonio Gramsci offered a relevant description of Fordism when he wrote,

It was relatively easy to rationalise production and labour by a skillful combination of force (destruction of working-class trade unionism on a territorial basis) and persuasion (high wages, various social benefits, extremely subtle ideological and political propaganda) and thus succeed in making the whole life of the nation revolve around production.²³⁴

In short, Fordism is a system that subordinates work, labor, culture, and to some degree, consumption, in order to support production. As historian sociologist Ruth Milkman shows, Fordism organizes work through "deskilling, product standardization, use of interchangeable parts, mechanization, a moving assembly line, and high wages," all features of the rationalization of mass production. Gramsci reflects on the effects of Fordism on labor when he writes, "In America rationalisation has determined the need to elaborate a new type of man suited to the new type of work and productive process." In order for Fordism to thrive, according to Gramsci, Ford needed to develop workers with "automatic and mechanical attitudes." In other words, mass assembly line workers would be required to learn to think and

.

²³⁴ Gramsci, Antonio. *Selections from the Prison Notebooks of Antonio Gramsci*. Edited and translated by Quintin Hoare and Geoffrey Nowell Smith. New York: International Publishers, 1971.

²³⁵ Milkman, Ruth. *Farewell to the Factory: Auto workers in the Late Twentieth Century*. Berkeley, Los Angeles, and London: University of California Press, 1997.

²³⁶ Gramsci, Antonio. *Selections from the Prison Notebooks of Antonio Gramsci*. Edited and translated by Quintin Hoare and Geoffrey Nowell Smith. New York: International Publishers, 1971.

behave more like machines. Thinking beyond the assembly line and toward culture, Gramsci states,

It seems possible to reply that the Ford method is rational, that is, that it should be generalised; but that a long process is needed for this, during which a change must take place in social conditions and in the way of life and the habits of individuals.²³⁷

Anthropologist David Harvey agrees, demonstrating that Henry Ford "believed that [a] new kind of society could be built simply through the proper application of corporate power," where he looked to build a consuming public alongside a compliant mechanical workforce.

Indeed, Ford began this process in earnest at the Highland Park plant. 238

The Highland Park factory, designed by industrial architect Albert Kahn and produced the Model T, opened in 1910.²³⁹ The manufacturing process at Highland Park incorporated innovations of mass production including interchangeable parts, specialized machine tools, overhead conveyors, and time and motion studies.²⁴⁰ Additionally, Highland Park was a new type of factory building called a daylight factory, built with an "expanse of windows" to improve the conditions of work in order to reduce worker turnover.²⁴¹ Also, this factory was the site of Ford's infamous profit-sharing plan that included interventions by its new Sociological

.

²³⁷ Gramsci, Antonio. *Selections from the Prison Notebooks of Antonio Gramsci*. Edited and translated by Quintin Hoare and Geoffrey Nowell Smith. New York: International Publishers, 1971.

²³⁸ Harvey, David. *The Condition of Postmodernity : An Enquiry into the Origins of Cultural Change*. Oxford, England; Cambridge, Mass.: B. Blackwell, 1989.

Hounshell, David A. From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States. Baltimore: The Johns Hopkins University Press, 1984. 226.

²⁴⁰ Cowan, Ruth Schwartz. *A Social History of American Technology.* New York and Oxford: Oxford University Press, 1997. 228.

²⁴¹ Biggs, Lindy. *The Rational Factory: Architecture, Technology, and Work in America's Age of Mass Production.*Baltimore and London: The Johns Hopkins University Press, 1996. 97.

Department where the largely immigrant work force was "incentivized" by the carrot of a five dollar day to integrate middle-class morals into their working-class lives - morals including showing up for work every day. 242 By 1916 Ford looked to a large space next to the Rouge River in Dearborn, Michigan to begin building a new factory complex in order to expand production using mass production and moving assembly line methods, paralleling an industrial trend of moving factories away from city centers.

But as factories like Ford's new River Rouge plant expanded in scale and moved to city outskirts and suburbs, according to historian William Littmann, they became "enigmatic worlds unto themselves," and likewise, "work inside the factory became a mystery to many Americans, a thing apart from ordinary life." ²⁴³ Shrewd manufacturers understood the value of accommodating public desire to view the mysterious manufacturing process and established public tours such as the Hershey Chocolate Factory tour in 1904 and the Jack Daniels Distillery tour beginning in 1866. 244 Making factories accessible to the public through tours was also in part a "response to muckraking journalists," such as Upton Sinclair, who described the character of factory work as dirty and unsafe. ²⁴⁵ Littmann explains that factory tours "offered visitors an idealized and often comforting vision of factory labor," repudiating the "dangerous

²⁴² Ford Motor Company. Ford Factory Facts. Detroit: Ford Motor Company, 1915. For more on Ford's Sociological Department see Meyer, Stephen. The Five Dollar Day: Labor Management and Social Control in the Ford Motor Company 1908-1921. Albany: State University of New York Press, 1981.

²⁴³ Littmann, William. "The Production of Goodwill: The Origins and Development of the Factory Tour in America." Constructing Image, Identity and Place. Edited by Alison Hoagland and Kenneth Breisch., 71-84. Knoxville: University of Tennessee Press, 2003.

²⁴⁴ Gelbert, Doug. Company Museums, Industry Museums and Industrial Tours: A Guidebook of Sites in the United States That Are Open to the Public. North Carolina and London: McFarland & Company, Inc., 1994. vii and viii. ²⁴⁵ Littmann, William. "The Production of Goodwill: The Origins and Development of the Factory Tour in America." Constructing Image, Identity and Place. Edited by Alison Hoagland and Kenneth Breisch, 71-84. Knoxville: University of Tennessee Press, 2003.

and decrepit environment described by muckrakers."²⁴⁶ He also points out the "belief that the factory could represent the behavior of the corporation led many firms to make physical changes to the factory environment, adding lavish reception rooms and museums, and installing glass windows and platforms so that visitors could better see certain phases of factory production."²⁴⁷ Ford went one step further in constructing the public perception of Ford Motor Company at the Century of Progress fair with a clean and safe simulated factory environment filled with displays emulating the production process. Industrial displays like those found at the Chicago fair further aroused an already keen interest in Ford's mass production process, especially as mass produced products, like the automobile, became part of everyday life. Intense public interest in Ford's production technologies at the fair helped drive the Rotunda tour in Dearborn.

Historian David E. Nye describes this public fascination with technology as sublime. He defines the sublime as "an essentially religious feeling aroused by the confrontation with impressive objects" and that "the sublime underlies this enthusiasm for technology."²⁴⁸ But the technological sublime at the Rouge and at other industrial sites has gendered components. Nye points out, "works of the technological sublime were decidedly male creations."²⁴⁹ The Rouge was widely understood as Henry Ford's invention and even the engineers who worked closely with him were also part of a largely male profession. Women laboring at the Rouge worked in areas not included on tour routes, keeping their technological contributions — and their female

²⁴⁶ Ibid

²⁴⁷ Littmann, William. "The Production of Goodwill: The Origins and Development of the Factory Tour in America." *Constructing Image, Identity and Place.* Edited by Alison Hoagland and Kenneth Breisch, 71-84. Knoxville: University of Tennessee Press, 2003.

²⁴⁸ Nye, David E. *American Technological Sublime*. Cambridge, MA and London: MIT press, 1994. xviii.

²⁴⁹ Ibid. 31.

bodies - invisible. But appreciation of the technological sublime was available to all as tourists men and women were welcome to pay homage at the Rouge temple.

Indeed, the Rouge, remarkable in size and technologies, gave rise to religious-style glorification. ²⁵⁰ Nye argues that industry became "sacred" and its factories "rivaled the religious architecture of antiquity." Vanity Fair described the Rouge as sacred and sublime when it printed, "in a landscape where size, quantity and speed are the cardinal virtues, it is natural that the largest factory turning out the most cars in the least time should come to have the quality of America's Mecca, toward which the pious journey for prayers." ²⁵¹ Experiencing the sublime elicits "powerful human emotions" and according to Nye, "when experienced by large groups the sublime can weld society together." ²⁵² Hence, experiencing the sublime at the Rouge or through representations of it brought the visiting public together as a nation.

Images of the Rouge, such as Charles Sheeler's 1930 "American Landscape" painting and earlier photos of the interior, such as "Ladle Hooks, Open Hearth Building" and "Stamping Press" – taken in 1927 as part of a Ford promotional campaign - echo the sublime at the Rouge. 253 Sheeler expresses Ford's effort to be explicit about the relationship between technology and religious devotion. Karen Lucic agrees when she writes of Sheeler's interior shots of the Rouge that they "present the massive enclosed spaces as soaring and cathedrallike, lit by a mysterious, glowing light... [that] endows these utilitarian spaces with a sanctifying

²⁵⁰ Ibid. xix.

²⁵¹ Original quoted from Vanity Fair. "By Their Works Ye Shall Know Them." New York: Conde Nast Publications, February 1, 1928. Quoted in Murphy, Angela Kramer. "Charles Sheeler." in Frames of Reference: Looking at American Art, 1900-1950: Works from the Whitney Museum of American Art. Edited by Beth Venn, Adam D. Weinberg, 85. Berkeley, Los Angeles, and London: University of California Press, 1999. ²⁵² Ibid. xiii.

²⁵³ Lucic, Karen. *Charles Sheeler and the Cult of the Machine*. Cambridge, MA: Harvard University Press, 1991. 91.

aura.²⁵⁴ The Rouge appropriates power of the cathedral, a place where people come to worship in obedience and this is a useful strategy for Ford in the context of the Depression.



Figure 8: Ladle Hooks in Open Hearth Building



Figure 9: Stamping Press

Not everybody, however, was ready to kneel before Ford's sublime assembly line and its cultural meaning-making of the doctrine of mass production and technology. Those who labored on and in the service of the moving mass assembly line certainly did not. Workers faced daily discipline and surveillance at the Rouge, a place epitomizing Foucault's argument:

The discipline of the workshop, while remaining a way of enforcing respect for the regulations and authorities, of preventing thefts or losses, tends to increase aptitudes, speeds, output and therefore profits; it still exerts a moral influence over behavior, but more and more it treats actions in terms of their results, introduces bodies into a machinery, forces into an economy. ²⁵⁵

Discipline enforced at the Rouge certainly attempted to compel workers to defer both to the rules and to those in charge, but was not always successful. The work was physically and psychologically exhausting and it was carried on in an atmosphere of utter contempt and

²⁵⁴ Ihid 92

²⁵⁵ Foucault, Michel. Translated by Alan Sheridan. *Discipline & Punish: The Birth of the Prison*. New York: Vintage Books. 1997. 210.

control of the worker. Historian Irving Bernstein wrote of conditions at the River Rouge, "as a gigantic concentration camp founded on fear and physical assault." 256 Workers resisted the conditions imposed against them at the Rouge and thus, resisted the doctrine of mass production.

Workers stopped supplicating at the altar of mass production, sat down on their jobs in the factories and stood up for themselves. The 1930s became a time of labor strikes, many of which were in the automotive industry and its satellite enterprises. Bernstein notes:

> Man-days lost due to strikes, which had not exceeded 603,000 in any month in the first half of 1933, spurted to 1,375,000 in July and to 2,378,000 in August. In fact, the whole year 1933 (mainly its second half) witnessed the largest number of work stoppages since 1921. 257

Workers framed their own meanings about work and laborers with their actions against company dictatorships and for industrial democracy in the workplace.

By placing the Ford Motor Company Rotunda with its tour of the Rouge factory complex in the context of other cultural productions that reacted to and made meaning from the effects of industrialization, such as the strike waves of 1933 and 1934, this chapter will explain the ways in which Ford Motor Company formulated the cornerstones of deindustrialization and globalization. How "carefully" the company "discharged" its social responsibility as "illustrated by the plant itself - and the product" was contested by workers, writers, and filmmakers in their

²⁵⁶ Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941.* Boston: Houghton Mifflin Company, 1970. 737.

²⁵⁷ Ibid. 172-173.

reactions to the relationship of capitalism and labor in a time of crisis and it was played out before a public audience at the Rouge.²⁵⁸

Gateway to the Rouge



Figure 10: Rotunda in Dearborn, Michigan

In the spring of 1936, the Ford Rotunda opened its doors in Dearborn, Michigan to crowds of people anxious to view the remodeled building and to go on a tour of the massive Ford River Rouge complex. ²⁵⁹ These new tours were largely for the public and administered by company trained docents, although Henry Ford would occasionally escort dignitaries through the Rouge buildings himself, even though he kept a staff of guides since his Highland Park days. ²⁶⁰ Some distinguished visitors who journeyed to the Rouge plant were Crown Prince Gustavus Adolphus and Crown Princess Louise of Sweden, President Louis Borno of the Haitian Republic and Prince Nicholas of Rumania. ²⁶¹

²⁵⁸ Ford, Motor Company. "Visit the Rouge Plant of the Ford Motor Company." Folder 951: Box 53 – U-V Folder: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1936.

²⁵⁹ The Ford Rotunda was opened to the public on May 14, 1936. http://dlxs.lib.wayne.edu/cgi/i/image/image-idx?id=S-VMC-X-7581-UND-1%5D7581_1

²⁶⁰ Ford Motor Company. Ford Factory Facts. Detroit: Ford Motor Company, 1915. And Ford News, 1926, 4L.7.

²⁶¹ "Visitor's List Large in 1926." Ford News, February 15 1927.

The average public visitors to the River Rouge Complex began their tour at the Ford Rotunda or the "Gateway to the Rouge," as it was dubbed. According to a complimentary pamphlet, "So numerous are visitors to the Rouge Plant of the Ford Motor Company that in 1934 plans were made for a hospitality building at Dearborn to be modeled after the Ford Rotunda visited by 12,000,000 people at the Chicago world's Fair." Thus the choice to move the Rotunda to Dearborn appeared to stem solely from enormous public demand for tours of the complex. The idea to move the Rotunda from Chicago to Dearborn was conceived by a Ford advertising and public relation advisor. Discussions regarding how to use the building once it was resurrected in Dearborn establish intentions over and above merely entertaining the public. An internal memo stated,

In the new building visitors to the Rouge Plant will be welcomed and entertained. It not only should make an impressive starting point for trips through the plant, but should furnish an excellent preparation and background for the things to be seen on the plant tour. ²⁶⁵

In short, what visitors would see when touring the Rouge would be framed in such a way as to inundate the public with Ford Motor Company's vision of product, process, and global reach. The memo concludes, "Millions of dollars have been spent in the past to build exhibits to

۲,

²⁶² Ford, Motor Company. "A Visit to the Ford Rouge Plant." 24. Folder 951: Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937.

²⁶³ Ford, Motor Company. "A Visit to the Ford Rouge Plant." 24. Folder 951: Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937.

²⁶⁴ "Rotunda News Releases." Accession 1108. Box 3. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. Not dated, however the text refers to the "late" Henry Ford, therefore it is likely post-1947. Also Harty, M. F. Folder Dearborn-Exhibits-Opening Rotunda: Box 19: Accession 554: Clarence W. Olmstead records series, Exhibition records subgroup, Ford Motor Company Public Relations records collection, Benson Ford Research Center, The Henry Ford.

²⁶⁵ Ford Motor Company. "The Rotunda: Suggestions for Its Utilization." Folder Dearborn-Exhibits-Opening Rotunda: Box 19: Accession 554: Clarence W. Olmstead records series, Exhibition records subgroup, Ford Motor Company Public Relations records collection, Benson Ford Research Center, The Henry Ford.

attract the public. Why not spend a few thousand where it would be sure to attract as well as being practical and instructive?" ²⁶⁶ Edsel Ford, as a trustee of the Detroit Museum of Arts, understood the value of "visual education," when he argued that, "The public museum of tomorrow must prepare to give added services that will touch the community on many sides. It must be closely knit with the public school system and contribute its share to visual education." ²⁶⁷ Not only would Rotunda exhibits and tours structure visitors' experience, but it would be a useful method of advertisement and educational to boot. This begs the question – how and about what would the public be educated?



Figure 11: Dioramas inside Rotunda

It turns out that they would be educated about the glories of globalization. The Rotunda presented a series of repeated arguments. They were about the emerging logics supporting globalization: the idea that less technologically advanced foreigners are better suited to hard physical labor; the contention that American corporations should organize and direct that

²⁶⁶ Ihid

Ford, Edsel. "The New Public Museum." Box 23 – U-V Folder: Accession 554. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center.

labor, not the federal government or labor itself; the notion that Americans reserve the right of access to foreign resources; and finally, the assertion that American corporations should not be constrained by national boundaries. At the Rotunda, in the mid-1930s, these logics set the stage for future movement of U.S. jobs to developing nations.

As visitors entered the Rotunda they immediately encountered two revolving dioramas in chromium-plated hemispheres, one on the north side of the building and the other on the south. ²⁶⁸ The north diorama shows "typical scenes from countries bordering on the Pacific Ocean," while the south one illustrates "sources of raw materials used in Ford products." ²⁶⁹ Thus, as visitors entered the building, they came face to face with American industry's colonial dynamics, along with the company's claim to global resources, including labor. Both dioramas (Figure 2) demonstrate these dynamics. Complimentary pamphlets distributed at the Rotunda offer close-up images of two of the diorama scenes.

The first, from the south diorama, presents "cork being stripped from a tree." ²⁷⁰ In this image, as well as in the diorama itself, visitors view two men, dark skinned and muscular, using primitive hand tools, and much physical strength to remove bark from cork trees in a primordial forest. The tools, bodies, and forest all represent an undeveloped land needing direction and cultivation, just as the North American continent with its indigenous population first appeared to early American settlers.

.

²⁶⁸ "The Ford Rotunda." Ford News, 16.6, June 1936. Benson Ford Research Center. The Henry Ford.

²⁶⁹ Ford, Motor Company. "A Visit to the Ford Rouge Plant." 24. Folder 951: Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937.

²⁷⁰ Ibid.

The second image titled: "Crude rubber with tropical plantation background" also delivers the same message, with an emphasis on the management of people. This image reveals a scene where a white skinned man in what would, at the time, be recognized as conventional colonial apparel – white jacket, white pants, white helmet – standing tall in an instructive pose over a man with dark skin, clothed only in shorts and turban. The native man, bent over a tub, lifts rubber up out of the tub with a paddle for inspection. Here, Ford's colonizing aspirations come to the fore.

Another section of the diorama portraying the extraction of raw materials for the production of Ford vehicles is a scene titled: "Cotton," which was located directly adjacent to "Rubber" (Figure 2). The scene depicts dark-skinned people using little or no sophisticated technology in what appears to be an American landscape. The placement of this scene in the diorama puts dark-skinned Americans on a level of civilization little higher than that of the tropical plantation workers. Therefore, the representation of the diorama potentially excludes African Americans from the technologically sophisticated nation.

Both dioramas representations characterize less technologically advanced, therefore "less modern," people collecting raw and unfinished resources for the consumption of American industry in the production of products for the modern American consumer. Although the people shown have the ability to extract the raw products, they are apparently unable to "properly" manage themselves, the land, or the process and therefore need supervision. The diorama scenes provide viewers with a sense of American strength in the context of a racially

Ford, Motor Company. "A Visit to the Ford Rouge Plant." 24. Folder 951: Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937.

conceived local and global imperialism, where workers and materials from colonized countries and at home participate in the expansion of American industrialism and by association, the nation. It is an uneven unidirectional relationship where little to no technology transfers from U.S. industries to the apparently less civilized peoples. Rotunda visitors are thus "educated" as to what type of people are civilized enough to understand and wield technological inventions, people who look like themselves, usually white and middle-class. Visitors gain a greater sense of the nation itself when viewed against what it believes it is not – technologically backward, incompetent, and dark skinned.

Raw resource extraction operations, such as of rubber or bark from tropical trees and cotton from plants, required only the most rudimentary tools and physical labor. In contrast, the American nation, comprised of industrial "experts" and middle-class tour patrons, views itself as civilized, exceptional, and technologically savvy, as articulated in a tour pamphlet:

Within this plant men ply almost every industrial trade known. Here, too, are working examples of man's most recent progress in science, engineering and industrial management. Many of these wonders are distinctive Ford achievements. All of them represent the Ford policy of never-ending progress. It is this principle that has made the Rouge one of the industrial wonders of the world. 272

Rotunda visitors will soon witness technological expertise in many forms along the tour route, thus strengthening beliefs of white American middle-class superiority and exceptionalism.

An additional mechanism used to frame visitor's understanding of the Rouge complex was the small theater. The reassembled Rotunda continued screening motion pictures for

²⁷² Ibid.

visitors as it had throughout the Chicago exposition. Located in the south wing, a theater that held 388 people was equipped to broadcast the Sunday afternoon Lincoln-Zephyr radio program." However, on weekdays, it was the "scene of a motion picture used to set the stage for visitors about to see the plant," a framing device that would be repeated at the "reinvented" 2004 Ford Rouge Factory Tour. ²⁷⁴

The Rotunda offered even more displays for visitors to see before boarding tour buses that would take them into the Rouge complex. Between the two dioramas in the very center of the Rotunda stood the "huge, revolving, illuminated globe showing Ford industries all over the world that was displayed in Chicago." A "Ford News" article describes the globe as:

A slowly revolving 20 –foot globe, 12,000 pounds in weight, electrically driven and illuminated, its base well below floor-level, on which the size and extent of the Ford industrial empire are objectively depicted in miniature, even to the ocean lanes followed by the ships of the Ford fleet in their journeys to the far corners of the earth. ²⁷⁶

The central location of the globe, as well as its features, initially highlighted the regrowth of American industry following the economic crash, which translated into hope for Depression era America of leaving economic woes in the past. In Dearborn, the globe became a

Ford Motor Company. "The Rotunda: Suggestions for Its Utilization." Folder Dearborn-Exhibits-Opening Rotunda: Box 19: Accession 554: Clarence W. Olmstead records series, Exhibition records subgroup, Ford Motor Company Public Relations records collection, Benson Ford Research Center, The Henry Ford.

Ford Motor Company. "The Rotunda: Suggestions for Its Utilization." Folder Dearborn-Exhibits-Opening Rotunda: Box 19: Accession 554: Clarence W. Olmstead records series, Exhibition records subgroup, Ford Motor Company Public Relations records collection, Benson Ford Research Center, The Henry Ford.

²⁷⁵ Ford, Motor Company. "A Visit to the Ford Rouge Plant." 24. Folder 951:Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937. See Figure 6 in Chapter 2

²⁷⁶ Ford Motor Company. "Rotunda Nears Completion at Dearborn." *Ford News*, Volume XVI, Number 2. February 1936. Benson Ford Research Center. The Henry Ford.

symbol of American industry's role, especially Ford Motor Company's, in defining the nation as a world power and the company as an imperial power.

Indeed, by 1936, Ford Motor Company had spread across the planet. As historian Allan Nevins points out, "The planting of American branch factories in foreign lands [was] a necessary subsequent step for reducing transportation costs [and] avoiding tariffs or other restrictions on trade." Ford began its global expansion as early as 1904, with the creation of the Ford Motor Company of Canada, Ltd. (Ford-Canada). Both Ford-US and Ford-Canada soon exported automobiles to European countries such as England and Germany, which eventually became sites of Ford factories. Ford's global reach did not restrict itself to Europe, but spread until the company could boast to have industrial concerns on six continents. Thus, marking Ford's world concerns on the globe inside the Rotunda in 1936 lead to an impressive array of points.

Encircling the globe is fencing with the V8 logo along it, a constant reminder of the product being produced at the factory for sale to Rotunda visitors and a sort of bold statement of Ford's global power (we own the world). Indeed, as a complimentary pamphlet from 1935 states:

A World-Wide Institution – Great as it is, the Rouge plant is only one unit in a world-wide plan of Ford production, distribution and service. In every portion of the globe, Ford is represented. Literally, the sun never sets on the Ford organization. ²⁷⁹

²⁷⁷ Nevins, Allan. Introduction to *American Business Abroad: Ford on Six Continents*. 2nd Edition. Wilkins, Mira and Frank Ernest Hill. New York: Cambridge University Press, 2011.

²⁷⁸ Grandin, Greg. Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City. New York: Picador, 2009. Wilkins, Mira and Frank Ernest Hill. *American Business Abroad: Ford on Six Continents*. 2nd Edition. New York: Cambridge University Press, 2011.

Ford Motor Company. "The Ford Rouge Plant at Dearborn." Box 18 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1935.

Here, Ford paternalistically watches over all, dwarfing the world with visions of vigilance. Through the globe display, Ford Motor Company shined a spotlight on globalization at



Figure 12: Globe of the World with Henry and Edsel Ford

the Rotunda.

Mirroring the fencing encompassing the globe, the Rotunda's interior walls were covered with "600 feet of photographic murals surrounding the outer wall of the concourse depict[ing] 32 scenes from the Rouge Plant," a factory site long understood to be the center of technological and industrial innovation in the nation, if not the world. The murals total 98 panels, each one 20 feet long and 6 feet high. The murals were comprised of "enlarged photographs of striking scenes in the manufacture of Ford cars in the Rouge Plant," both of the exterior as well as the interior of the complex. Sixteen of the scenes come from photos taken in 1936, while the others were "original panels used in the mural in the rotunda of the Ford Exposition at Chicago. Scenes replaced were those in which manufacturing processes have since

²⁸⁰ Ford Motor Company. "A Visit to the Ford Rouge Plant." 24. Folder 951:Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937.

²⁸¹ Ibid.

changed."²⁸² One panel was reminiscent of Sheeler's "Criss-Crossed Conveyors," while others showed work in the foundry.²⁸³ The focus of the photographic murals was on process.

Merging process with ideas, mounted on sixteen of the photographic panels were a "series of terse, epigrammatic" sayings by Henry Ford. Each letter was made of polished satin finished zinc five inches high, three quarters of an inch thick with bold vermilion sides, "the only bright color in the entire mural layout," sure to stand out and not be missed by viewers. 284 The topics covered by the epigrams range from advertising in nature ("ONE-THIRD OF A CENTURY OF PROGRESS PRODUCED THE FORD V-EIGHT") to statements on national economic recovery ("THE RECOVERY WE NEED – AMERICAN SPIRIT OF ENERGY AND INDEPENDENCE"). Taken together, the sayings promote traditional values such as individualism ("IT IS INDIVIDUALISM THAT MAKES CO-OPERATION WORTH HAVING"), arguments against the charge that overproduction, like underconsumption, created the depression ("OVER-PRODUCTION IS A MONEY CRY, NOT A HUMAN CRY-PRODUCE EVER MORE"), and assertions that company labor was well paid ("WAGES FOR PRODUCERS-PROFITS TO MAKE GREATER VALUES FOR USERS"). 285 Collectively, the sayings profess a paternalistic Ford who knows what is best for the nation, workers, and business.

00.

²⁸² "The Ford Rotunda." *Ford News*, Volume XVI, Number 6. June 1936. Benson Ford Research Center. The Henry Ford.

²⁸³ See Chapter 2, Figure 1.

²⁸⁴ "The Ford Rotunda." Ford News, Volume XVI, Number 6. June 1936. Benson Ford Research Center. The Henry Ford

²⁸⁵ "The Ford Rotunda." *Ford News*, Volume XVI, Number 9. September 1936. Benson Ford Research Center. The Henry Ford.

In essence, the placement of these sayings and scenes of the Rouge factory around the huge globe repeat the display of American industrial might in a global context, as the Rouge images visually embraced and surrounded the world within the walls of the Rotunda.



Figure 13: Rotunda interior showing mural panels.

Finally, between the globe and the murals, positioned around the interior were 34 current "Ford, Lincoln, and Lincoln-Zephyr products," "displayed to the best advantage," and described in a Ford Motor Company film as the "latest tangible shapes into which the Ford idea has been molded." Some of these vehicles featured cut-away portions, allowing visitors to view the normally hidden working parts of the autos. The cut-aways mirrored the soon to be revealed hidden work of manufacturing, which had become an enigma to many Americans. Transparency of assembly and manufacturing processes, along with the world wide aspirations of American industry were the main features of Depression era tours as presented to the

²⁸⁶ "The Ford Rotunda." *Ford News*, Volume XVI, Number 6. June 1936. Benson Ford Research Center. The Henry Ford. And "Rotunda Nears Completion at Dearborn." *Ford News*, Volume 16, Number 2. February 1936. Benson Ford Research Center. The Henry Ford. Also Unknown. "The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 – Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford. And Audio Productions, Inc., Eastern Service Studios and Ford Motor Company. "The Harvest of the Years: A Story of the Triumph of an Idea." 1938. https://archive.org/details/0750_Harvest_of_the_Years_A_Story_of_the_Triumph_of_an_Idea_The_14_30_52_20 Littmann, William. "The Production of Goodwill: The Origins and Development of the Factory Tour in America." *Constructing Image, Identity and Place.* Edited by Alison Hoagland and Kenneth Breisch, 71-84. Knoxville: University of Tennessee Press, 2003.

public, however visitors were not simply to observe all the Rouge had to offer in an unstructured way. The Rotunda was fully staffed with "knowledgeable" men "to act as guides and attendants," trained to make the Rotunda an "impressive starting point for trips through the plant," making it an "excellent preparation and background for the things to be seen on the plant tour."

Rotunda personnel were organized and trained by N.W. Ayer and Son, an advertising firm employed by Ford Motor Company. Rotunda staff trainees were made up of "carefully selected young men," chosen on the "basis of their education, apparent ability, enterprise and personality." ²⁸⁹ They would attend lectures "delivered by Ford officials and by heads of the departments involved," which put Ford in the position to indoctrinate Rotunda staff in the dogma of mass production, as well as in Ford values. ²⁹⁰ After the trainees completed a "limited period of duty on the Rotunda staff they would be eligible for transfer to other lines of work or their work with the company terminated." ²⁹¹ Training staff for the Rotunda gave Ford Motor Company the opportunity to weed through the tremendous number of job seekers and keep only what they judged to be "considerable talent." ²⁹² Talent used to convince visitors that Ford

²⁸⁸ "The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 – Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford. ²⁸⁹ Ibid.

²⁹⁰ "The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 – Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford. ²⁹¹ Ibid.

²⁹² Ibid.

Motor Company's idea of efficiency leads to a "means of spreading the results of scientific achievement more widely among mankind." ²⁹³

Once visitors finished viewing the interior Rotunda displays, they boarded glass-topped buses outside the entrance that drove them into and through the River Rouge Complex where tour guides lead them around multiple sections of the grounds and buildings. ²⁹⁴ Guides assigned to the bus tour were in their second month of training, after lectures on "the plant itself and the various departments and activities in it." 295 Visitors did not exit the buses on each stop, but at times merely viewed the object of the tour guides' lecture through bus windows, which were extended onto bus roofs. At designated points along the bus tour, they would disembark and walk through buildings to observe the manufacturing processes – with a tour guide to point the way. They walked upon steel catwalks used by workers through the foundry, heard the slam of industrial stamping presses, smelled the oil covering body shop parts, and walked next to the assembly line. Workers in 1936, excluding women and most African American workers, whose processes and departments were not include on the tour route, were thus viewed in an up close and personal fashion in an intimate tour of labor. Viewed from the catwalks and walkways built for practical work purposes and only pipe railings separating labor from tourists, workers were framed as users of industrial knowledge, especially of the

²⁹³ Audio Productions, Inc., Eastern Service Studios and Ford Motor Company. "The Harvest of the Years: A Story of the Triumph of an Idea." 1938.

https://archive.org/details/0750_Harvest_of_the_Years_A_Story_of_the_Triumph_of_an_Idea_The_14_30_52_20 Pord Motor Company. https://archive.org/details/gov.archives.arc.93713. National Archives and Records Administration - ARC Identifier 93713 / Local Identifier FC-FC-4649 - TOUR THROUGH THE ROUGE PLANT, ca. 1939. And Ayer. "Plan for an Initial Three-Month Training Course for the New Ford Rotunda Staff." Fred R. Black and C.W. Olmstead Papers. Folder 1 - Training Personnel- Ayer: Box 19 — Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford.

Ayer. "Plan for an Initial Three-Month Training Course for the New Ford Rotunda Staff." Fred R. Black and C.W. Olmstead Papers. Folder 1Training Personnel- Ayer: Box 19 – Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford.

technologies of moving mass production, a mystery to tourists. Workers' actual expertise was, however, visible to the eye of the viewing public who were only a few feet away. Railings likely installed by plant workers, gave the impression of keeping visitors out of the workers' way, just as much as they were objects installed for the visitors' safety. Ford Motor Company records declared that a total of 132,507 visitors toured the Rouge complex in its first year at Dearborn. ²⁹⁶ That year, the tour route had seven specific stops.

Within an Industrial City

The first stop for tour visitors at the "world's largest single industrial development" was the Coal and Ore Bins. 297 This stop introduced the public to the immense centralization of industrial manufacturing. An internal Ford memo states, "From that point, the Ford story 'From Earth to Automobile' would be told in logical and consecutive steps." 298 The coal and ore bins, towering over the bus, held raw materials shipped to the complex from around the world for use in the manufacture of consumer products. The memo continues, "Even the non-technical visitor will retain a clear picture of how raw materials are transformed into an automobile under the most efficient and advanced industrial practice in the world." The company, through its tour guides, disseminates logics of globalization at this tour stop where foreign raw

²⁹⁶ "Rouge Plant Visitors." 50th Anniversary Displays & Exhibitions: Box 1: Accession 1108. The Benson Ford Research Center. The Henry Ford. 1973."

²⁹⁷ Ford, Motor Company. "A Visit to the Ford Rouge Plant." 24. Folder 951:Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937.

²⁹⁸ "The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 – Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford. ²⁹⁹ Ihid.

materials are naturally (an obviously) part of the American production process that, Ford argues, ultimately benefits the American consumer.

At the second stop, the Foundry-Machine Shop, visitors disembarked and walked on a "balcony walkway" high above blast furnaces located next to the foundry that are filled with molten metal, often showering the floor below with sparks as workers threw cold chunks of metal into the vat. 300 Using an amplifier erected at the south entrance of the building, tour guides could expound on Ford's role in innovation with an address on the "continuous pouring methods developed by Ford." 301 Many of the workers at this portion of the tour were African Americans, as they were routinely relegated to the hot and dirty foundry jobs. 302 But for the tour visitor, making out the race of these workers would be difficult. Because of the intense heat and potential safety issues, visitors were on catwalks far above and away from the blazing furnaces, the distance causing workers to appear rather indistinct against the brightness, therefore visible markers of race, such as skin tone were obscured. 303 And so, this stop on the tour route, where many dark skinned workers daily proved their inclusion as part of a technologically sophisticated nation, obscured racial differences.

³⁰⁰ Ford Motor Company. https://archive.org/details/gov.archives.arc.93713. National Archives and Records Administration - ARC Identifier 93713 / Local Identifier FC-FC-4649 - TOUR THROUGH THE ROUGE PLANT, ca. 1939. And "Route for Visitors." Dearborn Exhibits-Opening Rotunda, Box 19, Folder 4, Accession 554, Clarence W. Olmstead records series, Exhibition records subgroup, Ford Motor Company Public Relations records collection, Benson Ford Research Center, The Henry Ford.

³⁰¹ "The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 — Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford. ³⁰² Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002. 73.

³⁰³ On factory tour safety issues see Littmann, William. "The Production of Goodwill: The Origins and Development of the Factory Tour in America." *Constructing Image, Identity and Place*. Edited by Alison Hoagland and Kenneth Breisch., 71-84. Knoxville: University of Tennessee Press, 2003.

Behind the blast furnaces, visitors would move to the foundry machine shop "for a glimpse of parts nearing completion," skipping the "foundry proper" because of safety concerns, "due to the hazard from molten metal to those not familiar with foundry practice." At the machine shop they viewed skilled tradesmen at work, reinforcing the idea brought to Dearborn from the Chicago Exposition that American industry was built on strong platforms of science's ability to manipulate technology and when directed by American companies, would lead to American prosperity.

The third stop consisted of the Vocational School and Chemical Laboratory, which also augmented the argument that science education was the path to modern progress. They passed by a "glass-enclosed laboratory" touted as "one of the most modern industrial laboratories in the world." Once again, Ford is at the cutting-edge of technological innovation – not just in the U.S., but globally. Guides were instructed to describe and explain the "Ford system of testing for quality in raw materials, parts in fabrication, and finished units," reiterating Henry Ford's epigram that "A CHEAPLY MADE PRODUCT IS TOO EXPENSIVE TO BE PRICED CHEAPLY." Ford was arguing that the company was only looking out for the best interests of its customers through its applications of technologies.

The Motor Building, fourth stop on the tour was largely a public relations/marketing maneuver. In 1936, Ford Motor Company was heavily invested in selling their redesigned V8

³⁰⁴ "The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 – Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford. And "A Visit to the Ford Rouge Plant." 24. Folder 951:Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937.

³⁰⁵ "A Visit to the Ford Rouge Plant." 24. Folder 951:Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937.

³⁰⁶ Ibid. And "The Ford Rotunda." *Ford News*, 16.9. September 1936. Benson Ford Research Center. The Henry Ford.

engines to consumers. This stop gave the company another opportunity to sell the value of purchasing a new Ford through an education on how well-made the engines were. They accomplished this goal with "the story of precision," and "explanation of the apparatus used in testing," once again using the tour stop to restate the company's position as leader in science and technology. ³⁰⁷

Next, tour visitors would enter the "B Building" where they saw "the plant's famed final assembly line" as they were led along the 270 foot length of the moving assembly line. Here, workers assembled more than 6,000 automobiles a year during the mid-1930s. While this section of the tour was also a marketing tool demonstrating the "quality" of Ford products in the guise of nearly completed vehicles, it was this stop, more than anywhere else that put labor on display.

Assembly line workers, normally men, wore newsboy style caps, overalls, and work shirts, often with the sleeves rolled up and rags hanging out of back pockets. Workers' apparel distinctly signaled their position as working-class. Their bodies were in near constant motion — arms reaching across and overhead toward either wielding tools such as wrenches to install small pieces or guiding larger parts into the proper position for installation and feet taking them around or alongside the moving line. Their eyes tended to focus on their work and there was

³⁰⁷ "The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 – Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford. ³⁰⁸ "The Ford Rouge Plant at Dearborn." Box 18: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1935.

little conversation between them. ³⁰⁹ At some points along the tour route, workers were sandwiched between the pipe railing and the automobile they were working on.

In comparison to the workers, tour visitors, squeezed between the pipe railing and walls, slowly walked along the length of the moving assembly line, sometimes stopping to watch workers perform a particular process, such as dropping the automobile body down onto the chassis. Their motion was quite still compared to the motion of the workers. Tour visitors were largely dressed in attire suggesting a more typically middle-class social position, with men wearing suits and ties with fedoras, while women were in dresses and fashionable hats.

Although this tour stop put labor on display, the company worked to minimize their contribution to the finished product. As the 1937 complimentary pamphlet explains, "Without the thousands of inspections, and close control of every operation which prevails throughout the plant, the final assembly line as seen here would be impossible." To translate, without close supervision and control of labor, from the start of the process to the end, workers would not have the ability to produce vehicles, let alone quality vehicles. In other words, Ford was the appropriate manager of labor, an argument with particular disposition at a time when Ford Motor Company and its labor had a very contentious relationship.

After viewing the final line, visitors once again board buses, continuing their journey until stopping at a point just north of the gas reservoir, to the open hearth building "for an

Ford Motor Company. *Tour Through The Rouge Plant*. National Archives and Records Administration: ARC Identifier 93713 / Local Identifier FC-FC-4649, ca. 1939. https://archive.org/details/gov.archives.arc.93713?start=119.5

introduction to the story of steel."³¹⁰ Often the most memorable part of their journey, steel-making processes such as "ingot pouring, soaking pits, blooming mills and finally hot and cold strip mills" were a display of shock and awe, demonstrating the might of industrial manufacturing.³¹¹

Finally, the last stop on the tour before returning to the Rotunda was the Drop Forge

Plant, located north of the steel mills, another space where visitors were impressed with the

power of industrial manufacturing. Drop Forge presses molded heated metals into automobile

parts by placing red-hot metal ingots onto a lower die and using the weight of the top die, press

the metal into the desired shape.

Each tour stop allowed visitors to absorb ideas about American industry's position in the global world, take in examples of the value of science and technology to the nation, and learn who should do what jobs, thus continuing the work begun during the Chicago Century of Progress Fair. The bus tour put American progress toward modernity on display through a carefully designed exhibit of globalization (raw materials), science (skilled technicians in foundry-machine shop), and controlled labor. 312

³¹⁰ "The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 – Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford. ³¹¹ Ibid.

³¹² Dearborn Ford Motor Company – Exhibits –Opening Rotunda, Box 19, Accession 554, Clarence W. Olmstead records series, Exhibition records subgroup, Ford Motor Company Public Relations records collection, Benson Ford Research Center, The Henry Ford. See also: "Suggested Visitors' Trip" and from same folder; The Rotunda: Suggestions for its utilization - This gives detailed account of suggested tour route; Filed under – Rotunda – Staff.

Return to the Rotunda

Once visitors returned to the Rotunda, they were "directed to the new car exhibits" and then to the Roads of the World. Rotunda staff at the new car exhibits consisted of trainees in their third month of company instruction. Learning in this period was "devoted to sales presentation on the rotunda floor." By now, visitors were completely immersed in Ford's version of the story of production — a scientifically supervised cutting-edge technological process with a global reach, innovated, directed, and managed by Ford Motor Company with marginal subsidiary contributions by labor, leading to a quality product that they should be proud to own.

After their visit to the new car exhibits, but before leaving, visitors could feel what it was like to ride in new Ford automobiles outside at the "Roads of the World" exhibit, described as "A portion of the dramatic story of man's growth ... graphically told in a group of reproduced highways, trails and roads which wind their circuitous way around the Rotunda," which had also been moved to Dearborn to "afford means of giving demonstration rides to thousands of visitors weekly. This display was 3,700 feet long, with sections "reproducing 19 famous highways of the world" that traced the "advance of civilization through one of its most revealing and characteristic channels, the roads man has built since he first invented the

3.

^{313 &}quot;The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 — Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford. 314 "The Ford Rotunda." Ford News, 16.6. June 1936. Benson Ford Research Center. The Henry Ford. And "The Rotunda: Suggestion For Its Utilization." Fred R. Black and C.W. Olmstead Papers. Folder 4: Box 19 — Rotunda Exhibits Dearborn: Accession 554. Ford Motor Company. Benson Ford Research Center. The Henry Ford.

wheel."³¹⁵ Here visitors took rides over the road in new Ford vehicles while the driver told the "gripping story of their origin," beginning with a replica of Avenida Rio Branco street in Rio de Janeiro, Brazil, through reproductions of the Appian Way built by the Romans in 312 B.C. and historic roads throughout Europe, China, and Africa, and ending with historic and finally "modern" U.S. highways. ³¹⁶ By ending with U.S. roads, Ford placed the nation at the top of a hierarchical ladder based on technological expertise.

Drivers at the Roads of the World, one month into their training, learned the "exciting" tales of the historical road surface and also in the "general background material on the company and its founder," as well as in the "methods, policies and ideals of the Ford Motor Company and prepare[d] ... for increasing usefulness and service with the company." Their first month of training was through assigned readings and lectures such as "Henry Ford, his life and work" and "The Rouge Plant; its size organization and plan of operation," among others. Additionally, trainees learned Ford's logics of globalization, through lectures like "Ford the world over: foreign plants, exports, the Ford fleet, etc.," and introduced to an early logic of deindustrialization – decentralization - with a lecture on "The decentralization of industry; smaller Ford plants in rural communities utilizing water power." Ford put forth the argument that these rural "Little Industries" or "Village Industries" were designed for "cooperation" between industrial areas and agricultural areas so "in agricultural regions [there would be]

³¹⁵ "A Visit to the Ford Rouge Plant." 24. Folder 951: Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937. And "Rotunda Nears Completion at Dearborn." *Ford News*, 16. 2. February 1936. Benson Ford Research Center. The Henry Ford. ³¹⁶ "The Ford Rotunda." *Ford News*, 16.6. June 1936. Benson Ford Research Center. The Henry Ford.

³¹⁷ Ibid.

³¹⁸ Ibid.

useful work to do when the harvest has been gathered."³¹⁹ However, labor uprisings of 1933-34 taught Ford and other manufacturers that centralized production – where raw materials entered one side of a factory and the completed product came out the other – while giving manufacturers greater control over costs and resources also allowed for greater worker solidarity and therefore, more power for labor. Decentralizing manufacturing processes had the potential to divide workers, breaking their bonds of solidarity and the rural village industries were the first step in the process. The Roads of the World display gave Ford Motor Company the opportunity to cultivate a concurrence of opinions regarding future dismantling of centralized production, both with the Rotunda staff and the public they would enlighten while making a pronouncement of the nation's place at the pinnacle of the modern world.

Such lineaments played a vital role in coalescing national identity. Those who visited the Rotunda, whether as part of the Chicago World's Fair, around 12,000,000 people during the building's display at the exposition, or as part of the Rouge tour in Detroit, compiled individual memories that became part of the collective imagination of a strong nation and a modern future where American industries lead the way to prosperity through technological innovation and global influence. Close readings of the Rotunda exhibits and its tour reveal an understanding of capital and labor that stands in sharp contrast to well-known representations of labor in this period, Charlie Chaplin's well known film, *Modern Times*. In the film, Chaplin

³¹⁹ Audio Productions, Inc., Eastern Service Studios and Ford Motor Company. "The Harvest of the Years: A Story of the Triumph of an Idea." 1938.

https://archive.org/details/0750_Harvest_of_the_Years_A_Story_of_the_Triumph_of_an_Idea_The_14_30_52_20 and Ford, Motor Company. "A Visit to the Ford Rouge Plant." 24. Folder 951:Box 52 – U-V-non-serial imprints: Accession 951. Ford Motor Company Non-serial Publications collection. Benson Ford Research Center. The Henry Ford. 1937. And Ford Motor Company. "Rotunda Nears Completion at Dearborn." Ford News, 16. 2. February 1936. Benson Ford Research Center. The Henry Ford.

challenges the idea that mass production should be glorified by showing the consequences of factory work on labor and corporate decision making on the nation.

Back to Work! Modern Times and the Challenge to Ford's Doctrine of Mass **Production**

But of course, no matter how much sparkle and polish or how many shiny, spinning globes Ford Motor Company put on display, real people were daily experiencing a very different reality of progress and science and modernity. Ford was not the only one putting out ideas about what work is like at this moment. Film maker, Charlie Chaplin created, in 1936, a very different, also much loved vision of American manufacturing in his indelible "Modern Times," which exposed the marginality of working-class existence during The Great Depression. 320 Job security was virtually unknown at a time when factory jobs disappeared in the blink of an eye and workers faced intermittent employment if any could be had at all.

"Modern Times" tells the story of the destitute 1930s working-class through Chaplin's infamous silent film character, the Tramp. Film Studies professor, Lawrence Howe reasoned, "[Chaplin's] Tramp persona, informed by his own impoverished upbringing, represented class disadvantage to elicit the sympathy of audiences." ³²¹ In the film, the Tramp works in a factory on the assembly line, which drives him temporarily insane. He spends some time in an asylum, after which he searches in vain for work. While looking for a job, he is mistaken for a communist agitator and is briefly arrested. Once released, he becomes romantically involved

³²⁰ Opening date of "Modern Times" was February, 1936.

³²¹ Howe, Lawrence. "Charlie Chaplin in the Age of Mechanical Reproduction: Reflexive Ambiguity in Modern Times." College Literature: A Journal of Critical Literary Studies 40, no. 1 (2013): 45-65.

with an orphaned street urchin, who had recently escaped arrest herself, whom he tries to protect and support through various jobs that end in dismissal and usually more jail time. Finally, the police catch up with the gamin, who expresses the hopelessness often felt by the oppressed working-class. The film ends with the couple walking toward an unknown but hopeful future. A close reading of the factory scene argues against Ford's vision of work and its emerging logics of globalization.

The film opens with a shot of a clock, a reminder that factories are ruled by time and then cuts to sheep being herded through gates then quickly cuts to depictions of working-class men traveling to work, with a large factory building in the background. The connection could not be clearer — workers, following orders like a herd of sheep like lambs to slaughter were no better than animals and were treated as such. As a child, Chaplin saw "sheep [that] would pass our house on their way to be butchered. I remember one escaped and ran down the street to the amusement of onlookers. Some tried to grab it and others tripped over themselves. I had giggled with delight at its lambent capering and panic, it seemed so comic. But when it was caught and carried back to the slaughter house, the reality of the tragedy came over me and I ran indoors, screaming and weeping." Much like in his creation of the Tramp character, Chaplin used his boyhood experience to make a visual argument in "Modern Times" that framed the working-class experience.

³²² As a matter of fact, a Ford Motor Company produced film discusses how "seconds" saved at one point of the production process leads to useful "minutes" added to other places in the process. Audio Productions, Inc., Eastern Service Studios and Ford Motor Company. "The Harvest of the Years: A Story of the Triumph of an Idea." 1938. https://archive.org/details/0750_Harvest_of_the_Years_A_Story_of_the_Triumph_of_an_Idea_The_14_30_52_20
³²³ Chaplin. Charles. My Autobiography. Harmondsworth, England: Penguin. 1964. 40.

Using experience Chaplin gained as an adult, such as visits to factories, he created the fictional Electro Steel factory, a shortened version of centralized production.³²⁴ Inside are tremendously large machines dwarfing their human operators, styled much like the dynamo found behind Chaplin with Henry Ford and Edsel Ford in a 1923 photo.



Figure 14: Edsel Ford, Charles Chaplin, and Henry Ford, 1923

The sheer size of the machinery in the film, extra large and exaggerated, loudly shouts industrial might. At the same time, it also depicts humans as in the service of the machines, as if the machines are more important than the workers who tend them. Both images mirror the visual message of the Rivera mural as discussed in Chapter 2. The steel factory is spacious and very clean – an image inconsistent with actual steel mills, after which the fictional factory is named. The clean factory is an imaginary of actual factories. Real factories, like real life, are quite messy. Yet somehow the workers have oil, grease, and dirt on their skin and clothing. These images send contradictory messages.

But the screen factory has been cleaned up and sanitized, much like the topical cleaning actual factories tend to undergo before upper management visits, giving an impression of dirty

Portrait of Chaplin, H. Ford and E. Ford in front of dynamo in 1923 – likely at the Highland Park facility. http://elibrary.wayne.edu/record=b3347653~S47.

people laboring in a clean environment. Although the factory depicted in "Modern Times" is clean, somehow the working-class men laboring within it are not. This contradiction sends a message that working-class men do not take care of themselves according to a middle-class standard of cleanliness, especially when held against the president's secretary who walks through the shop floor in some of the scenes. She is extremely neat and tidy – a stark contrast to the workers. Yet at the same time, it depicts the reality of factory work – sweating (due to the pace of work) and handling greasy, oily metal parts (one cannot stay clean when working with messy parts).

In stark contrast, is the factory president, seen sitting at his in an office, assembling a jigsaw puzzle and reading the newspaper. Behind him is a large screen that he can view at will, showing the factory floor, where he monitors production. Additionally, he has an audio connection that he uses to supervise and manage the shop floor.

Working on an assembly line is The Tramp. With a wrench in both hands, his job is to simultaneously tighten two nuts as the line speeds past. He is barely able to keep up with the line speed, when he takes a moment to acknowledge his bodily needs as he scratches an itch or bats away a flying insect. As this happens, we see The Tramp fall behind (in the hole) and get in the way of the next worker, who then also falls in the hole, interrupting the activity of the line worker immediately after him. This is how moving assembly lines work – they can only work as efficiently as the slowest worker. As the Tramp struggles to keep up, the line foreman, surveilling the situation, scolds him until he regains the proper pace. But the company president orders the line to be sped up several times, which increases the pace experienced by

workers. Line speed-ups, from both the movie viewer and worker perspectives appear to be quite arbitrary. The autocratic and unpredictable speed-ups in the film are a commentary regarding the capricious whims of capitalists – for more, more, more! More production! More profits!

At one point in the story, a relief man takes over the main character's line job and The Tramp jerkily walks away as if his body cannot stop the mechanical movements required of humans working on the assembly line and enters the bathroom where he proceeds to light a cigarette and relax against a sink. Nearly the entire back wall of the bathroom is a large screen. Suddenly, the bathroom monitor lights up, displaying the annoyed company president who abruptly barks, "HEY! QUIT STALLING!! GET BACK TO WORK!" In this scene, Chaplin comments on the constant surveillance workers labor under in the factory by placing the fictional monitor in what is a very private space. He shows how workers are always visible to those in power (the company president or line foremen) even when workers cannot see those in power, as when the Tramp is focused on tightening the nuts on the line. Foucault states that the effects of surveillance are "permanent in its effects, even if it is discontinuous in its action." In other words, workers in factories do not always know exactly when they are being observed, so they must behave as if they are at all times in order to avoid disciplinary action should surveillance occur. The bathroom scene illustrates this when the Tramp has his back to the bathroom monitor when it suddenly comes to life.

3.

³²⁵ Foucault, Michel. Translated by Alan Sheridan. *Discipline & Punish: The Birth of the Prison*. New York: Vintage Books, 1997. 201.

Chaplin continues his critique of factory work in a scene depicting the "Billows Feeding Machine." As the line stops for the lunch break, the Tramp convulsively continues jerking in imitation of the motions he uses while working. 326 The workers move to benches a few feet from the line, unable leave the factory floor to eat. The factory president allows salesmen to demonstrate, using the Tramp, a machine that allegedly would feed workers so production would not have to stop for a lunch break. Apparently, line workers do not need to see what their hands are doing in order to produce items on the assembly line, which harkens back to Henry Ford's assertion that even a child could perform assembly work. The demonstration fails miserably; as the engineers adjusting the feeding machine treat the Tramp as if he were also a piece of machinery, ignoring his discomfort as the feeding machine mindlessly feeds him large steel nuts and repeatedly slaps his face. This scene is a comment on the perceived ability of technology to produce superior levels of efficiency over the ability of humans, as well as commenting on the idea of making humans into machines.

As the work day progresses, the line is sped up "to the limit" and the Tramp, pushed to his breaking point experiences a complete nervous collapse. In one of the film's most well-known scenes, he follows his work onto the conveyor belt and is threaded into the gears running the assembly line. While he is not physically injured, Chaplin's critique that as a worker, he is simply another part of the machinery, he is so mentally distraught that only a stay in an asylum can bring him back to normal.

2.

³²⁶ Anecdote: During the first few weeks of assembly line work, I spent the nights dreaming about being on the line and how it wouldn't stop no matter how dire the situation. In discussing my dreams with fellow workers, I discovered that this is a common phenomenon.



Figure 15: The Tramp in the Machine

Overall, the message of this section of the film is: the working-class are treated like animals; they are only part of the machinery, not individuals; workers have no control over the pace of the line; workers labor so hard they get sweaty and dirty; bosses don't even work and are capricious; labor needs constant monitoring by bosses/management/owners; working on moving assembly lines impacts workers not just physically, but mentally as well. These many notions about labor are indicative of the American viewpoint regarding industrial manufacturing at the time. People wanted and needed work and were especially desirous of stable work, even if, as the film neatly demonstrates, it meant working on assembly lines that were both physically and emotionally demanding.

"Modern Times" works to entertain even as it puts forth a social critique. That critique focuses largely on industrialism, but also, as the film progresses beyond the factory walls, on the relationship between production and consumption. This relationship between production and consumption in the film, according to Howe, "was central to both the experience of and

the attempts to understand the Great Depression."³²⁷ In short, the film was just as much of a response to the depression as it was a response to industrialization.

The film contrasts sharply with the Rotunda tour in that the tour works to uplift industrialism, rather than to criticize it. The Rotunda tour works to demonstrate how valuable industry, and especially Ford Motor Company, is to the nation. The relationship between production and consumption on the Rotunda tour is always visible - new cars are visible the public cannot immediately purchase them while at the Rotunda. The central message of the Rotunda tour is "Be a good consumer and buy a Ford automobile," but also, "Look at what a good citizen Ford is – he and the company provide well paid jobs so you, the citizen consumer can purchase quality products." In other words, the company is the best citizen because it provides through production. Without production first, there would be no consumption. The film, on the other hand, shows the capricious nature of industry, how the nation cannot count on industry to always be the "good citizen" and put aside its own needs and desires for the good of the nation. But in the film, the working-class are shown as being the truly good citizens because they want to buy products but since industry does not keep them employed, they are barred from performing their role as good citizens.

Another way the film and Rotunda tour are different is in their sympathies toward labor. The film shows the trials and tribulations of factory workers and the working-class. That is, it shows hardships endured by labor as a result of decisions made in industry, while the Rotunda tour shows the (then) more unusual version of working labor (and plenty of it!). Again, on the

Howe, Lawrence. "Charlie Chaplin in the Age of Mechanical Reproduction: Reflexive Ambiguity in *Modern Times*." *College Literature: A Journal of Critical Literary Studies* 40.1 (2013): 45-65.

Rotunda tour, the company makes the argument that it is a good citizen that creates jobs for the once jobless.

Rather than deflecting the public's eye as Ford worked to do on the tour, "Modern Times" focused public attention on the arbitrary whims of factory owners. Overall, the Rotunda tour is quite optimistic about the future, whereas the film displays greater ambiguity regarding where and how the nation's citizens will work. The popular film was not the only public medium contesting the industrial vision of industries, such as Ford Motor Company. Workers themselves began challenging the absolute authority of their employers in an effort to define for themselves how the workplace should be structured.

Unionization, Ford Motor Company, and the Unseating of Labor

In 1935, after President Roosevelt signed the Wagner Act, "Large corporate employers were so certain that the Wagner Act was unenforceable," they disregarded the new act while opposing union organizing attempts. Lichtenstein confirms "...they hired labor spies, fired union activists, stocked upon guns and tear guns and financed a campaign in the press and on radio against the New Deal union idea." But some union leaders believed the time was right to "unionize industrial workers and ... seize this opportunity," in order to increase its "membership, economic power, and political clout." It was not an easy road, especially as "the repressive insularity of the factory regime – gestapo-like at the Rouge," made it difficult for workers to grasp the potential of "the New Deal's emancipatory message," which forced union

Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002. 43.

³²⁹ Ibid.

organizing to be a secretive activity.³³⁰ Fear of job loss or worse often made factory workers hesitant in respect to active unionizing, even though they were generally willing to strike.³³¹

Not only was it challenging to organize fearful workers at factories, American unions faced divisions within themselves. The American Federation of Labor (AFL), "not a labor union per se, it was rather a federation of national and international unions, each of which represented workers in a discrete trade or industry," was not willing to include semi- or unskilled workers. The AFL's exclusionary stance toward mass production workers eventually lead to the formation of the Committee for Industrial Organization (CIO) in 1935, which provided the "national coordination and leadership that enabled … new unions to confront such multi-state corporations as U.S. Steel, General Motors, and Firestone Tire and Rubber." The inclusion of unskilled labor under the umbrella of the CIO had a "certain radical, democratic potential," often unrealized, to expand union protections for women and African American workers in mass production positions. One of those new unions chartered under the AFL-CIO in 1935 was the United Auto Workers (UAW).

³³⁰ Ibid. 48.

³³¹Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002. 45.

³³² Zieger, Robert H. and Gilbert J. Gall. *American Workers, American Unions*. Baltimore and London. The Johns Hopkins University Press. 2002. 24. Also see Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941*. Boston. Houghton Mifflin Company. 1970. And Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford. Princeton University Press. 2002.

³³³ Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941*. Boston. Houghton Mifflin Company. 1970. 402. And Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford. Princeton University Press. 2002. 44-45.

³³⁴ Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002. 25-35.

³³⁵ The relationship between the AFL and CIO was always tense and eventually lead to a break and renaming of the CIO to the Congress of Industrial Organizations. Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941*. Boston. Houghton Mifflin Company. 1970. And Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford. Princeton University Press. 2002.

Henry Ford became fiercely defensive of his patriarchal style of controlling and policing labor in his factories as Wagner Act inspired outbreaks of union organizing roiled through the nation. Ford's relationship with the UAW became violent as automotive supplier plants, General Motors (GM), and Chrysler agreed to collectively bargain with the union.

Trying to induce fearful workers to sign on, the UAW used muckraking author Upton Sinclair's novel titled: *The Flivver King*, in their drive to organize Ford Motor Company. ³³⁶ This novel tells a story of three generations of one family and their connection to Ford Motor Company through their employment in Henry Ford's factories, including the Rouge River plant. It demonstrates how their fortunes were intimately connected to the cyclical rise and fall of automotive manufacturing in the 1930s. Sinclair artfully intercuts experiences of the factory workers with moments out of Henry Ford's life, giving a stark contrast between the lives of Ford labor and that of the wealthy industrialist. It also illustrates the changing nature of the labor-employer relationship of the time – where once the worker and employer worked toward more similar goals, as Abner Shutt, the first generation Ford worker in the novel did – to the later corporate relationship where paternalistic relations no longer held sway in keeping labor in line, particularly when wages at Ford were lower than either GM or Chrysler and model change layoffs resulted in lower wages when "rehired." ³³⁷ The novel was a harsh criticism of Henry Ford and his treatment of unskilled laborers in his factories.

³³⁶ Sinclair, Upton. *The Flivver King: A Story of Ford-America*. Chicago: Charles H. Kerr Publishing Company, 1937. Introduction.

³³⁷ Bernstein, Irving. *The Turbulent Years: A History of the American Worker 1933-1941.* Boston. Houghton Mifflin Company. 1970. 738.

Ultimately it was Henry Ford's actions through his executive thug, Harry Bennett with his 3,000 man "para-military" Service Department and their "engagement in systematic intimidation" that turned the tide toward unionization. Worker control at the Rouge complex was "founded on fear and physical assault," as epitomized in Bennett's 1937 assault the Battle of the Overpass where he and forty of his men brutally attacked UAW leaders in a bloody assault. Pord's reputation fell after the attack and soon after, the UAW distributed two hundred thousand copies of *The Flivver King*. Although it took three more years before Ford and the UAW signed a contract, the Battle of the Overpass is often attributed to Ford's failure to keep unionization out of the Rouge.

As the unsettled 1930s became the 1940s, labor gains, such union organizations and collective bargaining agreements, legally achieved through the Wagner Act, ruled constitutional by the Supreme Court in 1937, would face the persistent resolve of American companies to dismantle legislation that was favorable toward workers. The growth of unions had leveled out as the U.S. entered World War II. Although labor's political power grew during the war though "labor's mobilization in elections and participation on the war boards," the end of the war witnessed a "split in Congress and in the Democratic Party on labor issues." This split would lead to legislation curbing labor's power.

³³⁸ Ibid. 740

³³⁹ Ibid. 737. And Lichtenstein, Nelson. *Walter Reuther: The Most Dangerous Man in Detroit*. Urbana and Chicago: University of Illinois Press, 1995. 84-85.

³⁴⁰ Ibid. 86

³⁴¹ Roof, Tracy. *American Labor, Congress, and the Welfare State, 1935-2010*. Baltimore: The Johns Hopkins University Press, 2011. 27.

By the end of World War II, labor seemed stronger than ever, but the war's sudden end lead to cancellations of military contracts and retooling of manufacturing plants, leaving many manufacturing laborers without steady work. Fears of post-war inflation pushed unions to "seek substantial wage gains," resulting in a strike wave in 1945-1946, threatening the postwar program for an "orderly transition to peacetime production" of the Truman administration. ³⁴² Employers grudgingly came to terms with the striking unions, but turned their own political clout toward legislating against union powers.

The National Association of Manufacturers (NAM) worked with legislatures to forge together "proposals circulating since the introduction of the Wagner Act into comprehensive legislation" that would curb the power of unions in what became the Labor-Management Relations Act of 1947, better known as the Taft-Hartley Act. This act established restrictions that would weaken union organizing, put limits on the right to strike, exclude foremen and supervisors from joining unions, and require union officials sign affidavits stating they were not Communists, among others. ³⁴³ Specifically, "Section 8(b) established a number of unfair labor practices for which unions could be held legally accountable, including sympathy strikes and 'secondary boycotts'." Additionally, the act "gave employers the opportunity to sue any union that called a strike in violation of a no-strike clause in the labor-management

³⁴² Zieger, Robert H. and Gilbert J. Gall. *American Workers, American Unions*. Baltimore and London: The Johns Hopkins University Press, 2002. 148.

³⁴³ The intent of the affidavit was to eliminate the more aggressive and radical organizers, as well as creating political splits within the unions. Roof, Tracy. *American Labor, Congress, and the Welfare State, 1935-2010*. Baltimore: The Johns Hopkins University Press, 2011. 42. And Zieger, Robert H. and Gilbert J. Gall. *American Workers, American Unions*. Baltimore and London: The Johns Hopkins University Press, 2002. 152. And Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002. 114-118.

³⁴⁴ Bluestone, Barry, and Bennett Harrison. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. New York: Basic Books, 1982. 136.

agreement."³⁴⁵ Taft-Hartley restrictions severely weakened labor's ability to shape the workplace, giving more influence to Ford's illusory vision of factory work as seen at the Rotunda and its tour in the eyes of the public.

Conclusion

After the violently unstable year of employer/employee relations that coincided with the Chicago Century of Progress Exposition, Ford moved the Rotunda to Dearborn where it endeavored to shape the public's understanding of work, workers, and the production process. This move occurred against the backdrop of legislated underpinning of labor's rights and questions about employer obligations to labor.

At the Rotunda, public attention was focused away from Ford's disinvestment in workers and the community and toward global aspirations through a tour and displays revealing a dogma of mass production established through the massive and complex technologies of production. Additionally, the Rotunda taught the logics supporting globalization; the moral appropriateness of ascribing physical labor to technologically unsophisticated global workers; that business is best suited to determine what work looks like and how labor should be controlled; and finally, that national borders should not check the growth of American corporation or their claims to foreign resources. But those who labored in factories did not accept Ford's bright and happy vision. Workers contested the daily discipline and surveillance of the factory system with continued work stoppages and union memberships. Workers were not the only nonbelievers of the religion of mass production. Charlie Chaplin's

³⁴⁵ Ibid.

"Modern Times" offered a biting representation of laboring in American factories closely aligning to the reality of everyday factory work and contradicting Ford's fantasy at the Rotunda.

As Detroit became the "Arsenal of Democracy" during World War II, Rotunda tours of the Rouge complex ceased on January 28, 1942. ³⁴⁶ Ford Motor Company used the Rotunda as additional office space. Although Ford began producing civilian vehicles again in 1945, the Rotunda was not re-opened to the public until 1953 in a celebration of Ford Motor Company's fiftieth anniversary. ³⁴⁷ The building was refurbished both inside and out, with a radical addition of a geodesic dome over the open air center court. The first year after re-opening, the Rotunda had over 1,500,000 visitors, with 169,000 who took the tour of the Rouge factory complex. ³⁴⁸

Unfortunately, in November of 1962, the Rotunda succumbed to a fire that began as workmen were preparing the building for winter by waterproofing the roof. Although firefighters fought the blaze, drafts created through the building's design kept it from being saved. Less than an hour after the fire began, the building collapsed. After the fire, tours of the Rouge continued intermittently until 1980 when, as the Wall Street Journal proclaimed, Auto Production Cuts Kill Tour of Ford Plant. Tours of the Rouge stopped for another twenty years until Ford Motor Company and The Henry Ford teamed up, creating a new, polished Ford Factory Tour, once again offering a specific conception of factory work in America and the corporate obligation to workers, the community, and the nation.

³⁴⁶ Cole, Dave. "The Ford Rotunda Story." Vertical Files. Subject: Ford Motor Company. Folder: Ford Rotunda: General. Benson Ford Research Center, The Henry Ford. Date unknown.

³⁴⁷ Ibid.

³⁴⁸ Ibid.

³⁴⁹ Ihid

³⁵⁰ "Auto Production Cuts Kill Tour of Ford Plant." *Wall Street Journal*. June 16,1980. Vertical Files, Ford Motor Company-Plants-North America-MI-Dearborn-Rouge-Tours.

Chapter 4

Ford Rouge Factory Tour: Obscuring Deindustrialization and Globalization

"The farther you look back, the farther you can look ahead."

Henry Ford

Seventy years after the Chicago Century of Progress Exposition and Rotunda tours put moving assembly line processes on display, Ford Motor Company (FMC) decided to once again allow the public into its "wonder of modern engineering," the Ford River Rouge complex. ³⁵¹ In a partnership with The Henry Ford: America's Greatest History Attraction, FMC created a flashy new Ford Rouge Factory Tour. The Henry Ford's mission, to "provide unique educational experiences based on authentic objects, stories, and lives from America's traditions of ingenuity, resourcefulness, and innovation," echoes the desire Henry Ford exposed about

³⁵¹ Bodurow, Constance. "Conserving and Interpreting Our Recent Industrial Heritage." *The George Wright Forum* 20.2 (2003): 68-88.

educating the public in the previous tours, as well as at The Henry Ford itself, and shines through at the newest incarnation of Rouge factory tours. 352

On the surface, the contemporary Ford Rouge tour allows tourists the opportunity to see inside the closed world of manufacturing as it occurs at a historical site. Although the Ford River Rouge Complex is historical and has many old (and often crumbling) factory buildings, the section housing the tour was refurbished into a modern American factory where images of technology dominate. Below the surface, however, are many hidden layers of meaning not mentioned in tour exhibits. Ford Motor Company's sensational 2004 reinvention of the Rouge tour responds to the crisis of its moment, a dramatic movement of manufacturing jobs out of the United States, with another polished celebration of technology that works to obscure globalization and the disappearance of the laboring body it puts on display in sharp contrast to the rhetoric of globalization previous exhibits loudly declared.

Sentimental Matter

Henry Ford collected objects he believed exhibited the essential characteristics of America. He held a firm conviction that the materials he collected represented American cleverness in technological innovation. To house this collection of Americana, Ford created a complex that he named *The Edison Institute and Greenfield Village*. Here he assembled buildings and everyday objects from his past and placed them together, creating a fictional "village" and museum. Public History scholar Steven Conn argues that the village is fictional in two ways. First, it is a village of historical buildings that were never actually located together in

³⁵² The Henry Ford. *The Henry Ford Visitor Guide*. 2005.

the same space during their heyday and second, the pastoral past they represent never actually existed either. He states "Both the village and the past which it purports to represent sprang from the sentimental longings of an industrial giant," who played a role in the rise of modern industrialism and in the decline of rural life. ³⁵³ Indeed, Henry Ford's "automobiles and factories, perhaps more than anything else," caused the past he was collecting to disappear. ³⁵⁴ In a 1931 interview, Ford stated, "Improvements have been coming so quickly that the past is being lost to the rising generation, and it can be preserved only by putting it in a form where it may be seen and felt. That is the reason behind this collection. ³⁵⁵ Ford's sentiment addressed his concerns of losing the past social order as a result the public's embrace of the automobile. The new Rouge tour presents its own fictions with an image of a nostalgic past, yet rather than stopping with the past as Ford had with his museum and village, it offers an optimistic vision of an industrial future where American labor engages in postindustrial work in advanced technological settings and hides the deindustrialized reality of globalized manufacturing.

Conn also argues that Henry Ford wanted his museum to be an "object-based, scientifically arranged presentation of American technological progress, and in so doing he borrowed the object-centered museum techniques of the late nineteenth century." Ford believed that as the focal point, objects could communicate historical meaning more powerfully than words, where historical objects are "significant to the present, [and] demonstrate a

³⁵³ Conn, Steven. *Museums and American Intellectual Life, 1876-1926.* Chicago: University of Chicago Press, 1998. 154

³⁵⁴ Ibid. 152.

³⁵⁵ Quoted in Hamilton, J.G DeRoulhae. "The Ford Museum." *The American Historical Review*.36.4 (1931):772-775. Conn, Steven. *Museums and American Intellectual Life, 1876-1926.* Chicago: University of Chicago Press, 1998. 157.

seamlessness between past and present."³⁵⁷ Extending the object-based display method to include a live display, the Rouge tour incorporates a similar sense of seamlessness between past, present and additionally, the future.

Late-nineteenth century museums that featured objects, such as ethnographic or natural history museums, consisted of long, well lit halls filled with glass cases containing objects for visitors to study. 358 That is also the interior arrangement of The Edison Institute, now The Henry Ford Museum, and part of The Henry Ford. But Ford was not content with the static display of objects. He created spaces in Greenfield Village where objects were in use in their proper setting; this style of exhibits is called in-situ. In-situ exhibits attempt to replicate, at least in external features, the authenticity, and knowledge of the exhibited culture. 359 For example, Ford included blacksmith shops where blacksmiths actually performed their craft, often dressed in historic apparel as a reenactment of the past, using anvils and hammers like ones he collected, to recreate a specific time period – the pre-industrial past. 360 Ford himself stated, "When we are through, we shall have reproduced American life as lived; and that, I think, is the best way of preserving at least a part of our history and tradition." Ford looked to use the authenticity of processes and tools and technologies to teach history to the public in a living museum. By displaying objects in the museum and people using them in the village, he joined the village and museum as two linked parts of a single enterprise to preserve his vision of

3!

³⁵⁷ Ibid.

³⁵⁸ Ibid. 7.

³⁵⁹ Kirshenblatt-Gimblett, Barbara. *Destination Culture: Tourism, Museums, and Heritage*. Berkeley, Los Angeles, and London: University of California Press, 1998. 19-21.

³⁶⁰ Conn, Steven. *Museums and American Intellectual Life, 1876-1926.* Chicago: University of Chicago Press, 1998.

³⁶¹ Quoted in Simonds, William A. *Henry Ford and Greenfield Village*. New York: Frederick A. Stokes Company, 1938. 117.

America and educate the public with his conception of the historical past. Tours of the River Rouge plant expanded Ford's living museum beyond artisans performing as historical everyday people to genuine workers laboring for wages.

From the late 1930s until World War Two and again from 1953 through 1962, tours began at a unique site, the Ford Rotunda and Hospitality Building. ³⁶² The building, reassembled in Dearborn, Michigan from Ford's exhibit at the Chicago World Fair of 1934, housed additional exhibits including photographic murals, an illuminated, revolving globe, diorama displays, and a motion picture theater. 363 Buses equipped with company trained guides left the Rotunda every thirty minutes to arrive at the Rouge factory. But as Detroit became the Arsenal of Democracy during World War II, Ford Motor Company suspended tours of the Rouge. Tours began again in 1953 in honor of Ford Motor Company's fiftieth anniversary from a refurbished Rotunda and ran from there until 1962 when a roof fire destroyed the building. ³⁶⁴ In 1975, Ford began more tours starting from the Ford Guest Center, located on Ford Motor Company property, across the street from the Henry Ford Museum and Greenfield Village. 365 These tours did not have the polish or publicity of prior tours and this incarnation of the tour ended in 1980 as a result of "cutbacks in auto production." A Ford spokesman told *The Wall Street Journal* that "recent production halts have made the tours less spectacular" and additionally, "suspension of bus shuttles, brochures, and tour guides will save Ford about \$1.5 million a year," justifying closure

³⁶² See Chapter 3 for an in-depth discussion on the Ford Rotunda. "A Visit to the Ford Rouge Plant." Folder 951: Box 52 – U-V-non-serial imprints: Accession 951, Ford Motor Company Non-serial Publications collection, Benson Ford Research Center, The Henry Ford, 1937.

³⁶³ "Visit the Rouge Plant of the Ford Motor Company." Folder 951: Box 53 – U-V Folder: Accession 951, Ford Motor Company Non-serial Publications collection, Benson Ford Research Center, The Henry Ford, 1936.

³⁶⁴ Cole, Dave. "The Ford Rotunda Story." Vertical Files, Subject: Ford Motor Company, Folder: Ford Rotunda: General, Benson Ford Research Center, The Henry Ford, Date unknown.

³⁶⁵ Dearborn Press. Vertical Files, Subject: Ford Motor Company-Plants-North America-Michigan-Dearborn-Rouge-Tours, Benson Ford Research Center, The Henry Ford, June 5, 1975.

because the popular tours were supposedly no longer interesting for visitors and ending them would benefit the company. 366

Visitors of past tours used steel catwalks in the foundry, experienced the deafening sound of industrial stamping presses, smelled the stink of oily parts, and walked alongside workers on the assembly line. These past tours covered the working factory built for the production process, an authentic functioning industrial complex, while the contemporary tour shows visitors an assembly line built as part of a museum exhibit – a functional, yet fabricated, display of manufacturing.

The twenty first century assembly plant tour, like a nineteenth century museum, is a large, well lit space where the display of production workers performing their jobs with technologically advanced objects tells the story of assembly work, as defined by the company and the museum. The assembly plant portion of the tour is, like the Henry Ford Museum and Greenfield Village, a combination of a static museum and living museum, honoring Ford's sentimental vision of the past while conflating it with the present and adding displays of futuristic state of the art technologies that meld the present and the future together.

Job Loss and Public Anxiety

Just as a master plan was in the works for a new in-situ exhibit at the Rouge factory, the U.S. entered an economic recession and by 2004, when the tour opened, it put labor on display at a time when the nation was in the midst of a jobs crisis. Newspapers and

³⁶⁶ The Wall Street Journal. Vertical Files, Subject: Ford Motor Company-Plants-North America-Michigan-Dearborn-Rouge-Tours, Benson Ford Research Center, The Henry Ford, June 16, 1980.

magazines were claiming economic gains for the nation, but it was a "jobless" recovery. 367 Newspapers gave U.S. workers much to worry about, with headlines like "Manufacturing Jobs Dwindling - Changing Times Are Making It Difficult for U.S. Factories to Stay Open" and "Two Consecutive Years of Job Losses - The First in State since 1930s." 368 Not only did the U.S. public need to worry over job security, but also about overall falling wages when they read articles such as "U.S. Conference Of Mayors Releases Report Showing Economy Surges, But With Lower Paying Jobs; Economic Summit Nov. 12 In New York" and "Wage Winners and Losers; Most Paychecks Fell in 2004 But U.S. Survey Finds Pilots, Doctors Came Out Ahead." 369 New and continuing jobs were increasingly located in the service sector where wages tend to be significantly lower than in the manufacturing sector. ³⁷⁰ On top of all these woes, Americans' fears of a declining nation were validated when they read stories like "Loss Of Manufacturing Base May Mean Loss Of U.S. Power" or "Battling Imports: Surviving the Onslaught; U.S. Companies Customize, Rethink Strategies to Compete With Products From Abroad" and "U.S. Auto Makers Lose Market Share to Rivals;

³⁶⁷ Rouge Heritage 2000 was FMC's plan to revitalize the River Rouge Complex. Bodurow, Constance. "Conserving and Interpreting Our Recent Industrial Heritage." *The George Wright Forum* 20.2 (2003): 68-88. And Gallagher, John. "Economic Surge Expected State Still Feels Pain Of Rising Jobless Rate As U.S. Growth Seen In '04." *Detroit Free Press,* November 21, 2003, A.1. And Langdon, David S., Terence M. McMenamin, and Thomas J. Krolik. "U.S. Labor Market In 2001: Economy Enters A Recession." *Monthly Labor Review*. U.S. Bureau of Labor Statistics, February 2002.

³⁶⁸ Jefferson, Greg. "Manufacturing Jobs Dwindling - Changing Times Are Making It Difficult For U.S. Factories To Stay Open." *San Antonio Express-News*, October 5, 2003: 01L. and "Two consecutive years of job losses the first in state since 1930s." *Denver Post*, December 28, 2003, K.05.

³⁶⁹ "U.S. Conference of Mayors Releases Report Showing Economy Surges, But With Lower Paying Jobs; Economic Summit Nov. 12 In New York." *U.S. Newswire*, November 10, 2003, 1. Vascellaro, Jessica E. "Wage Winners and Losers; Most Paychecks Fell in 2004 But U.S. Survey Finds Pilots, Doctors Came Out Ahead." *Wall Street Journal*, September 13, 2005, B.1.

³⁷⁰ Kirchhoff, Sue. "Service Base Drives June's Job Growth; Goods-Producing Sector Sees Losses." *USA TODAY*, July 6, 2004, B.02. Rutledge, Mike. "'Transition Economy' Hits Manufacturing Jobs." *Cincinnati Enquirer*, August 14, 2005, C.4.

Foreign Competitors Gain On GM, Chrysler and Ford; Overall December Sales Fell."³⁷¹ In short, the early years in the twenty first century U.S. saw job losses in manufacturing, sinking wages, and declining national standing in an increasingly global economy, signaling strong forces from globalizing and deindustrializing corporations. One factor leading to the expanding globalization of manufacturing, as well as to increased deindustrialization, was the implementation of trade agreements.

Industrial Mobility

Expansion of U.S. corporations. Economists Barry Bluestone and Bennett Harrison argue that "public policies *reinforced* corporate decisions that were based on more important factors: markets, labor costs, and political security" in that "managers who invested abroad were rewarded with windfall profits from the IRS."[emphasis in original]³⁷² In other words, it was financially advantageous for companies to move part of their operations outside of the U.S. and companies did indeed take advantage of such policies as global trade increased "fivefold during the 1970s and 1980s." The upsurge in the globalization of American companies continued into the 1990s, leading to the North American Free Trade Agreement (NAFTA) in 1994.

³⁷³ Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford. Princeton University Press. 2002. 222.

Ansberry, Clare and Timothy Aeppel. "Battling Imports: Surviving the Onslaught; U.S. Companies Customize, Rethink Strategies to Compete With Products From Abroad." *Wall Street Journal*, October 6, 2003, B.1. Clack, Bob. "Loss Of Manufacturing Base May Mean Loss Of U.S. Power." *Milwaukee Journal Sentinel*, January 6, 2003, 3D. Freeman, Sholnn and Karen Lundegaard. "U.S. Auto Makers Lose Market Share to Rivals; Foreign Competitors Gain On GM, Chrysler and Ford; Overall December Sales Fell." *Asian Wall Street Journal*, January 7, 2004, M.8.

372 Bluestone, Barry, and Bennett Harrison. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. New York: Basic Books, 1982. 130.

NAFTA, a free trade agreement between the U.S., Canada, and Mexico lifted many tariff restrictions. Two dominant criticisms of the agreement quickly surfaced – one from environmentalists and one from labor and its supporters. Each criticism stemmed from a shared concern. Environmental scientist Tom Wathen explained in 1993, "As companies seek to reduce production costs, industries may shift production to countries with weak environmental laws or lax enforcement." Each group raised its concerns in the public sphere, resulting in two side agreements to NAFTA in order to address, even if only partially, public concerns. These two criticisms of NAFTA demonstrate the close relationship between production, intimately intertwined with labor, and the environment. This relationship materializes again on the 2004 Rouge tour.

Indeed, apprehension in the matter of moving production became a substantial talking point in the nation. U.S. Rep. William O. Lipinski wrote on the potential in the agreement toward deindustrialization in the Chicago Tribune:

In 1991, the average hourly wage for American manufacturing workers was \$15.45, while for Mexican manufacturing workers it was \$2.17. Wages are even lower in the American-owned plants in the maquiladora region-which is a virtual free trade zone on the Mexican side of the border-aver only \$1.25 per hour.

Common sense says that the huge difference in wages will give American companies an incentive to move their plants to Mexico. And why wouldn't they move? The lower wages allow companies to quickly recoup the cost of moving, and then reap huge profits thereafter. ³⁷⁶

³⁷⁴ Wathen, Tom. "A Guide to Trade and the Environment." In *Trade and the Environment: Law, Economics, and Policy,* edited by Durwood Zaelke, Paul Orbuch, Rob Housman, 3-22. Washington, D.C.: Island Press, 1993.

³⁷⁵ The two side agreements are the North American Agreement on Environmental Cooperation and the North American Agreement on Labor Cooperation.

³⁷⁶ Lipinski, William O. "U.S. will lose in trade agreement." *Chicago Tribune,* April 22, 1993. 24.

Twenty years after NAFTA's signing, assessing its damage or benefits is complex and depends upon which variables are measured. NAFTA may have reinforced company decisions to move outside of the U.S., but U.S. companies were already engaged in deindustrialization as they moved production away from traditional union strongholds, like Michigan, to regions within the U.S., often in Sun Belt states, where labor organization was either weak or non-existent and wages could be lower, like Kentucky. Rental Ren

The national discourse created by the movement of production inside the U.S., along with NAFTA encouraged job losses to places outside the borders, increased the national anxiety over job security. Ten years after NAFTA, public concerns over job losses continued to mount. Ten Motor Company, by then a large multinational corporation, responded to the public anxiety with its shiny new tour celebrating technology, diverting the public's focus away from jobs lost as a result of deindustrialization and globalization.

Tour Narratives Reimagine the Rouge

In 2000, FMC hired sustainable architectural designer William McDonough to create a five-year master plan to overhaul the Dearborn Assembly Plant. Urban designer and Architecture scholar Constance Bodurow stated that "The project has a clear

³⁷⁷ Villareal, M. Angeles and Ian F. Fergusson. "NAFTA at 20: Overview and Trade Effects." *CRS Report Prepared for Members and Committees of Congress*, Congressional Research Service, April 28, 2014.

³⁷⁸ For a detailed account of only one company's movement of production both inside and outside the U.S., see Cowie, Jefferson. *Capital Moves: RCA's Seventy-Year Quest for Cheap Labor*. New York: The New Press, 1999.

³⁷⁹ Gavin, Robert. "JOB LOSSES MOUNT IN BAY STATE PAYROLLS SHED 9,500 IN FEB. AS MASS. LAGS US." *Boston Globe*, March 20, 2004. A.1. Associated Press. "'Show Us the Jobs' tour stops in West Branch; Riders compare Bush job losses to those under Herbert Hoover." *Telegraph - Herald* [Dubuque, Iowa], March 26, 2004: A.13. Tim Jones. "Republicans in Michigan vent anger; Job losses, war causes of worry." *Chicago Tribune*, February 5, 2004. 1.9.

environmental agenda, with improvement of the site's natural and work environments taking precedence over the Rouge's nationally significant cultural resources." 380

Additionally, as Timothy O'Brien, vice president of corporate relations for Ford Motor Company, in an interview with Bodurow, insists the "The Rouge is not a museum, but a functioning manufacturing plant." 381 Yet, against FMC's insistence that their primary goals are improved environmental works and restored productive capacity, Bodurow points out that "Adaptive re-use and interpretation of the historic buildings and infrastructure of the Rouge has been secondary to the development of FRFT (Ford Rouge Factory Tour)." 382

These conflicting assertions are the backdrop against which visitors tour the contemporary Rouge.

The 2004 tour moves museum patrons away from the more personal experience of production that defined Ford's past labor exhibits, but like the former tours, visitors must pass through several exhibit spaces and view a series of films before finally entering the actual assembly line portion of the tour. The museum-style displays and films set the upcoming assembly portion of the tour firmly within a singularly framed history – a great man narrative where the virtues of Henry Ford and his technologies improved the world and employees barely played a role. The current tour preserves images of the past in particular ways, such that the industrial past becomes a tale of current and future prosperity. Tour narratives stress the factory's revitalization, thus assuaging collective anxieties of declining prosperity due to the

³⁸⁰ Bodurow, Constance. "Conserving and Interpreting Our Recent Industrial Heritage." *The George Wright Forum* 20.2 (2003): 68-88.

³⁸¹ Ibid. 77.

³⁸² Ibid. 76.

public perception of slumping American manufacturing productivity. A 2004 souvenir pamphlet states:

The Ford Rouge Center returns to its roots as a model of innovation, bringing it proudly into the 21st century to serve as a living laboratory for ecologically intelligent manufacturing ideas that meet the needs of a new generation. ³⁸³

Here, the revitalized factory connects to its past through its "roots" while establishing aims for the present through contemporary technical innovation of "ecologically intelligent manufacturing." Consideration of present concerns takes precedence over the past, yet the two join in their quest for "innovation." Such tour narratives constantly bring to light a continuity of the Rouge of the past and present, even though the experience of taking the Rouge tour in 1936 differed considerably from today.

Ford Motor Company teamed up with The Henry Ford in designing the 2004 tour and decided to have it begin at The Henry Ford, although further from the Rouge complex than the Rotunda location. Museum patrons purchase tour tickets and board buses at the Henry Ford Museum, a replica of Philadelphia's Independence Hall. Unable to move Independence Hall itself, Ford decided to reproduce it at his museum. In a sense, Ford included the nation as part of his fictional village. Ford's copy of the building makes a cultural connection through the erection of a facsimile of the seat of the nation at the center of American industry. In other words, Ford was in essence, symbolically moving the power of the nation away from government and into the hands of industry.

³⁸³ Ford Rouge Factory Tour Pictorial Souvenir. The Henry Ford. Printed in USA. 2004.

The Henry Ford Museum, where twenty first century tours begin, evokes the past by housing Ford's collection of Americana. As Conn argues, the Henry Ford Museum was "conceived as a way of rescuing a disappearing past," disappearing in part because of Ford. 384

Just as the Greenfield Village and the Henry Ford Museum preserve a particular past, the Rouge tour attempts to save a specific part of American life from vanishing into the annals of history, or so it seems.

The Legacy Theater and Ford Motor Company's Story of the Rouge

Once visitors arrive at the Rouge complex, visitors enter The Legacy Theater, under the watchful eye of Henry himself from an illuminated, larger than life portrait hanging next to, and overwhelming, a montage of worker images just above the theater entrance.



Figure 16: Portraits hanging above the Legacy Theater

After visitors are seated, a black and white film narrates the history of the Rouge

Complex and the success of Henry Ford's innovations. It begins by informing the audience that

"[t]his is the epic story of the mighty Rouge Industrial Complex and the generations that came

³⁸⁴ Conn, Steven. *Museums and American Intellectual Life: 1876 – 1926.* Chicago and London: The University of Chicago Press, 1998, 152.

before us that made it an industrial icon." ³⁸⁵ Couched in terms such as "epic," "mighty," and "iconic," the film immerses the audience in a version of the historical past as constructed by the company and the museum. The film's narrative continues telling the tale, beginning "over 100 years back" with Henry Ford's determination to "make a reliable car that everybody could afford." ³⁸⁶ This interpretation of Ford's motives assigns considerable altruism without any mention of a profit motive. The film moves to descriptions of Henry's quest for quality through experiments with assembly processes where "Instead of the men moving to the work, what happened was the work moved to the men" – and in the film, the moving assembly line comes into being. 387 The story then declares, "With his moving assembly line, Henry revolutionized the manufacturing process. But he hadn't only changed the way he made his cars. Henry changed the lives of the people who made them." 388 From this momentous achievement, the film's narrator informs the audience of Henry Ford's continued benevolence of offering five dollars a day wages, resulting in "new members of the American middle class." 389 But what this film does not relate to the audience is the physical and emotional cost of the moving assembly line to workers or the restrictions placed on receiving the higher wage. 390 The history this theater shows narrowly focuses on Henry Ford, Ford Motor Company, the Rouge, and the invention of mass production while it downplays worker/company tensions in a brief narration of the infamous "Battle of the Overpass."

Legacy Theater Narrative Transcript. Compiled and transcribed by J. Faber. 2005.

³⁸⁶ Ibid.

³⁸⁷ Ibid.

³⁸⁸ Ibid.

³⁸⁹ Ibid.

³⁹⁰ For a discussion of what it was like to work at the Ford Rouge, see Chapter 3. For a history of the \$5 a day wage see Meyer, Stephen. *The Five Dollar Day: Labor Management and Social Control in the Ford Motor Company, 1908-1921*. Albany: State University of New York Press, 1981.

The Battle of the Overpass was a 1937 confrontation between key United Auto Workers (UAW) organizers, including Walter Reuther, and Ford's militant security force led by Harry Bennett. The melee ended with the UAW organizers being severely beaten. Rather than stopping union organizing, this altercation resulted in sympathy and greater support for the UAW. This particular confrontation is routinely invoked as the iconic encounter between the UAW and Ford Motor Company, when Henry Ford worked to keep his labor force from unionizing. The film reveals labor issues at the Rouge as consequences of the Great Depression, rather than Ford repression where "Rouge workers faced wage cuts and lay-offs as the world slipped into poverty." ³⁹¹ The Legacy film concludes the story with a declaration that "the union lost the battle, but they won the war," and a glorious vision of a "partnership" of labor and management, calling it "one of the company's greatest assets," leaving viewers with a dichotomy of company/labor relations where in the past relations were "bad" and now are "good." The Battle of the Overpass as shown in this film is a scripted vision of how the bodies of workers disappear into the union, where individuals are represented by a small cohort of union officials. It serves the purpose of characterizing the history of the relationship between Ford Motor Company and the UAW as one with a rocky start, but ultimately ending in a contented partnership. Calling the relationship a partnership thus obscures the unequal power relations between the company and the union and the correspondingly unequal affiliation of workers and the UAW.

³⁹¹ Legacy Theater Narrative Transcript. Compiled and transcribed by J. Faber. 2005.

While the film briefly relates one small story of unionization at Ford Motor Company and Henry Ford's fight to stop it, bringing workers into the narrative, it is still largely a story of the determination and success of Henry Ford and the building of industry. Thus, it tells a story of a fairy tale rise to power by one man, who then "generously" spreads the forthcoming wealth of that rise among Americans by providing them with work and an important consumer product. As anthropologist Michel-Rolph Trouillot argues, "Each historical narrative renews a claim to truth," and the story told by the film appears as the one true story of the past, and those same claims may inhere as part of the collective memory of the audience. "Through its "great man narrative," the Legacy Theater film leaves the audience with the impression that Henry Ford was the sole originator of innovation in the automotive industry, erasing the collaboration of multiple generations of engineers and, of course, the hard work of hourly laborers. And with the film's final question, "What about the future?" visitors are moved directly from the past to the future as they reassemble in the Art of Manufacturing Theater. "394"

The Art of Manufacturing: Disney Style

The second theater, The Art of Manufacturing, has no narration, only music. It is heralded as a "multisensory" virtual reality experience, as visitors sit in seats that swivel 180° to view the eight screens covering the walls of this octagonal room, while, in concert with the images on the screens, they experience virtual factory smells, are spritzed with water drops and bombarded by heat. It is a highly romanticized depiction of manufacturing work, with a noticeable focus on the robotics and technologies used in the process, and a minimum

าว

³⁹⁴ Legacy Theater Narrative Transcript. Compiled and transcribed by J. Faber. 2005.

³⁹³ Trouillot, Michel-Rolph. *Silencing the Past: Power and the Production of History*. Boston: Beacon Press, 1995. 6.

portrayal of workers. Those workers shown in the movie are in areas of the plant which are exceptionally clean and computerized for an assembly environment, thus once again focusing the imagination of the observer on the exception and not the rule of industrial labor, making blue collar work appear nearly white collar. This film displays the future, where technology functions as Disneyfied, dancing images and workers are few and engage in technologically advanced computer monitoring rather than physical labor.

The film shown in the second theater on the tour is a futuristic display that works with the Legacy Theater film to elide the past with the future while ignoring the present. This conception of past and future side by side without the present in between fails to make connections with the current conditions of workers in America. Through these films, manufacturing labor simply jumps from hard physical labor to computerized technological work without showing the present fusion of physical and technological work. It is this film's depiction of technological work as the only future of manufacturing that lifts technology to its zenith. The massive casualties of industrial labor jobs from deindustrialization and globalization and the corresponding repercussions of ruined communities within the nation as a result of those losses disappear in the theater.

There is no mention anywhere on the tour of the movement of industrial manufacturing jobs to other countries globally, or of the difficulties faced by American workers, their families, and the communities where disinvestment by industrial corporations in unionized states leads to shuttered factories and lower paid service work. As cultural geographer Kevin Robin has argued, a "close and necessary" relation exists between "the modernizing ambitions of

enterprise culture and the retrospective nostalgia of heritage culture" This tour is heritage work. ³⁹⁵ The tour does not simply buttress traditional identities of physical laborers, but with its emphasis on the future, it forges new identities of white collar technological workers while evading the truth that in fact, few manufacturing workers achieve this celebrated status. From here, the tour continues to the Observation Deck, where Ford Motor Company's attempt to be "green" is on display.

For Ford Motor Company, efforts to be in harmony with nature stem back to Henry Ford's own vision and desire for efficiency. He is often quoted as saying, "With one foot on the land & one in industry America is safe. Industry is mind using nature to make human life more free." He clearly saw a connection between man, machine, and nature. As much as he was concerned with nature, Henry Ford implemented waste-reduction programs at the complex in order to improve efficiency, not as efforts to be environmentally friendly. Find Environmental historian Tom McCarthy argues that "One of the principal goals of industrial ecology – the design of raw material and energy glows to minimize waste in manufacturing – was probably carried further [at the Rouge] than at any other industrial site in the world" in the 1920s and 1930s. The fact that the recycling and waste reduction programs were environmentally sound was incidental. Unfortunately, many of the recycling and waste reduction programs instituted by the company's founder were discontinued during the reorganization of the

³⁹⁵ Robins, Kevin. "Tradition and Translation: National Culture in its Global Context" in *Representing the Nation: A Reader*. Edited by Geoff Eley and Ronald Grigor Suny, 15-31. New York: Oxford University Press, 1996.

 ^{396 &}quot;Henry Ford Quotations." The Henry Ford. http://www.thehenryford.org/research/henryFordQuotes.aspx
 397 McCarty, Tom. "Henry Ford, Industrial Ecologist or Industrial Conservationist? Waste Reduction and Recycling at the Rouge." Michigan Historical Review 27.2 (Fall 2001): 53-88.
 398 Ihid.

company after World War Two. 399 According to McCarthy, "In fact, there was a period between 1945 and the 1980s – a lengthy hiatus – during which Ford managers deemphasized, if not actually repudiated, the commitment to waste reduction, as the company narrowed its postwar focus to making cars and money." 400 McCarthy points out that it was not until the late 1980s and 1990s that the company recognized that "a connection between waste reduction and the environment ... could be used in its public-relations efforts. 401 Indeed, Ford's contemporary public relations campaign wrapped up as environmental consciousness is clearly displayed at the Rouge tour on the Observation Deck.

Informational panels along the windows of the Observation Deck reiterate the history of the Rouge and give explanations about the "world's largest living roof." ⁴⁰² The living roof, layers of vegetation matting and sedum plants allow phytoremediation, which is the use of natural plants to deplete soil of contaminants, to occur. Ford Motor Company's phytoremediation center plans, plants, and maintains all of the vegetation installed on the complex grounds and on the living roof in an effort to regenerate the Ford Rouge Complex, much of which falls under the definition of a brownfield site. 403 From this point, visitors leave the docents, who have been leading them from the different sections of the tour, behind and proceed to the "Walking Tour" above the final assembly line.

³⁹⁹ Ibid.

⁴⁰⁰ Ibid.

⁴⁰¹Ibid. Ford is also embarking on additional practices of environmental responsibility, such as the production of

⁴⁰² The living roof is a result of work of the Phytoremediation Center. Phytoremediation is the use of natural plants to deplete soil of contaminants. Ford's phytoremediation center plans, plants and maintains all of the plants installed on the complex grounds and the living roof in an effort to regenerate the brownfield site.

⁴⁰³ Brownfield sites are industrial facilities, either abandoned or under-used, that are available to be re-used.

Constructing Labor on the Walking Tour



Figure 17: Last stop before the Walking Tour of the final assembly line

Up to this point on the tour, the ongoing narrative is an accolade of the achievements of Henry Ford and the company. It is an intense focus on the local that hides the global. Rarely are the accomplishments and contributions of the workers mentioned. The final leg of the tour is self-guided, giving the indication that the work of the assembly line below is so simple and insignificant that a guided tour is unnecessary.

After viewing a brief safety video, tour visitors walk onto the wide catwalk surrounding the final assembly line where they view contemporary manufacturing workers engaged in labor on an assembly line. Computerized kiosks and video monitors take over the docents' task of interpreting the assembly activities occurring below, thus further removing the human element in the exhibit. Past tours allowed visitors a personal exposure to factory work. Only a pipe railing a few feet away from the assembly line separated visitors and worker, thus giving visitors up-close exposure to automobile assembly work. Since visitors were down in the assembly area, they would walk along the line, eye to eye with workers; close enough to permit comments to pass from either side of the railing. Such immediate proximity to the line allowed

visitors realistic experience, where the loud sounds and often offensive smells of manufacturing would assault their ears and noses, along with extreme heat from blast furnaces. In contrast, current tours move museum patrons away from such a personal experience of production.



Figure 18: Pre 2004 tour visitors experience an up-close and personal Rouge

With World's Fairs as antecedents, the Rouge tour displays the eventual extinction of American manufacturing workers and the perceived promotion of industrial technologies as the wave of the future. Much like in the Centennial Exposition of 1876, where Native Americans and Native American artifacts were displayed, as if they were extinct, so too are the manufacturing workers of the tour displayed as if they are already obsolete. And, just as Laura Wexler describes the 1904 St. Louis World's Fair as "...a vision not only of the fruits of the past hundred years of expansion and conquest but also of the promising connection between that past and future acquisitions," the Rouge tour also exhibits the connection between past

⁴⁰⁴ Rydell, Robert. *Fair America: World's Fairs in the United States.* Washington and London: Smithsonian Institution Press, 2000.

abundance and future prosperity. 405 Past abundance, as displayed throughout the tour in videos and photographs, depicts the golden age of American automobile production, while the introduction of state-of-the-art technologies proclaims future prosperity. The present is only discernible through the actual view of the assembly line floor on the walking tour. The separation of visitors from the line and the use of labeling and interactive kiosks results in the current tour substituting a closed formality and a structured exhibition for the open intimacy of the earlier tours. The structure and formality point to a more concentrated form of surveillance than found on previous tours.

The walking tour examined here allows museum patrons to walk along a catwalk raised over the assembly line and view workers assembling the F-150 pickup truck, Ford's top selling vehicle. 406 The raised catwalk encircling the assembly line is eerily suggestive of Foucault's formulation of the panopticon, not only in its physical composition, but in its surveillance function as well. He states, "The theme of the Panopticon – at once surveillance and observation, security and knowledge, individualization and totalization, isolation and transparency – found in the prison its privileged locus of realization." Although not a prison, the industrial factory has often been compared to one by workers, where its panoptic process is felt. 408 Indeed, surveillance of workers in industry, one part of the panopticon's theme, became "an integral part of the production process" carried out by foremen and supervisors who

⁴⁰⁵ Wexler, Laura. *Tender Violence: Domestic Visions in an Age of U.S. Imperialism*. Chapel Hill and London: University of North Carolina Press, 2000. 267.

⁴⁰⁶ "Ford F-150: The Top Selling Vehicle of All Time Hits the Road Anew; Best Quality Ford Parts." Free Press Release. http://www.free-press-release.com/news/200505/1116374717.html 17 May 2005.

⁴⁰⁷ Foucault, Michel. *Discipline & Punish: The Birth of the Prison*. 2nd edition. Translated by Alan Sheridan. New York: Vintage Books. 1995.

⁴⁰⁸ Author's own experience working with others in industrial factories.

observed the work and behavior of workers in order to keep them on task, in essence, to discipline them to the rigors of industrial work. Another mode of discipline in factories is the moving assembly line itself, as it moves forward, workers are forced to work at the line's pace, and thus it disciplines them to continuously work. The assembly line is therefore an indirect form of surveillance.

Foucault's theorization of the unequal power relations imbued in panoptic institutions, argues that those inside the panopticon will censor their activities as a result of constant or perceived constant surveillance. Workers on the line in this part of the tour, during the hours the tour runs, are also under constant observation. However, the power relations on the tour are not as certain as those Foucault discussed.

The arrangement of the catwalk high over the assembly line precludes familiarity between those working below and those viewing above. Communication is strictly prohibited between museum patrons and workers. ⁴¹¹ As a result of the ban on communication between the catwalk and the shop floor, a power relation occurs.

Museum and Performance Studies scholar Barbara Kirshenblatt-Gimblett calls this particular power relation that occurs during the display of live people, "the museum effect." ⁴¹²

The power relations of museum effect are unequal, where those doing the viewing have more

⁴¹⁰ Foucault, Michel. *Discipline & Punish: The Birth of the Prison.* 2nd edition. Translated by Alan Sheridan. New York: Vintage Books. 1995.

Foucault, Michel. *Discipline & Punish: The Birth of the Prison*. 2nd edition. Translated by Alan Sheridan. New York: Vintage Books. 1995.

⁴¹¹ This prohibition comes from the safety video and is repeated by docents as they leave museum patrons on their own to complete the self-guided section of the tour.

⁴¹² Kirshenblatt-Gimblett, Barbara *Destination Culture: Tourism, Museums, and Heritage*. Berkeley: University of California Press, 1998.

power than those who are observed. She calls this an "asymmetrical reciprocity," that is, the effect is unequal because museum patrons openly watch the workers, walking the fine line between looking and staring, which places them in a position of power. At least one previous Rouge employee keenly experienced the asymmetry, stating, "As a worker, I felt like a circus animal [performing] for the audiences' entertainment. Kirshenblatt-Gimblett agrees, stating, "To make people going about their ordinary business objects of visual interest and available to total scrutiny is dehumanizing." Not every worker viewed on the tour feels dehumanized. One Rouge employee stated, "I feel like a pro football player on Sunday. I perform better when there's a crowd." This man no longer considers himself to be a worker, but a performer, thus re-imagining his everyday life, changing his own history from that of a worker to one of a more valued occupation (a professional football player) in the United States.

In order for the viewers to retain their position of power however, those on display must perform and not acknowledge the presence of the viewers – in other words, they must perform what is, in actuality, their ordinary daily acts and "go about their business as if no one were paying attention to them." But, the open arrangement of the assembly line and the catwalk above does not deter workers from looking up and making eye contact with patrons. When such contact occurs, the museum effect shatters and the power relations between museum patrons and workers become uncertain. When the museum effect breaks, tour visitors

⁴¹³ Ihid

^{414 &}quot;Rouge Memories." The Detroit News. http://info.detnews.com/autostalk/rougeletters.cfm. April 11, 2004

⁴¹⁵ Kirshenblatt-Gimblet, Barbara. *Destination Culture: Tourism, Museums, and Heritage*. Berkeley: University of California Press. 1998.

⁴¹⁶ Provenzano, Frank. *Detroit Free Press*. Sunday, April 11, 2004. 2G.

⁴¹⁷ Ibid.

compare themselves to the workers, while at the same time; workers, looking up, compare themselves to the onlookers.

Further defining the characteristics of the museum effect Kirshenblatt-Gimblett states, "The museum effect works both ways. Not only do ordinary things become special when placed in museum settings, but the museum experience itself becomes a model for experiencing life outside its walls." In the case of the Rouge tour, an in-situ museum exhibit, ordinary factory work, and factory workers themselves become exceptional, while at the same time, they are an example of a universal experience of work in a capitalist system, where the majority of museum patrons are workers too – although not necessarily industrial workers. Patrons can imagine how the outside world might view their own everyday existence, just as they are viewing the quotidian experiences of the workers. According to Kirshenblatt-Gimblett the museum effect "brings the distinctions between the exotic and the familiar closer to home." The museum effect on the Rouge tour turns the workers into the exotic other and blurs the distinction between the global other and what is, in actuality, the working citizen.

The construction of labor on the walking tour is multi-layered as workers become the exotic other and at the same time, they become cultural artifacts. Interactive displays set along the catwalk for museum patrons highlight the high-tech equipment used below creating a hybridity between worker and technology, where the machinery blurs workers, who appear to be as much a part of the technology, as they are separate human beings. 419

¹¹⁸ Ihid

⁴¹⁹ Haraway, Donna Jeanne . *Simians, Cyborgs and Women: The Re-Invention of Nature*. London: Free Association Press, 1991.

Sociologist Tony Bennett also extends Foucault's theory to include the viewing tourists. He argues that institutions of exhibition form a "complex of disciplinary and power relations" where the "messages of power" are inscribed and broadcast into the public arena. 420 He sees social indoctrination in the state through public admittance to museums and argues the public is transformed into "subjects of knowledge" who regulate themselves due to the cultural knowledge they gain from exhibits and the activity of seeing and being seen while attending exhibits. 421 In other words, attending museum exhibits involves a combination of spectacle and surveillance.

The design of the tour catwalk allows visitors to not only look down upon workers, but to view other patrons as well, thus subjecting each other to a regulating gaze. Bennett also argues that museums and related institutions are a place where citizens are able to identify with power, where they are both its subject and beneficiary. The contemporary Rouge tour is such a place. Visitors, from their museological and panoptic position of power over the workers can identify as a higher class of Americans than those subject to working on the doomed automobile assembly line. At the same time, they become the subject of the gaze from both fellow tourists and the workers through the openness of the catwalk.

At seven places along the catwalk are viewing platforms featuring printed placards explaining the manufacturing steps occurring below on the assembly floor. Each viewing platform also includes an interactive kiosk with a video screen. Facts, data, and images

⁴²⁰ Bennett, Tony. "The Exhibitionary Complex." in *Representing the Nation: A Reader; Histories, Heritage and* Museums, edited by David Boswell and Jessica Evans, 332-362. London and New York: Routledge; in association with Open University, 1999.

⁴²¹ Ibid.

describing the manufacturing process are accessible to the visitor. Although the videos feature what appear to be workers explaining the process below, they are essentially virtual workers - talking heads on monitors. Technology is the subject of the videos, not the workers manipulating the tools and machinery. In this way, the institutions direct the audience's attention to the technology and the process, rather than on the workers. Earlier tours did not use museum exhibition techniques such as placard labeling; therefore, museum patrons viewed a more authentic world of assembly line work, even though it was an edited version, but not a museumized construction like the contemporary tour.

The tour allows audiences, through a comprehensive presentation of the production process as an exhibit, to view the industrial past, as it becomes one with the technological future and the present is as transparent as the workers appear. On this tour, the past (history) and sites of innovation (the future) are highlighted, while the significance of the present is minimized; locating the factory at the intersection of the industrial and postindustrial, where manual labor meets technical skill.

The Tour Frames Labor

On the Rouge tour, workers are shown using cutting edge technologies, such as large computer consoles. This type of display blurs the distinction between traditional manual labor and modern mental labor, as it is a common assumption that in the U.S. white collar jobs generally employ computer equipment, perceived against work with industrial machinery, as high tech. Therefore, it seems as if Rouge tour workers are performing work that is closer to white collar work than blue collar. Here, the tour makes visible the unity between mental and

manual labor. This then appears to transform these blue collar workers into white collar workers, confusing the division between the two types of labor and creating a new imaginary of a worker who is nearly white collar.

This imaginary is of an American work force that is educated and performs white collar work. Historian Michael Denning argues that one "invisible" social movement of the 1960's, a "wave of union organizing by white collar, service, and public sector employees, particularly women," resulted in an increased perception that the collective American work force is overwhelmingly white collar. ⁴²² The representation of assembly line workers on the Rouge tour supports this assumption. However, this imaginary excludes all other working class people, both within and outside U.S. borders. The current tour erases all hints of the global context of labor, including its effect on the shrinking number of manufacturing workers employed in America. Therefore, the master narrative produced by the museumization of the tour is a memory of past industrial power linked to contemporary innovation, creating a fiction of stability in American manufacturing.

But high paying industrial jobs continue moving outside the U.S. and those workers who had entered the ranks of the middle-class through good wages and benefits must now compete for "scarce resources," thus generating "new racial enmities and antagonisms." Labor historian George Lipsitz argues, "The mere existence of national borders enables differential rates of pay for the same work and creates artificial divisions among workers." Labor workers whose companies moved their jobs overseas are part of this competition and division.

,

⁴²² Denning, Michael. *Culture in the Age of Three Worlds*. London and New York: Verso, 2004, 231.

⁴²³ Lipsitz, George. *American Studies in a Moment of Danger.* Minneapolis: University of Minnesota Press, 2001, 12.

424 Ihid 16

Denning's conception of a two-tier working class is useful here. The first tier is composed of unionized white collar and professional workers who are "better educated than most of the population and likely to see work as a 'career'." The second tier is made up of mostly black, Latino, and Asian Americans "laboring in non-union sweatshops." 425

Middle-class workers who once held jobs in disappearing industrial work sites are not generally educated enough to enter the first tier and reluctantly become part of the second tier. The racial tension comes from the fact that unionized industrial work in the United States has traditionally been a white male strong-hold. Although some resistance within the Union Ranks allowed minorities and women to participate, they are routinely concentrated in production rather than skilled trades positions. The greatest amount of racial tensions would therefore come from the level of laid-off skilled trades workers forced to enter the second tier rank. By moving assembly production outside of the U.S., American manufacturers have been able to break this stronghold down, therefore participating in the feminization of industrial work. Confusing the boundaries between these two tiers, workers viewed on the tour are basically a mixture of white males, African Americans, a few other people of various races, and women. It displays to the public a seemingly unified work force with stable jobs which will remain in the United States.

The Rouge tour also hides the connections between American industrial workers and foreign industrial workers. They are linked through a common product, the automobile, and a common employer, the corporation. They are interacting with each other in their competition

,

⁴²⁵ Denning, Michael. *Culture in the Age of Three Worlds*. London and New York: Verso, 2004, 233.

⁴²⁶ Ong, Aihwa . "The Gender and Labor Politics of Postmodernity." In *The Politics of Culture in the Shadow of Capital*, edited by Lisa Lowe and David Lloyd, 61-97. Durham & London: Duke University Press, 1997.

for production jobs. But these workers are often unaware of those connections. It also hides the connection between American consumers and foreign production workers. One way this connection is hidden is through the company's use of foreign built parts that are used to construct the trucks built on the tour. Those consumers who go on the tour are shown a vehicle produced largely in the United States, thus obscuring the enormous amount of vehicles that are produced outside the U.S. Thus the boundaries between what is American and what is foreign become blurred.

Many large corporations, once thought to be quintessentially American are now so large and globally active, that I argue it is increasingly difficult to call them simply American. Ford Motor Company, the site of the Rouge tour, is one such corporation. Since the blurring of the nationality of corporations occurred, so have loyalties to national boundaries. Tensions surrounding secure national boundaries revolve around the political economies of work, as seen in the ongoing national debate on immigration. The blurring of corporate identity coincides with the strengthening of the demarcation and competition between American and non-American workers.

Aihwa Ong argues, "Modern nation-states routinely regulate social life, promoting certain norms, practices, and identities while marginalizing others." The norms, practices, and identities promoted by the Rouge tour are parallel to those promoted by the nation-state. The interactive displays along the catwalk emphasize the image of the workers below as white collar technicians. The norms, practices, and identities advanced by the tour are visions of the

,

⁴²⁷The White House. http://www.whitehouse.gov/news/releases/2004/01/20040107-1.html. April 16, 2006.
⁴²⁸Ong, Aihwa . "The Gender and Labor Politics of Postmodernity." In *The Politics of Culture in the Shadow of Capital*, edited by Lisa Lowe and David Lloyd, 61-97. Durham & London: Duke University Press, 1997.

embodiment of the educated white collar individual as the average worker. The tour marginalizes manual labor of all sorts, along with collective activities, blurring the boundaries between what is American and what is foreign.

The Virtual Display: Touring the Rouge from the Internet

Walter Benjamin wrote about the phantasmagoric in his *Arcades Project*. ⁴²⁹ As philosopher Susan Buck-Morss argues, "Benjamin's central argument in the [Arcades Project] was that under conditions of capitalism, industrialization had brought about a *re*-enchantment of the social world, and through it, a 'reactivation of mythic powers'." ⁴³⁰ The Rouge tour offers a revival of the "mythic power" of the Rouge complex as the site of modernity and allows visitors to once again be captivated with what appears to be simultaneously an industrial and postindustrial world.

In *The Arcades Project,* Benjamin examines the Arcades of Paris, where the buildings' architectural forms of glass and steel symbolized modernity and constituted the ruins of the dreams of the nineteenth century. It was a space filled with commodities for public consumption, displayed in the same fashion as museums, long, brightly lit halls with objects displayed in the glass cases of shop windows. But by 1927, when Benjamin arrived, the Paris Arcades, having only been built less than a decade before, were no longer frequented by society, as it had already moved on to some other, newer distraction. Benjamin's message: that which is modern is often fleeting.

⁴²⁹ Benjamin, Walter. *The Arcades Project*. Edited by Rolf Tiedemann. Translated by Howard Eiland and Kevin McLaughlin. Cambridge: Belknap Press, 1999.

⁴³⁰ Buck-Morss, Susan. *The Dialectics of Seeing: Walter Benjamin and the Arcades Project, Studies in Contemporary German Social Thought*. Cambridge: MIT Press, 1989.

The Rouge complex has become part of the ruins of the dreams of twentieth century modernity. Industrial might fueled the ideals of twentieth century America, but the spotlight on American manufacturing began to weaken as cheaper commodities became readily available from new global sources. However, the tour takes the old and dresses it up as something new, which is the substance of the concept of progress. At base, the tour redefines the meaning of progress.

The manner in which The Henry Ford presents the tour to the public offers vital clues to how the public perceives American industrial workers. The marketing tool used by The Henry Ford to reach the widest possible audience is a section of their website that is devoted to the Ford Rouge Factory Tour. Most of the website offers information to lure prospective visitors into attending the tour. Several of these webpages deserve detailed scrutiny.

The website devoted to the Ford Rouge Factory Tour by The Henry Ford illustrates and describes the factory as a city. At the top of the front page is a dramatic photo depicting an unformed auto body in the foreground with welding sparks and machinery in the background.



Figure 19: Image from Rouge Tour Website

1 _

⁴³¹ Gilloch, Graeme. *Myth and Metropolis: Walter Benjamin and the City.* Cambridge, UK: Polity Press, in association with Blackwell Publisher, 1996.

The background of the photo looks very much like a cityscape. This optical effect draws an image of a city in the mind of the audience. The unformed auto body with the welding sparks implies the creation or birth of the automobile. Graeme Gilloch states that Benjamin saw the "metropolis as the principle site of the phantasmagoria of modernity, the new manifestation of the myth." So, described as a city, the Ford Rouge Plant is also a phantasmagoria of the modern.

The first two paragraphs under this image invite the audience to come to hallowed ground, a sacred center, the "birthplace" of the automobile (the birth as viewed again in the image on the top of the page) and participate in an event that is simultaneously spiritual and scientific, representing both myth and modernity.

The first paragraph begins "Witness the celebration of the innovation of manufacturing in America." This statement introduces the industrial site as a spectacle. The words, "Witness" and "Celebration" have subtle spiritual and religious undertones intended to inspire awe toward the Rouge in the website user and potential audience member for the factory tour. By including "America," this statement puts the Ford Rouge Factory in a context similar to that of National Monuments, claiming respectful admiration from the audience. 433

The next statement is "- where history and the future merge." The tour exhibits the labor of blue collars workers as something akin to white collar employment, celebrating the transformation of manual labor from dirty, grimy, physically exhausting work to technically

.

⁴³² Ihid

⁴³³ MacCannell, Dean. *The Tourist: A New Theory of the Leisure Class*. Berkley and Los Angeles: University of California Press, 1976.

skilled work that utilizes more mental than physical labor. It is here where the industrial and postindustrial meet. The boundaries between the technology and the workers are unstable, blurring which is man and which is machine. The workers are nearly cyborgs.

The blurred distinction between humans and machine occurs here for two reasons. The first reason it is so difficult to see the workers on this assembly line is the visual perspective from the elevated catwalk. Scale is distorted; machinery appears large and prominent, while workers appear smaller than life size, dwarfed by the technology surrounding them. In this context it is easy to confuse whether machinery is assisting workers or workers are assisting machinery. To the visitor, it appears as if the worker and the machinery are one. The second is that the assembly line is in constant motion, which also distorts the distinction between worker and machine. Both are moving together in rhythm, human dwarfed by machine, in an industrial dance. It is difficult to view the physically smaller human as anything more than part of the machinery.

Much like an exhibit in a Natural History Museum, the tour subordinates culture to technology rather than to nature. ⁴³⁴ The cyborg weakens the basic opposition between nature and culture, allowing boundary spaces to open up. It is in these spaces where the "arbitrariness and constructed nature of what is considered the norm" is open to view. ⁴³⁵ The norm is now popularly perceived as white collar work. The reality is that many more workers are employed in service sector and industrial occupations. Through the boundary space created by the cyborg

⁴³⁴ Kirshenblatt-Gimblett, Barbara. *Destination Culture: Tourism, Museums, and Heritage*. Berkeley, Los Angeles, and London: University of California Press, 1998.

⁴³⁵ Prins, Baukje. "The Ethics of Hybrid Subjects: Feminist Constructivism According to Donna Haraway." *Science, Technology & Human Values*. 20.3 (1995).

workers, tour patrons are thus confronted with an image of themselves as reflected in the workers below.

Donna Haraway argues that cyborgs are hard to see, both politically and materially just as the workers are hard to "see" on the webpage. ⁴³⁶ Materially, they are not present on the webpage in either the photos or the text. Politically, workers have been a vital ingredient in the forging of this monument; but the marginalization of their role has pushed their contributions aside, even made them out to be hostile toward the creation of American industry, therefore antagonistic to American might and progress.

The next paragraph highlights certain words:

GO behind the scenes inside one of the world's largest automotive complexes. EXPERIENCE a virtual reality theater adventure. SEE the world's largest living roof. WITNESS the new factory where the Ford F-150 is made. 437

The capitalized words suggest to the prospective audience not to take their (The Henry Ford) word for it, but just as any rational scientist would, replicate the experience of industry themselves by observing it with their own eyes. Each of the capitalized words implies that the viewer should apply the scientific method of experiencing an event to prove its validity. Dean MacCannell argues, "Scientific experiments are designed to control bias, especially that produced by human beings, out of the result, but cultural experiences are designed to build it

⁴³⁶ Haraway, Donna Jeanne . *Simians, Cyborgs and Women: The Re-Invention of Nature.* London: Free Association Press. 1991.

⁴³⁷ *The Henry Ford*. http://www.thehenryford.com/rouge/history.asp.

in."⁴³⁸ Historically, the Rouge factory is based on technological rationality, a condition where technological fact is weighted with authority over human consideration, yet the terminology of the website extends an offer to the potential visitors to combine their own human tendencies with scientific authority through a pilgrimage to the Rouge.

Another significant page on the Ford Rouge Factory tour website is titled "History of the Rouge." The first section of this page describes the complex by giving detailed information to express the vast size of the complex.

It was a city without residents. At its peak in the 1930s, more than 100,000 people worked at the Rouge. To accommodate them required a multi-station fire department, a modern police force, a fully staffed hospital and a maintenance crew 5,000 strong. One new car rolled off the line every 49 seconds. Each day, workers smelted more than 1,500 tons of iron and made 500 tons of glass, and every month 3,500 mop heads had to be replaced to keep the complex clean. 439

It is in this section of the website where the marginalization of workers occurs most overtly. First, the claim that the complex was a city without residents immediately erases the worth of the workers. Their invisibility in the production process promotes the importance of the place and of the machinery, not the value of the humans who occupied it. Secondly, the statement, "To accommodate [the workers] required a multi-station fire department, a modern police force, a fully staffed hospital and a maintenance crew 5,000 strong," begs several questions. 440 What was the purpose of the police force? If the work was so amendable to workers, why is a hospital needed? Is the fire department for the protection of the workers or for the protection of capital? Why would a work force need a maintenance crew?

181

⁴³⁸ MacCannell, Dean. *The Tourist: A New Theory of the Leisure Class*. Berkley and Los Angeles: University of California Press, 1976.

⁴³⁹ The Henry Ford. http://www.thehenryford.com/rouge/history.asp.

⁴⁴⁰ Ibid.

According to this account, employees had to be "accommodated," implying that workers and their needs were an imposition on the company. However, much of the need for these services was not for the workers. A compliant work force would not require a police force. The type of services offered by a police force would better serve the needs of a company that had to control its labor. The police force therefore existed mainly to protect the company from workers or even from each other. While any fire is surely hazardous to the workers, quick response by a fire department would benefit the company in minimizing damage to company property just as much, if not more, than it would assist workers. Additionally, a fully staffed hospital would be necessary to treat workers injured on the job, indicating that worker injuries were so often and/or severe that immediate medical care was necessitated. Caring for injured workers protected the company politically, even as it was beneficial to the workers. Finally, a maintenance crew would only be an asset to the smooth operation of production, an item of immediate concern to the company, but not workers. Either the services listed on this portion of the webpage indirectly define workers as a group the company needed to control or they explicitly express the benevolence of the company. Further down the page the text states "Henry Ford's ultimate goal was to achieve total self-sufficiency by owning, operating and coordinating all the resources needed to produce complete automobiles."441 Workers fall under the category of "resources needed," something to be controlled by the company in its effort to realize Ford's goal.

A short paragraph titled "Unionization" briefly mentions one way in which Ford's actions made work difficult for employees and then it goes on to once again tell the romanticized story

⁴⁴¹ The Henry Ford. http://www.thehenryford.com/rouge/history.asp.

of Walter Reuther and the United Auto Worker's (UAW) clash with Ford servicemen on what has come to be known as "The Battle of the Overpass." Although this is a significant event in the UAW's efforts to organize the Rouge, it in effect marginalizes the workers themselves in the face of the UAW and the public. The story is no longer about the challenges faced by individual workers in the plant. It is now a story of the challenges faced by the UAW, one single entity, comprised of many workers. Workers represented by the UAW are no longer discerned as discrete individuals, not only are they a cog in the industrial machine, but they became a member of the mighty union. A study to discover the loss of individualism and how it contributes to worker invisibility within the dimensions of a large union is an important consideration, but one outside the scope of this paper.

By the end of the marketing of the Rouge's history on this webpage, the UAW and the company are comfortably working together in the reinvention of the Rouge. Disagreements between workers and the company have yielded to the greater good of capital and to a desire by labor to keep the factory (and their standard of living) from becoming another deindustrialized ruin. At the contemporary Rouge tour, the company and the museum produce a story of the past and a vision of the future that symbolizes a factory where labor contentedly works with technologies that ease their laboring. Mass marketing of the tour on the website facilitates that revision. Close readings of the Rouge tour and its accompanying website reveal a representation of work and workers that diverge from tours of manufacturing plants run by Ford Motor Company competitors, General Motors and Toyota, whose factory tours tell different stories of globalization and deindustrialization in the U.S.

General Motors Bowling Green Assembly Plant Tour

The General Motors Bowling Green Assembly Plant tour displays authentic GM labor working on an authentic assembly line. Unlike the Rouge tour, this tour displays a factory that sprang up out of deindustrialization. The focus is on the product, GM's high-end sports car, the Corvette. It is somewhat reminiscent of Rouge tours before the reinvention as a museum exhibit, as visitors walk alongside the assembly line on the shop floor. This tour does not profess a doctrine of mass production. If anything, it confessed to a potential decline – an entire section of the factory where the Cadillac XLR luxury roadster was assembled had recently been dismantled due to "GM restructuring." Of course, this was not the first time GM restructured a Corvette facility. Production of the Corvette was moved twice before settling in Kentucky.

Just one year after the start of the Corvette line, where GM began pilot production at "Chevrolet's old customer delivery garage, Plant Number 35 in Flint, Michigan, it was moved to Saint Louis, Missouri in 1954. ⁴⁴³ The initial production in Flint was planned to be temporary while the St. Louis plant retooled in preparation for the Corvette. But this move proved to be only temporary as well. In 1979, GM announced the closing of the aged St. Louis plant, slated to occur in 1981. Corvette production would move into a newly transformed factory in Bowling Green, Kentucky. Workers, somewhat protected by UAW contract had the option of moving with production. The St. Louis plant closed and nearly 1,000 workers followed the Corvette to

1/

⁴⁴² My 2009 visit followed on the heels of what came to be called the "Great Recession of 2008," much like the original Rotunda tours occurred during the Great Depression. Author's GM Bowling Green Assembly Plant Tour. July 9, 2009. About the Cadillac XLR. http://www.cadillac.com/discontinued-vehicle-xlr.html.

⁴⁴³ Mueller, Mike. *The Corvette Factories: Building America's Sports Car*. Minneapolis: Motorbooks, 2009. 40.

Bowling Green, a move causing its own set of difficulties for the laid-off workers, including tensions with workers at new facilities.⁴⁴⁴



Figure 20: Image from Corvette Factory Tour website

Rather than beginning at the museum, visitors to the Corvette tour must drive themselves directly to the factory and use the same walkway from the parking lot and entrance into the plant used by workers themselves. A check-in booth is located directly inside the door for those who made reservations, which must be done at least two weeks in advance. Visitors who did not or were not able to do so are directed to a small office further down the hallway. After paying the small seven dollar admission fee, visitors follow footprint decals on the floor to the main waiting room.

At the waiting room door, a young tour guide gives each visitor a ticket with their designated group number and instructs them to be seated until their group is called. Decorated in the signature Corvette colors of red, white, and black, the room is filled with red plastic chairs. In one corner are vending machines with snacks and drinks for purchase. Another corner holds a small glass counter containing Corvette Assembly Plant merchandise. The walls behind

⁴⁴⁴ The topic of tensions between laid-off workers and the unwelcoming workforce at other plants where they are assigned is a huge under-researched subject that needs to be addressed elsewhere. Giegerich, Steve."'Vette's loss looms in hindsight; 1981; Writing off of Corvette plant here began mass migration of manufacturing jobs.; 2011; Bowling Green, Ky., mayor calls Corvette 'best new company our community has ever had.'; CORVETTE PLANT." *St. Louis Post - Dispatch*, July 10, 2011: A.1.

Descriptions of the GM Corvette tour are from the author's own experience on the tour. 2009.

and beside it are lined with shelves holding t-shirts for sale. "Feel free to browse this area," tour guides periodically announce, "as the profits of sales from these souvenirs are donated to a local charity." Additionally, they explain, this is the only place where Corvette Assembly Plant souvenirs of any type can be purchased. Manning the souvenir booth are GM and United Autoworker's Local 2164 retiree volunteers. 446

Similarly to the Rouge tour, videos set the tone. There is a large screen in the front of the waiting room playing videos from popular television shows featuring the Corvette for visitors to watch while waiting to depart on the tour. Unlike the Rouge tour films; these videos put a spotlight on the product rather than on the process. 447 Of course, a mandatory safety video plays as well. The framing of what visitors will see once the tour begins is minimal in comparison to the Rouge tour and it does not target labor.

As tour guide call out numbers, the designated groups congregate just outside large double-doors leading into the assembly area. The guide gives some quick safety reminders, but they, unlike the Rouge tour docents, instruct visitors not to make contact with the workers and explain that due to the elimination of the Cadillac XLR, visitors will notice some empty spaces. ⁴⁴⁸ Piling through more double-doors, they immediately see the assembly line as well as a large open space where the discontinued Cadillac production was once located. Visitors' first view is of deindustrialization.

.

⁴⁴⁶ Author's GM Bowling Green Assembly Plant Tour. July 9, 2009.

⁴⁴⁷ One of the videos is from National Geographic Channel's show "Ultimate Factories," which gives the impression that the video would be mostly about the factory, but it is, in fact, mostly about the Corvette. http://channel.nationalgeographic.com/channel/ultimate-factories/episodes/corvette1/

⁴⁴⁸ Although communicating with workers was not discouraged, no one in my tour group attempted to speak with workers, including our tour guide.

Visitors follow their guide alongside the line, while s/he explains some feature of the Corvette and occasionally, an assembly operation. The dialogue strongly focuses on the product itself, much more than on the production process – how fast the Corvette is, what types of wheels a performance vehicle like the Corvette needs, etc. The assembly line next to the visitors moves slowly and workers appear relaxed and unhurried. Noticeably, like the interior of the factory itself, they tended to be older (40s, 50s, plus). This plant, explains the guide, has many high seniority workers. One possible explanation for the concentration of higher seniority workers would be that the factory is only running one shift, so lower seniority labor was either laid-off or moved elsewhere, as well as the fact that the factory has been running for nearly thirty years. Just as in Chaplin's film, *Modern Times*, break areas are dotted throughout the shop floor, right next to the assembly line. Unlike in the film, break areas contain picnic tables gaily covered with vinyl tablecloths and flat screen televisions. But these break areas, while giving a semblance of a relaxing space, do not allow workers to move out of visitors' gaze during tour hours.

Although the tour has a dedicated website, it is quite basic, especially compared to the that of the Rouge tour. It is has few images and gives only basic information regarding the tour, such as the length, cost of the tour, what to wear when taking the tour, and what not to bring into the building, along with a reservation page.⁴⁴⁹

There is no evidence of the museum on the assembly line floor - there are no displays or kiosks in the shop floor area, like the ones on the catwalk on the current Rouge tour. Both the

1/1

[&]quot;About our Tours." *GM Bowling Green Assembly Plant*. https://www.bowlinggreenassemblyplant.com/. Visitors may not bring "cameras, backpacks, purses, fanny packs or other containers" into the plant.

Corvette museum and the factory made a point that there was no partnership between the two, although the tour guides suggest a visit to the museum and tour tickets may also be purchased through the museum's website. Therefore, this tour does not experience the museumization that takes place at the Rouge tour, but it is designed for Corvette enthusiasts rather than for explaining neoliberalism.

Of course, the GM Corvette tour is not the only other factory tour putting automotive assembly on display. Among others is a tour of Toyota's factory, which in many ways is, similar to the Rouge tour. The Toyota tour makes an argument for the company and its place in the nation while still showcasing its popular products. Unlike the Rouge tour, Toyota emphasizes the role played by labor in producing its vehicles.

Local Toyota and Valued Labor

The Toyota factory tour is another unique representation of industry and labor. Unlike the GM tour, it is not a tour of deindustrialization. And also differing from the Rouge tour, it highlights its globalized connections rather than obscuring them. It makes an argument that globalization can be good for U.S. communities (and that Toyota, in contrast to U.S. industries, believes in investing in American communities, rather than decimating them). Additionally, the Toyota tour loudly affirms that workers at this factory have a voice in the production process, alongside technological innovation and, of course, a global company.

This tour begins at the Toyota Motor Manufacturing, Kentucky (TMMK) visitor center in Georgetown, Kentucky. 450 TMMK opened in 1988, a time in the U.S. when automotive companies like Ford were also teaming up with foreign competitors to open a few



Figure 21: Toyota Visitor Center

manufacturing factories in the U.S. to build, generally Japanese corporations' products, in what were dubbed, transplant factories. ⁴⁵¹ Like the GM Corvette factory tour, visitors must find their own way to the TMMK factory tour. The visitor center is a cross between an exhibit space, a car dealership space, and a corporate lobby. Inside, TMMK produces product advertisements and displays of plant history, and community involvement. A well produced website is a polished augmentation to the tour and visitor center. The website declares, visitors can see "firsthand the beginnings of a global automaker" and "Toyota's first wholly owned manufacturing facility in the United States" at the visitor center. ⁴⁵² This same declaration is included in the displays inside the visitor center, immediately announcing TMMK's global identity.

^

⁴⁵⁰ Description of the TMMK tour are from the author's experience on the tour. 2009.

⁴⁵¹ The Mazda Motor America plant where I worked was one such collaborative transplant factory.

⁴⁵² "Tour TMMK: Plant Tour." *The Official Website of Toyota Motor Manufacturing, Kentucky, Inc.* http://www.toyotageorgetown.com/tour.asp

At the visitor center, a large display taking up an entire wall works to, as the website reiterates, "prove its commitment to the community, as well as to the state." ⁴⁵³ This display consisted of a map Georgetown surrounded by photos of TMMK team members and community member taken at various local community building events. The website expands on the theme of "corporate citizenship" with an entire page dedicated to it, defining the corporation's beliefs in this statement:

> It is an important aspect of our company's philosophy and operating principles that TMMK, be deeply committed to good corporate citizenship, striving to benefit the community where it operates and where its team members and customers live.

To fulfill this commitment, we believe it is our responsibility to support various organizations which improve the quality of life across the Commonwealth. 454

Looking to build goodwill in the local, state, and national community with this statement and the display, TMMK forcefully makes the argument that this corporation is a good citizen, no matter what national borders its factories reside within. This argument also implicitly points out that American corporations that have moved production away from American communities are not the good corporate citizens that global Toyota is. As more visitors fill the center, tour guides direct them into a large room where they distribute headsets to all. Guides then load the visitors onto awaiting trams to begin the tour.

⁴⁵³ "Toyota and the Community." The Official Website of Toyota Motor Manufacturing, Kentucky, Inc. http://www.toyotageorgetown.com/commdex.asp

⁴⁵⁴ "Corporate Citizenship." The Official Website of Toyota Motor Manufacturing, Kentucky, Inc. http://www.toyotageorgetown.com/comm3.asp

Trams begin in the stamping area, where the guide's voice comes through visitors' headsets and explains the "just in time" Toyota manufacturing system, where few parts are stored along the assembly line, but are brought to workers just as they are needed. The trams smoothly glide past the stamping presses, whose sound is muffled by the headset, and on toward the assembly line floor. Tour guide statements regarding assembly frequently included assertions that Toyota team members have an important role in the production process. This assertion is re-emphasized on a virtual tour video available on the website with statements such as "Robots and team members work together," and "[in] assembly innovative solutions that assist team members with those awkward, hard to reach installation." ⁴⁵⁵ On the surface, these statements regarding workers and technology are, at times, similar to those on the Rouge tour. The difference resides in emphasis – at TMMK, technology assists whereas at the Rouge, technology improves. Assisting puts technology into a secondary position, where improving makes technology appear more in control. Additionally, TMMK guides point out that team members are rewarded for suggestions that improve the production process, defining workers firmly as valuable to the company. The Rouge tour catwalk kiosks do not tell the story of who works to improve production processes, making it look like technology practically innovates itself, without human intervention. On several occasions throughout the TMMK tour, the tram stops and a team member comes over to talk to the tour guide, while addressing the people on the tram as well. This spotlight on worker contributions to the process and even on workers themselves starkly contrasts with the GM tour's focus on the product and the Rouge tour's attention on technology over labor.

⁴⁵⁵ "Plant Tour Video." The Official Website of Toyota Motor Manufacturing, Kentucky, Inc. http://www.toyotageorgetown.com/tourvid.asp

The TMMK tour ends with a return to the room where headsets were distributed.

Rather than framing the tour with videos as at the GM and Rouge tours, visitors view a video after the tour ends. This video details TMMK's commitment to environmentally sustainable manufacturing. TMMK thus bookends the tour with visual statements pledging a commitment to the local and global through community and environmental involvement. Although the Rouge also underscores its environmental endeavors at the Observation Deck, the museum structure of display cases and a diorama type view of the living roof through glass windows give the appearance of past commitment rather than current or future commitment to environmental sustainability.

The comparison of the three factory tours demonstrates how differently the production process, labor, and technology are put on display. Additionally, these three tours send distinct messages regarding globalization and deindustrialization. GM's focus on the product ignores the plant's deindustrialized history even as it puts deindustrialization on display in an authentic factory without any museum displays. The TMMK tour also occurs in an authentic factory, but it frames its tour with a museum style format. TMMK's message pointedly places the global corporation in a position of beneficence where it engages in industrialization rather than in deindustrialization of the U.S., along with its strong commitment to the local through community service and environmental stewardship in a globalized context. The Rouge tour, on the other hand, is of a functional assembly line built as part of the factory tour, although it is surrounded by authentic factories, tour visitors only experience a museumized version of factory work that glosses over both deindustrialization and globalization.

Conclusion

What people saw in 2004 on the Rouge tour was a masked celebration of industrial global expansion and of the deindustrialization of American manufacturing that marginalized the living bodies of workers viewed along the tour while it revered industrial technology. In 1934, Ford Motor Company worked to win the hearts and minds of its public at the Chicago Century of Progress Exposition, while erasing traces of authentic labor in its exhibit. By 1936, Ford visions of a powerful and beneficent global corporation moved from the fair to the home of its already iconic the River Rouge complex. Here, Ford Motor Company diverted public attention away from the emerging logics of deindustrialization and Ford's disinvestment in American labor while it lauded technology and globalization as the way to national progress.

Labor strikes, unionization, and legislative struggles over labor rights lent a greater urgency to Ford Motor Company's public relations campaign to promote a doctrine of mass assembly. Ford Rotunda exhibits and displays helped frame the corporation as labor friendly by also including tours of the Rouge complex, even as the workers there labored under structures of discipline and surveillance that were not visible to the eye of the viewing public.

In the end, twenty first century tours of the Rouge demonstrate a shift in the meaning of globalization, from an admirable quality of nation building to a pejorative idea linked to deindustrialization and sinking social status for labor. 1990s trade agreements, such as NAFTA, contributed to the debasing of globalization. The contemporary tour ignores globalization in its museumized displays. Additionally, the nation also drops out of the twenty first century Rouge

| tour. Ford Motor Company no longer looks to uplift national power, but rather to boost its own |
|--|
| |
| corporate power. |

Bibliography

Anderson, Benedict. *Imagined Communities: Reflection on the Origin and Spread of Nationalism.* London and New York: Verso, 1983.

Appadurai, Arjun. *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis and London: University of Minnesota Press, 1996.

Babson, Steve. Working Detroit: The Making of a Union Town. Detroit: College of Urban, Labor, and Metropolitan Affairs and Wayne State University Press, 1986.

Baron, Ava and Eileen Boris. "The Body as a Useful Category for Working-Class History." Labor: Studies in Working-Class History of the Americas, 4.2 (2007).

Bender, Thomas. A Nation among Nations: America's Place in World History. New York: Hill and Wang, 2006.

Benjamin, Walter. *The Arcades Project*. Translated by Howard Eiland and Kevin Mc Laughlin. Cambridge, MA. and London: Belknap Press of Harvard University Press, 1999.

Bennett, Tony. "The Exhibitionary Complex." In *Representing the Nation: A Reader - Histories, Heritage and Museums*. Edited by David Boswell and Jessica Evans, 332-362. London and New York: Routledge, 1999.

Bernstein, Irving. *Turbulent Years: A History of the American Worker 1933-1941*. Boston: Houghton Mifflin Company, 1970.

Bernstein, Irving. *The Lean Years: A History of the American Worker 1920-1933*. Baltimore, Maryland: Penguin Books, 1966.

Biggs, Lindy. *The Rational Factory: Architecture, Technology, and Work in America's Age of Mass Production*. Baltimore and London: The Johns Hopkins University Press, 1996.

Bix, Amy Sue. *Inventing Ourselves Out of Jobs? America's Debate over Technological Unemployment 1929-1981*. Baltimore and London: The Johns Hopkins University Press, 2000.

Bluestone, Barry and Bennett Harrison. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. New York: Basic Books, 1982.

Bodurow, Constance. "Conserving and Interpreting Our Recent Industrial Heritage." *The George Wright Forum* 20.2 (2003): 68-88.

Boisseau, T.J. and Abigail M. Markwyn, eds. *Gendering the Fair: Histories of Women and Gender at World's Fairs*. Urbana, Chicago, and Springfiel:. University of Illinois Press, 2010.

Boswell, David and Evans, Jessica, eds. *Representing the Nation: A Reader; Histories, Heritage and Museums*. London and New York: Routledge, 1999.

Brick, Howard. "Optimism of the Mind: Imagining Postindustrial Society in the 1960s and 1970s." *American Quarterly* 44.3 (1992): 348-380.

Bright, Charles and Michael Geyer. "Where in the World is America? The History of the United States in the Global Age." In *Rethinking American History in a Global Age*, edited by Thomas Bender, 63-100. Berkeley: University of California Press, 2002.

Buck-Morss, Susan. *The Dialectics of Seeing: Walter Benjamin and the Arcades Project, Studies in Contemporary German Social Thought.* Cambridge: MIT Press, 1989.

Chaplin. Charles. My Autobiography. Harmondsworth, England: Penguin, 1964.

Cohen, Lizabeth. *Making a New Deal: Industrial Workers in Chicago, 1919-1939.* 2nd ed. New York: Cambridge University Press, 2008.

Conn, Steven. *Museums and American Intellectual Life, 1876-1926.* Chicago: University of Chicago Press, 1998.

Cook, Jay. "The Kids Are All Right: On the 'Turning' of Cultural History." *American Historical Review*. 117. (2012): 746-771.

Cowan, Ruth Schwartz. *A Social History of American Technology*. New York: Oxford University Press, 1997.

Cowie, Jefferson. *Capital Moves: RCA's Seventy-Year Quest for Cheap Labor.* New York: Cornell University Press, 1999.

Cowie, Jefferson and Joseph Heathcott, eds. *Beyond the Ruins: The Meanings of Deindustrialization*. Ithaca: ILR Press, 2003.

Denning, Michael. Culture in the Age of Three Worlds. London and New York: Verso, 2004.

Downs, Linda Banks. *Diego Rivera: The Detroit Industry Murals*. New York and London: W. W. Norton & Company, 1999.

Duggan, Lisa. *The Twilight of Equality? Neoliberalism, Cultural Politics, and the Attack on Democracy*. Boston: Beacon Press, 2003.

Duncan, Carol. "From the Princely Gallery to the Public Art Museum: The Louvre Museum and the National Gallery, London." In *Representing the Nation: A Reader; Histories, Heritage and Museums*, edited by David Boswell and Jessica Evans, 304-331. London and New York: Routledge, 1999.

Eagleton, Terry. Why Marx was Right. New Haven and London: Yale University Press, 2011.

Edgar, Andrew, and Peter Sedgwick, eds. *Cultural Theory: The Key Concepts*. London and New York: Routledge, 1999. Williams, Raymond. Keyword: A Vocabulary of Culture and Society. New York: Oxford University Press, 1976.

Eley, Geoff, and Keith Nield. *The Future of Class in History: What's Left of the Social?* Ann Arbor: The University of Michigan, 2007.

Evans, Jessica. Introduction to *Representing the Nation: A Reader; Histories, Heritage and Museums*, edited by David Boswell and Jessica Evans, 1-8. London and New York: Routledge, 1999.

Ferguson, Eugene S. "Power and Influence: The Corliss Steam Engine in the Centennial Era." *Annals of the New York Academy of Sciences*, 424 (May 1984): 225–246.

Findling, John E. Chicago's Great World's Fairs. Manchester: Manchester University Press, 1994.

Foucault, Michel. *Discipline & Punish: The Birth of the Prison.* 2nd ed. Translated by Alan Sheridan. New York: Vintage Books, 1995.

Gelbert, Doug. Company Museums, Industry Museums and Industrial Tours: A Guidebook of Sites in the United States That Are Open to the Public. North Carolina and London: McFarland & Company, Inc., 1994.

Gilloch, Graeme. *Myth and Metropolis: Walter Benjamin and the City*. Cambridge, UK: Polity Press, in association with Blackwell Publisher, 1996.

Golisnsky, Jan. *Making Natural Knowledge: Constructivism and the History of Science*. Cambridge and New York: Cambridge University Press, 1998.

Gramsci, Antonio. *Selections from the Prison Notebooks of Antonio Gramsci*. Edited and translated by Quintin Hoare and Geoffrey Nowell Smith. New York: International Publishers, 1971.

Grandin, Greg. Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City. New York: Picador, 2009.

Hamilton, J.G DeRoulhae. "The Ford Museum." *The American Historical Review*.36.4 (1931):772-775.

Haraway, Donna Jeanne. *Simians, Cyborgs and Women: The Re-Invention of Nature*. London: Free Association Press, 1991.

Harvey, David. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. Oxford, England; Cambridge, Mass.: B. Blackwell, 1989.

High, Steven. *Industrial Sunset: The Making of North America's Rust Belt, 1969-1984*. Toronto: University of Toronto Press, 2003.

High, Steven, and David W. Lewis. *Corporate Wasteland: The Landscape and Memory of Deindustrialization*. Ithaca and London: ILR Press, 2007.

Hobsbawm, Eric and Terence Ranger. *The Invention of Tradition*. Cambridge: Cambridge University Press, 1983.

Hounshell, David A. From the American System to Mass Production, 1800-1932: The Development of Manufacturing Technology in the United States. Baltimore: The Johns Hopkins University Press, 1984.

Howe, Lawrence. "Charlie Chaplin in the Age of Mechanical Reproduction: Reflexive Ambiguity in Modern Times." *College Literature: A Journal of Critical Literary Studies* 40.1 (2013): 45-65.

Hutchinson, Paul. "Progress on Parade." The Forum and Century 89.6 (1993): 370.

Hutchinson, Paul and Winfred E. Garrison. 20 Centuries of Christianity: A Concise History. New York: Harcourt Brace, 1959.

Kirshenblatt-Gimblett, Barbara. *Destination Culture: Tourism, Museums, and Heritage*. Berkeley, Los Angeles, and London: University of California Press, 1998.

Leshne, Carla. "The Film & Photo League of San Francisco." Film History 18 (2006).

Lichtenstein, Nelson. *State of the Union: A Century of American Labor*. Princeton and Oxford: Princeton University Press, 2002.

Lichtenstein, Nelson. Walter Reuther: The Most Dangerous Man in Detroit. Urbana and Chicago: University of Illinois Press, 1995.

Lipinski, William O. "U.S. Will Lose In Trade Agreement." Chicago Tribune, April 22, 1993.

Lipsitz, George. *American Studies in a Moment of Danger*. Minneapolis and London: University of Minnesota Press, 2001.

Littmann, William. "The Production of Goodwill: The Origins and Development of the Factory Tour in America." *Constructing Image, Identity and Place*, edited by Alison Hoagland and Kenneth Breisch., 71-84. Knoxville: University of Tennessee Press, 2003.

Lucic, Karen. *Charles Sheeler and the Cult of the Machine*. Cambridge, MA: Harvard University Press, 1991.

MacCannell, Dean. *The Tourist: A New Theory of the Leisure Class*. Berkley and Los Angeles: University of California Press, 1976.

Marchand, Roland. *Creating the Corporate Soul: The Rise of Public Relations and Corporate Imagery in American Big Business*. Berkeley, Los Angeles, and London: The University of California Press, 1998.

Marx, Karl. "A Contribution to the Critique of Political Economy." *The Portable Karl Marx*. Translated by Eugene Kamenka. New York: Penguin Books. 1983.

McCarthy, Tom. "Henry Ford, Industrial Ecologist or Industrial Conservationist? Waste Reduction and Recycling at the Rouge." *Michigan Historical Review* 27.2 (Fall 2001): 53-88.

Meyer, Stephen. *The Five Dollar Day: Labor Management and Social Control in the Ford Motor Company 1908-1921*. Albany: State University of New York Press, 1981.

Milkman, Ruth. Farewell to the Factory: Auto Workers in the Late Twentieth Century. Berkeley, Los Angeles, and London: University of California Press, 1997.

Montgomery, David. Workers' Control in America. New York: Cambridge University Press, 1979.

Mueller, Mike. *The Corvette Factories: Building America's Sports Car*. Minneapolis: Motorbooks, 2009.

Nairn, Tom. "Scotland and Europe." In *Becoming National: A Reader*, edited by Geoff Eley and Ronald Grigor Suny, 79-105. New York and Oxford: Oxford University Press, 1996.

Noble, David. F. Forces of Production: A Social History of Industrial Automation. New York and Oxford: Oxford University Press, 1986.

Nye, David E. American Technological Sublime. Cambridge, MA and London: MIT Press, 1994.

Nye, David E. *Electrifying America: Social Meanings of a New Technology, 1880-1940.* Cambridge, MA and London: The MIT Press, 1995.

Ong, Aihwa. "The Gender and Labor Politics of Postmodernity." In *The Politics of Culture in the Shadow of Capital*, edited by Lisa Lowe and David Lloyd, 61-97. Durham & London: Duke University Press, 1997.

Peterson, Joyce Shaw. *American Automobile Workers, 1900-1933*. Albany, New York: State University of New York Press, 1987.

Porter, Theodore M. *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*. Princeton, New Jersey: Princeton University Press. 1995.

Prins, Baukje. "The Ethics of Hybrid Subjects: Feminist Constructivism According to Donna Haraway." *Science, Technology & Human Values* 20.3 (1995).

Proctor, Robert N. Value-Free Science? Purity and Power in Modern Knowledge. Cambridge, MA: Harvard University Press, 1991.

Rivera, Diego. My Art, My Life: an Autobiography. New York: The Citadel Press, 1960.

Robins, Kevin. "Tradition and Translation: National Culture in its Global Context" In *Representing the Nation: A Reader.* Edited by Geoff Eley and Ronald Grigor Suny, 15-31. New York: Oxford University Press, 1996.

Roof, Tracy. *American Labor, Congress, and the Welfare State, 1935-2010*. Baltimore: The Johns Hopkins University Press, 2011.

Rubyan-Ling, Saronne "The Detroit Murals of Diego Rivera." History Today 46 (April 1996).

Rydell, Robert W. World of Fairs: The Century of Progress Expositions. Chicago and London: The University of Chicago Press, 1993.

Rydell, Robert W., John E. Findling, and Kimberly D. Pelle. *Fair America: World's Fairs in the United States*. Washington and London: Smithsonian Institution Press, 2000.

Schuessler, Jennifer. "In History Departments, It's Up With Capitalism." *The New York Times*, April 6, 2013. http://www.nytimes.com/2013/04/07/education/in-history-departments-its-up-with-capitalism.html?pagewanted=all& r=1&.

Silver, Beverly J. *Forces of Labor: Workers' Movements and Globalization Since 1870.* New York: Cambridge University Press, 2003.

Simonds, William A. *Henry Ford and Greenfield Village*. New York: Frederick A. Stokes Company, 1938.

Sinclair, Upton. *The Flivver King: A Story of Ford-America*. Chicago: Charles H. Kerr Publishing Company, 1937.

Singh, Nikhil Pal. "Liberalism." *Keywords for American Cultural Studies*, edited by Bruce Burgett and Glenn Hendle. 139-145. New York and London: New York University, 2007.

Smith, Anthony. "The Origins of Nations." In *Becoming National: A Reader*, edited by Geoff Eley and Ronald Grigor Suny, 106-131. New York and Oxford: Oxford University Press, 1996.

Smith, Merritt Roe and Leo Marx, eds. *Does Technology Drive History? The Dilemma of Technological Determinism.* Cambridge, MA and London: The MIT Press, 1994.

Smith, Terry. *Making the Modern: Industry, Art, and Design in America*. Chicago: University of Chicago Press, 1993.

Steger, Manfred B. *Globalisms: The Great Ideological Struggle of the Twenty-First Century*. 3rd ed. Lanham: Rowman & Littlefield Publishers, 2008.

Sugrue, Thomas J. *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit*, Princeton Studies in American Politics. Princeton, N.J.: Princeton University Press, 1996.

Trouillot, Michel-Rolph. *Silencing the Past: Power and the Production of History*. Boston: Beacon Press, 1995.

Villareal, M. Angeles and Ian F. Fergusson. "NAFTA at 20: Overview and Trade Effects." *CRS Report Prepared for Members and Committees of Congress,* Congressional Research Service, April 28, 2014.

Wathen, Tom. "A Guide to Trade and the Environment." In *Trade and the Environment: Law, Economics, and Policy*, edited by Durwood Zaelke, Paul Orbuch, Rob Housman, 3-22. Washington, D.C.: Island Press, 1993.

Wexler, Laura. *Tender Violence: Domestic Visions in an Age of U.S. Imperialism*. Chapel Hill and London: University of North Carolina Press, 2000.

Wilkins, Mira and Frank Ernest Hill. *American Business Abroad: Ford on Six Continents*. 2nd Edition. New York: Cambridge University Press, 2011.

Wilson, Edmund. "Detroit Paradoxes." The New Republic, July 12, 1933.

Wilson, Mabel O. *Negro Building: Black Americans in the World of Fairs and Museums*. Berkeley, Los Angeles, and London: University of California Press, 2012.

Winter, Jay. Remembering War: The Great War Between Memory and History in the Twentieth Century. New Haven and London: Yale University Press, 2006.

Zieger, Robert H. and Gilbert J. Gall. *American Workers, American Unions*. Baltimore and London: The Johns Hopkins University Press, 2002.

Zukin, Sharon. *Landscapes of Power: From Detroit to Disney World*. Berkeley: University of California Press, 1991.