THE INSTITUTIONAL FIELD AND ORGANIZATIONAL CONTINUITY AND CHANGE AT GENERAL MOTORS' LANSING DELTA TOWNSHIP MANUFACTURING PLANT

By

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Anthropology—Doctor of Philosophy

2016

ABSTRACT

THE INSTITUTIONAL FIELD AND ORGANIZATIONAL CONTINUITY AND CHANGE AT GENERAL MOTORS' LANSING DELTA TOWNSHIP MANUFACTURING PLANT

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This dissertation investigates the topic of organizational continuity and change as it occurred throughout General Motors, most specifically its Lansing Delta Township (LDT) manufacturing plant, in order to better understand processes of institutionalization and the implications of both continuity and change on organizations and society. The research and analysis rests on new institutional theory and privileges the "…field rather than the organization" as a focus of analysis (Davis and Marquis 2005: 332). So although my ethnographic data was collected at LDT—my focus is on the larger institutional field in which LDT is a part. The institutional field is inclusive of the General Motors Corporation, the auto-industry as a whole, in addition to the local Lansing, Michigan community and individual social agents within it. The work of Bourdieu (1993) and his notion of the field, as well as, the broader discipline of anthropology support this theoretical grounding with its interest in rules, norms, behaviors, and cognitive schema. Most significant regarding this notion of the field is the fact that is serves as the location of contestation where power relations play out—the power relations being defined by the specific field, the habitus, and the social capital possessed by the actors. Bourdieu's (1993) notion of a field presents a required construct when analyzing processes of continuity and change. This dissertation aims to demonstrate how large scale social and economic changes in the auto industry have impact on the local level and offers insight to anthropologists and other socials scientists interested in understanding how particular institutions change over time (Davis and Marquis 2005:333). By focusing on the field as opposed to the organization our

understanding of how institutional continuity and change occur is strengthened. This focus overcomes the weaknesses of previous research that drew lines of demarcation around particular organizations and attempted to analyze them independent of the larger global context. This dissertation does not attempt to build a general theory of organizations; in fact, quite the opposite, this dissertation aims to elucidate changes as they occurred in a specific time and place in direct reference to LDT's unique context. This pursuit is in accord with what Davis and Marquis championed as the next step in organizational theory the attempt to understand more deeply mechanism-based conceptions of how change occurs (2005:335).

This research relies on Scott (1995, 2013) for its working definition of institutions and grounds its understanding of observable stability within GM in concepts put forth by Scott. Institutions according to Scott "consist of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behavior. Institutions are transported by various carriers—culture, structure, and routines—and they operate at multiple levels of jurisdiction" (1995:33). The construct of routines as established within the sub-field of evolutionary economics and theories of evolutionary change will be employed to help explain observations of how continuity and change occurred at LDT. By relying on a field level approach this dissertation contributes to the discipline of anthropology by advancing understanding of how institutional continuity and change occur—both LDT's recent lean manufacturing initiatives, GM's bankruptcy, as well as the impact and influence that bankruptcy had on the lean initiative which was underway throughout the corporation all contribute to an unprecedented context in which to examine processes of institutionalization.

This dissertation is dedicated to Lyle Grant Birchman, 1958-2016.

ACKNOWLEDGEMENTS

There are many individuals who I would like to thank as they contributed to the completion of my dissertation and PhD. First and foremost, my amazing parents, Ann and Peter Altimare who despite my lengthy academic road, showed genuine enthusiasm, encouragement, and steadfast support. I thank my siblings, Brian, Elise, and Charlotte from whom I always felt respect and pride for my academic pursuits.

I also thank Justin Carrizales who witnessed firsthand the writing of this dissertation. Justin, true to your character, you were nothing but supportive, patient, and kind. Your care and consistency was my Northern Star.

Dr. Norman Schwartz, thank you, your undergraduate applied anthropology course taught me that anthropology theory and practice could interrogate questions in remote as well as local sites—this lesson was integral to my later research pursuits.

Dr. Elizabeth Briody, I couldn't have asked for a more loyal and devoted mentor at General Motors—it was this relationship and opportunity that opened the door to research at General Motors and you were a forever cheerleader always believing in me, I am forever grateful and indebted for all of the opportunities you have sent my way. Within the General Motors and UAW Local 602 community there are countless individuals, to many to name, which assisted and aided me in conducting my research. A heartfelt thank you goes to each and every research participant that patiently answered my questions, allowed me to observe their work, and were welcoming and encouraging of my efforts. In particular, I would like to thank Randy Thayer, the then plant manager, who allowed me to conduct research at GM's Lansing Delta Township Plant.

Last but not least, my academic community at Michigan State University. This community includes my anthropology cohort—in particular, Amanda Abramson, Fredy Rafael Rodriguez-Mejia, Natalie Petersen-Menefee, and Kate Frederick. A very special thank you goes to my advisor Dr. Marietta Baba whose instruction and guidance was integral to the development of my theoretical voice—thank you for the years of guidance and support, without you I could not have completed this research and dissertation. Thank you also to my committee members Dr. Linda Hunt and Dr. Mindy Morgan—thank you both for your assistance in the completion of my dissertation as well as for serving as excellent examples of teachers, scholars, and anthropologists.

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Introduction

Examining Change Processes

The complexity present in an organization such as General Motors (GM) contributes to the challenge of both implementing change as well as understanding the processes of change. This dissertation examines what happens in a complex organization such as GM when change efforts are attempted, such as GM's introduction of a new production system (Global Manufacturing System, also known as GMS), as well as, changes of a much different nature—in this instance those precipitated by GM's bankruptcy. As will be explained in greater detail in chapter 4, when my dissertation research was initiated there was an explicit focus on change to GM's production system through the implementation of GMS; however, as I was researching the GMS system as implemented at GM's Lansing Delta Township Plant I was witness to a second change of significance—that is GM's corporate bankruptcy. This latter event, and its timing, which situated itself during my fieldwork allowed for novel questions to be asked and specific interactions to be examined. Foremost, how would GM's bankruptcy impact and influence the implementation of GMS? How would employees respond to and understand GM's bankruptcy? How would bankruptcy impact and influence GM's organizational routines embedded within the LDT manufacturing plant?

Explanation of both continuity and change are grounded in understandings of the "field" and "actors" as situated and embedded (like routines)—attention is paid both to the cultural habitus of the varying actors as well as their access to capital—social, cultural, economic and symbolic (Bourdieu 1994: 179). Habitus according to Bourdieu is "A structuring structure, which organizes practices and the perception of practices" (1984:170). The research questions

for this dissertation rest on new institutional theory—with its focus on the interaction of specific actors such as work groups, formal organizations, agencies of the State, and individuals within the work site, each with their own agency, interests, and differences in perspective during processes of organizational and technological change (Barley 1986, Scott 2001). Field theory in conjunction with the concept of routines as borrowed from evolutionary change theory in economics offers a manner in which to understand and analyze data at varying levels of analysis because the field is inclusive of a variety of scales—some housed at the individual level, others at the state level, and still others at the international or industry level in the case of lean manufacturing in the auto industry.

Processes of organizational change are not completely understood; however, these two events in the history of LDT offer a window into the mechanisms by which institutional change can occur; first, GM's efforts to implement lean manufacturing techniques; and second, GM's restructuring efforts. I will investigate both GM's implementation of lean manufacturing at LDT, GM's restructuring efforts post bankruptcy, and the interaction of GMS and bankruptcy in order to better understand processes of organizational continuity and change. This research aims to contribute an in-depth ethnographic understanding of how lean manufacturing is understood and implemented at LDT, as well as observations pertaining to the process of corporate-wide continuity and change post bankruptcy. Bankruptcy as a context contributed to the scope and urgency of the corporate transformation in a manner that exceeds other case studies of institutional change. The bankruptcy provided a historic opportunity to analyze a singular phenomenon of continuity and change in one of the world's historically significant organizations.

Of significance to my research and analysis are large-scale historical events, the actions of individuals and collectives, and the social mechanisms in play. The presentation of historical, legal, and ethnographic data in relation to changes occurring on the ground at LDT will be explained in reference to larger historical shifts in economy and society; hence this work contributes to recent calls for organizational theory to prioritize fields and mechanisms. This dissertation situates GM's implementation of GMS and GM's corporate bankruptcy as happening within the institutional field—and the individual plant is positioned as a sub-organizational unit. This arrangement allows for an examination of how the field responded to both events in addition to answer the question of how the events interacted. Did GMS—its role, position, influence, and or meaning change during bankruptcy? Furthermore, in what ways did bankruptcy impact and influence LDT's employment practices and production methods?

American Automobile Manufacturing and the Institutional Field

This dissertation investigates processes of institutionalization at a General Motors manufacturing plant, Lansing Delta Township (LDT), to analyze the mechanisms of institutional continuity and change. The research and analysis rests on new institutional theory and privileges the "…field rather than the organization" as a focus of analysis (Davis and Marquis 2005: 332). So although my ethnographic data was collected at LDT—my focus is on the larger institutional field in which LDT is a part. In fact, the institutional field is inclusive of the General Motors Corporation, the auto-industry as a whole, in addition to the federal government, the local Lansing, Michigan community and individual social agents. The work of Bourdieu and his notion of the field, as well as, the broader discipline of anthropology support this theoretical orientation with its interest in rules, norms, behaviors, and cognitive schema. Bourdieu describes a field as: "a field of forces, whose necessity is imposed on agents who are engaged in it, and a

field of struggles within which agents confront each other, with differentiated means and ends according to their position in the structure of the field of forces, thus contributing to conserving or transforming its structure" (Reed-Danahay 2004: 32). Most significant regarding this notion of the field is the fact that it serves as the location of contestation where power relations play out—the power relations being defined by the specific field, the habitus, and the social capital possessed by the actors. In other words, Bourdieu's notion of a field presents a required construct when analyzing processes of continuity and change.

General Motors (GM) enjoyed a long history of dominance in the auto-industry; however, during the last few decades increased global competition, rising oil prices, and changing consumer preferences, contributed to it being less competitive and effective and losing market share. Furthermore, in comparison to its competition GM's production processes were becoming outmoded. In response to these pressures the company decided to initiate change; more specifically, they began to incorporate lean production techniques[1]. In addition to transformations in GM's production-process, GM experienced another profound change—financial collapse and bankruptcy in 2009. GM's bankruptcy and associated bridge loans (loans provided by the U.S., Canadian, and Ontario Provincial Governments) entailed dramatic restructuring efforts to eliminate waste, streamline processes, and ensure sustained viability. These two changes will be investigated as interrelated but distinct. It is important not to conflate these changes and instead to articulate that these changes are different but not absolutely separate in their effects—part of the dissertation's work will be to tease apart each. This will entail

[1] Lean production or lean manufacturing is a process that aims to eliminate waste; through waste elimination both quality and efficiency are positively impacted. Seven forms of waste are typically identified: defects, overproduction, transportation, waiting, inventory, motion, and processing.

examination of lean manufacturing in the GM context in addition to GM's bankruptcy proceedings as distinct occurrences within the institutional field; however, their interaction is also of particular interest and will be addressed.

Ethnography and Change Initiatives at General Motors

General Motors as a corporation employed an anthropologist, Elizabeth Briody, within their Research and Development (R&D) Center for upwards of 20 years. Briody's work was grounded in ethnographic methods and theory and the company valued and utilized that orientation in numerous research efforts. It is relevant to point out that my first involvement with GM was through Elizabeth Briody, as a Master's student in Applied Anthropology at Northern Arizona University. At that time, GM's R&D center was interested in something that was termed design anthropology—essentially the use of ethnographic methods to understand the manner in which customers were interacting with and using products, in this case their cars. A rapid ethnographic research project was conducted in Los Angeles, CA, under Briody's guidance and support. This initial collaboration earmarks the beginning of my history with GM. I went on to serve as Briody's summer intern three consecutive summers. I participated in two main categories of research, an Ideal Plant Culture Project and a Health Care Study. For the purposes of this dissertation the most relevant work was the Ideal Plant Culture Project (this work is presented in Briody's et al. 2010 publication entitled *Transforming Culture*).

Organizations such as GM's Lansing Delta Township (LDT) plant constitute complex socio-technical environments with embedded processes and institutions. By institutions, I borrow from Scott's (2001:48) definition because of his emphasis on stability yet inclusion of change processes. This notion of change is also addressed by Bourdieu, and is captured in his approach with his concept of "relationality" which presents the idea that cultural production is situated—in

other words it occurs in context. Cultural products and producers are situated within "a space of positions and position-takings" that define a particular set of relations (Bourdieu 1993: 30). It is the power struggules as they occur between actors in their situated contexts which either promote continuity or enable change within the field through time.

Research on the topic of an "ideal" (desired future state) plant culture came at the request of senior GM leadership, the then VP of North America, Troy Clarke. Clarke's history included work at GM's Silao, Mexico plant—an experience that left him with self-described deep appreciation of culture[2]. Specifically, he wanted to know how and why the Siloa facility was unique in comparison to US facilities, performed as well as it did, and produced high quality vehicles. These interests were tied to a simultaneous GM corporate interest in being able to craft and shape plant cultures in US locations. These curiosities translated into a full-blown, multi-year research project, with the intention of capturing what an ideal plant culture would be in the US context. It was in the midst of this ongoing research that I joined GM's R&D staff as a summer intern in 2006.

The ideal plant culture project is significant for many reasons; not the least of which is that the project captured significant themes, problems, and ambitions for the same plant population that I would study and interact with during my dissertation research. Lastly, exposure and involvement in that work no doubt impacted my interest in LDT's implementation of GM's Global Manufacturing System (GMS). The research objectives that guided my ethnographic data collection centered on revisiting the plant population that the ideal plant culture project studied; in particular, I would be examining the state of GMS[3]. By "state" I refer to how thoroughly and

[2] The meaning of culture in this instance aligns with Batteau's (2013) explanation of companies' vernacular use of the term.

[3] GMS (GM's global manufacturing system) is the name given to GM's lean production system, in other words, GM's version of the Toyota Production System (TPS). GMS is comprised of 33

comprehensively the 33 elements of GMS were implemented at GM's LDT plant. Another central concept that I planned to examine was the level of collaboration among the plant population, inclusive of hourly and salaried staff. Collaboration as a concept was found in Briody's (2010) research to summarize a desired component of an "ideal" plant culture. Other objectives entailed understanding how employees perceived GMS and its various elements. Lastly, by the time I began research at LDT, GM was experiencing such economic decline that its future viability was being discussed in the national media. I was interested in understanding how local employees perceived GM's decline as well as explore the factors that they understood as being responsible for GM's decline (for example management, foreign competition, or other explanations).

Despite my research being initiated with a focus on GMS it grew to include the impact of GM's bankruptcy when that event occurred during the conduct of my research. In response to the events of the bankruptcy, I was motivated to expand my research to include the impacts and influence that bankruptcy had on GM generally as well as LDT's implementation of GMS specifically. This contributed to the reformulation of my research questions.

Hence, the original research aims as well as its expansion in the face of bankruptcy, directed the conduct of ethnographic research at LDT and data collection that allows this dissertation to focus on the following questions:

1. How do organizational behaviors and routines at LDT function as mechanisms that both reflect and enable continuity and change within the institutional field? How were routines at LDT impacted or not impacted by the implementation of GMS?

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lean elements. These elements are summarized in a handbook style manual. The manual entails a definition and purpose of each element in addition to various requirements and techniques—the GMS manual can be understood as a reference guide for all GM manufacturing.

2. What was the impact on organizational behavior of GM's corporate bankruptcy? How were the embedded organizational routines (understood to be patterned, persistent, collective, non-deliberative, and processual) at LDT (inclusive of local behaviors related to GMS) impacted by bankruptcy, in other words what was bankruptcy's effect on GMS?

Studies of Organizational Change

This research builds on the foundation established within new institutional theory. New institutional theory is concerned with the resilient aspects of social structure and the processes by which rules, norms, and routines become so established and embedded that they assume authoritative power and guide social behavior. Furthermore, new institutional theory aims to understand the manner in which these embedded patterns are established, shared and changed through space and time—as well as how they weaken and disappear. Based on this orientation my research is interested in the processes of continuity and change in organizational settings (Bourdieu 1977, DiMaggio and Powell 1983, Scott 2004). In my research, emphasis is placed on a specific group; that is, autoworkers and GM employees at GM's Lansing Delta Township Manufacturing Plant. In this manner, a specific group within a formal organization is examined regarding their patterns of practice (use of a new manufacturing technique—GMS) and their interpretations of meaning (understandings of "lean" processes and notions of global competition). I expect that these patterns of practice and interpretations of meaning will reflect continuity with existing societal institutions such as: mass-production, American notions of the work ethic, individuality, autonomy, labor-management conflict, and union labor, as well as be challenged by economic and technological change at the global and local scale.

GM is a formal organization, more specifically it is a for profit corporation, with a history that includes the institutionalization of mass-production as a manufacturing process. Since the

1980s, GM has been undergoing a long-term process of institutional change as it undergoes a dramatic shift in its production process toward lean manufacturing. Global economic change (e.g., globalization and GM's bankruptcy) and levels of competitiveness (GM's rank among global auto-makers is currently contested) are challenging previously embedded norms, rules, constructs, and organizational routines. My research conceives of institutions as external facts and symbolic systems (Scott 2008, Durkheim 1895) that are defined, shared and passed on by members of the group. This research is poised to contribute to the existing anthropological literature on new institutional theory by establishing such theory as a primary theoretical orientation and offering insight into the processes by which rules, norms, and practices are both "instituted" and assume authority as well as how they are altered and changed through time and space. This approach will contribute to anthropological understanding of organizational routines and innovation in a modern American manufacturing plant as well as to the general processes of organizational continuity and change.

Lean Manufacturing

The existing literature on lean manufacturing is typically grouped within two categories, first emphasis on its characteristics and origins within Toyota (Womack, Roos, and Jones 1990; Liker 2004); and second, the contested effect of lean manufacturing on individual workers (Babson 1995, Liker, Fruin, and Adler 1999, Vallas 2006). Parker and Slaughter (1995:44) define lean production in the following manner stating, "We think a more accurate term for lean production is 'management by stress.' We call it that in order to identify its central operating dynamic and to challenge from the beginning the terms used to promote the system." Parker and Slaughter (1995) focus on the systems tendency to focus on the systems' weakest parts, and in its efforts to do away with waste, disposing of these parts, even if they represent laborers.

My research is less interested in the origins of lean production methods in Toyota or the critique of lean methods as exploitive— instead it offers new knowledge on the implementation of lean manufacturing as part of an organizational transformation, as well as, elucidating workers' beliefs, assumptions, and understandings of GMS—GM's suite of lean techniques—as culturally embedded and context specific. This particular focus builds on the work of Brondo and Baba (2010) and their case study of lean manufacturing at GM's Lansing Grand River Plant (LGR) as well as Briody, Trotter, and Meerwarth (2010) and their study of cultural transformation in GM's manufacturing environments. In particular, Brondo and Baba (2010) were able to illustrate the effect that organizational and institutional forces external to LGRA had on GMS—in particular the ways in which these external forces threatened and challenged GMS as implemented in the plant. This work offers an analysis and proposition regarding why particular institutional changes occurred in context while other routines remained stable and intact. Lastly, arguments will be made regarding the manner in which GM's corporate bankruptcy enabled continuity *in* change, in other words, the manner in which bankruptcy which included the distribution of loans stabilized the automaker sufficiently that it was able to continue operations, safeguard payroll and employee insurance, pay suppliers, honor warranty claims, and continue "business as usual" all while radically transforming its balance sheets and debt to income ratio (these examples relate to the regulatory pillar of institutions, i.e. obligations).

Routines as Mechanisms of Institutional Change

The concept of routines as presented by Nelson and Winter (1982) offers a productive construct for evolutionary theories of economic change. However, this useful construct also has drawbacks such as various foci and definitions. As a review of the literature will show, several

scholars have emphasized different primary components of what is refered to as routines. Of interest to this dissertation is the manner in which routines can serve as mechanisms of continuity and change. One of the most noteworthy analogies presented by Nelson and Winter in their work *An Evolutionary Theory of Economic Change* (1982) was that routines function like genes in the social world. Becker offers the following explanation of this concept, "Like the concept of the gene in biology, the concept of the routine, would be the key for understanding how the economy changed" (Becker 2003: 1). By extension, it appears the notion of "routines" can be understood as a relevant mechanism by which to investigate processes of institutional change. Nelson and Winter's (1982) concept of routines garnered strength based on its satisfactory capacity to answer three questions "…how variation comes about, how selection takes place, and how what has been selected in one period is transmitted to the next period" (Becker 2003:1). As has been explained, the concept of the field is central to this dissertation—conflicts, interactions, and occurences are being examined as they occur between actors in the field—however the concept of routines as a mechanism functioning within the field is equally important. This dissertation connects the concept of routines coming from evolutionary economics with that of the institutional field, stemming from new institutional theory by highlighting the idea of institutional rules, both formal and informal (i.e. rules can be manifested in routines) thereby connecting these literatures in a productive manner. The analysis of ethnographic themes for evidence of routines is enabled by this connection.

The usefulness of routines as a construct stems from the ability to examine their variation, selection and tranmission processes through time. The more insight gathered related to variation, selection, and transmission the more sound the explanations and interpretations of continuity and change. Becker (2003:2) elaborates on this point arguing, "An evolutionary

explanation is a promising candidate for explaining change in the social realm, such as for instance innovation, the diffusion of innovation, the transfer of ("best") practices and organizational memory and organizational learning." Based on the use of "routines" as a concept within this dissertation it is important to clearly articulate what is meant by the term routines—what are the characteristics and roles of routines?

This section will decribe the characteristics of routines as presented in the literature; articulate the roles that routines fulfill within organizations, and lastly describe the manner in which routines viewed as mechanisms help deepen interpretations of continuity and change as it occurs within the instutional field. First, in relation to the characteristics that routines posses, as they have been presented in the literature, Becker highlights the following "they are patterns, repetitive and persistent, collective, non-deliberative and self-actuating, of processual nature, context-dependent, embedded, and specfic, and path dependent." These characteristics will be elaborated upon as they relate to the objective of this dissertation.

The notion of patterns is central to the concept of routines; however included in Winter's explanation of routines in his 1964 publication he provides an avenue for change and modification. He writes "… a pattern of behavior that is followed repeatedly, but is subject to change if conditions change" (Winter 1964: 263). The idea of conditions changing can be equated to changes within the field. In additon to the significance of routines being both patterned and capable of change, Becker's work pursues a worthy line of inquiry—he asks, what do the patterns consist of? Based on his thorough literature review he offers the following synthesis grouping the content of patterns into the folloing four topics: patterns as action, patterns as activity, patterns as behavior, and lastly patterns as interaction (2003: 4). The most significant of these topics is the idea of patterns as interactions—this is central to an

understanding of routines serving as mechanisms within the field. This is rooted in the idea that interaction exists at the collective level versus soley the individual level (Becker 2003:5).

The second characteristic of routines as dissected by Becker is that they are repetitive and persistent—this characteristic aligns very well with current understandings of processes of institutionalization and stability. Routines are collective in nature—this characteristic is very significant because it reinforces that routines exist outside the individual, that is they exist within the organizational level (Dosi, Nelson, and Winter 2000: 5). This aligns with a framework that presents routines as a mechanisms of institutional continuity and change occuring in the field. Becker (2003: 5) also argues that "…the collective nature of routines has important implications for understanding the concept of routines. It makes us aware that routines can be distributed (Simon 1992, Winter 1994, Scapens 1994, Marengo in Cohen et al 1996, Coriat and Dosi 1998, Lazaric and Mangolte 1998, Zollo and Winter 2002)." Becker adds that sufficient acknowledgement of the collective character of routines helps demonstrate their complexity.

Another characteristic of routines covered by Becker's (2003) analysis is that they are non-deliberative—this refers to their somewhat automatic character, routines tend to be followed without required thought or intention. In relation to the processual nature of routines Becker (2003:9) explains:

> Several characteristics along which the processual nature of routines can be described have been identified in the literature: decay, leading to a need for 'maintenance' of routines (Hannan and Freeman 1989, p. 76; cf. Giddens 1984, p. 86); decay speed (Cohen 1991, p. 139; Grant 1991, p. 123); the speed of executing routines, of changing their contents, and of switching between them (Cohen 1991, p. 136); reaction speed (Cohen and Bacdayan 1994, p. 558); reaction time, time lags, and time delays (March 1994, p. 42); frequency of repetition and point of time of impact (Ginsberg and Baum 1994, p. 130); frequency and fashion of shifting from one routine or set of routines (Hannan and Freeman 1989, p. 76); age (duration) of an activity, speed of environmental change, quality of information with regard to the activity, amount of managerial and employee turnover, and volatility of the decision environment which all can

act to intensify or dispel the influence of routines (Hirshleifer and Welch 1998). The processual nature of routines is particularly significant to interpretations of institutional continuity and change, Winter offers the following questions related to routines which demonstrate the manner in which they function as mechanism within the field, he questions "Which classes of routine behavior are capable of protracted coexistence with each other, without producing, out of their own dynamic logic, pressures for change? What classes are mutually incompatible or antagonistic, and in what time frame is the clash likely to become acute? (Winter 1975:109).

Becker presents interesting experimental research in psychology as it relates to routines. Foremost, he presents several studies that describe the impact of time pressure on the maintenance of routines. For example "Under increased constraints such as time pressure, prior knowledge gains a stronger impact on choices and can also overrule new evidence in the decision process (Betsch, Brinkmann, Fielder and Breining 1999)" (Becker 2003: 11). Similarly, Becker cites the work of Weick (1990) whose research findings included that under stress and pressure "…team responses that were acquired more recently and practiced less often can be expected to unravel sooner."

Becker's explanation of context-dependence, references the notion of "scaffolded action" borrowed from Clark (1997) that references the process whereby routines are tied to external support. The significance of context-dependence as it relates to institutional change processes is the manner in which it offers insight into the various kinds of specificity which impact the field, these include: historical specificity—precise points in time (Barney 1991, Hodgson 2001); local specificity—inclusive of cultural differences (Simon 1976); and relation specificity (Dyer and Singh 1998). Most significant related to the discussion of embeddedness is that routines face

many obstacles during processes of transfer because they are taken out of their original context. Very similarly, the notion of path dependence suggests that routines are modified through time based on feedback and results (Levitt and March 1988).

Furthermore, Becker offers the following list of roles that routines have in organizations stemming from the literature, "…to coordinate and control, provide 'truce,' economise on cognitive resources, reduce uncertainty, lead to inertia, provide stability and enable and constrain, act as triggers, and embody knowledge" (2003:2). An example of this will relate to the manner in which employees interpreted layoffs in relation to past experience versus unprecedented bankruptcy. Turning attention to the role of co-ordination, routines support co-ordination by providing regularity, consistency, and knowledge of others actions in additon to instructions for action (Bourdieu 1992, Nelson and Winter 1982). The role of "Truce" entails "…a zone of discretion within which conformity cannot be forced but is a question of motivation" it entails the agreed apon relationships between groups not defined explicitly by rules but rather outlined through maintenance of the staus quo based on mutual benefit (Becker 2003:17). The notion of truce is critical to interpretations of change processes. As Becker (2003:17) explains, "Understanding a routine as comprising a 'truce' helps recognize and appreciate that political or motivational arrangements are underlying the working and stability of recurrent activity (Mangolte 1997b; Lazaric and Mangolte 1999)."

Another significant role fulfilled by routines is that of reducing uncertainty—this is significant on the actor level in terms of economizing cognitive resources by relying on established routines. This role is also fulfilled on the societal level, "societal institutions like laws, norms and so forth establish a certain level of predictability for all members of the society" (Becker 2003:21). Just like the tendency in institutional change theory to focus on stability so

too does the literature on organizational routines emphasize stability; however, routines help support change "One particular instance of these 'twin'-roles is the simultaneous problem-solving (Egidi 1996) and coordinating/ governance character of routines (Coriat and Dosi 1998). The enabling role of routines seems to be underestimated in much of the literature" (Becker 2003:21). Lastly, the role of routines in embodying knowledge is significant and stems from arguments originally made by Nelson and Winter (1982:99) "…the routinization of activity in an organization constitutes the most important form of storage of the organization's specific operational knowledge." This line of thinking helps articulate then manner in which organizational lessons that are learned are stored functionally as routines that are shared and carried forward.

As this summary of the primary characteristics and roles of routines has outlined, conceptualizing routines as a mechanism of institutional continuity and change is productive. In fact, by offering such explanations this dissertation contributes both to new institutional theory as well as evolutionary theories of economic change. As will be covered further, this intersection of routines understood to possess the previously summarized characteristics and roles help offer further insight into field level phenomena. This dissertation gains insight by using the construct of routines to help interpret ethnographic data as well as grounding those routines within an understanding of the field.

The Field and Institutional Pressures

Understanding of the field is elucidated in reference to Fareed et al. (2015) and their presentation of specific institutional pressures including cause, constituents, content, context, and control. Fareed et al.'s (2015) institutional pressures help to drive explicit comprehension of field level factors which exert force on phenomena such as GM's adoption of lean manufacturing

techniques as well as GM's bankruptcy proceedings. "…[I]nstitutional pressures, which Ingram and Simons (1995) noted as being socially constructed rules and conventions that shape organizations' practice" (2015:28). Borrowing Becker's (2003) understanding of routines and Fareed et al.'s (2015) understanding of institutional forces creates a theoretical lens suitable for interpreting of my dissertation data, data that includes primary as well as secondary sources in addition to interpretation of two distinct field level phenomena (GMS and bankruptcy).

The following chart briefly outlines and defines each of the five institutional pressures examined (adapted from Fareed et al. (2015:31)):

Table 1: Institutional Pressures within the Field

Cause	Constituents	Content	Context	Control
An organizations' understanding of and agreeability with potential gains in social legitimacy or economic prowess	The organization's ability to manage the various expectations of its stakeholders in the environment	Content encompasses the nature of the pressure to which an organization is forced to conform. A key dimension of pressure within this construct is the consistency of the pressure with an organization's goals	Interconnectedness is an important aspect of the construct context, and is defined as the 'density of inter-organizational relations among occupants of a field' (Oliver 1991: 170). Highly interconnected environments have several formal and informal channels through which the diffusion of institutional norms can easily occur	Control reflects the means through which institutional pressures are imposed. Without legal coercion, the environmental field, within which an organization operates, is a recognized source of institutional control (Ingram and Simons 1995)

Later in the dissertation, I borrow from Fareed et al. (2015:28)[4] by focusing on this "extensive set of organizational theory-specific predictors… cause, constituents, content, context and control" to examine the institutional pressures that exerted force from the field on GM's adoption of lean manufacturing techniques, as well as GM's bankruptcy event.

As noted previously in this chapter, the work of Richard Scott (2008, 2013) particularly his analysis of institutional pillars regulative systems, normative systems, cultural-cognitive systems— each of these elements has been identified by one or another social theorist as *the* vital ingredient of institutions. The three elements form a continuum moving "from the conscious to the unconscious, from the legally enforced to the taken for granted" (Hoffman 1997: 36). One possible approach would be to view all of these facets as contributing, in interdependent and mutually reinforcing ways, to a powerful social framework—one that encapsulates and exhibits the celebrated strength and resilience of these structures. In such an integrated conception, institutions appear, as D'Andrade (1984: 98) observes, to be over determined systems: "over determined in the sense that social sanctions plus pressure for conformity, plus intrinsic direct reward, plus values, are all likely to act together to give a particular meaning system its directive force."

[4] Whereas Fareed et al. employed the use of an ordered probate regression model to test five hypotheses, my intention is not to conduct statistical analysis based on like predictors but instead to borrow Fareed et al.'s explanatory framework to explicate factors which link the global and the local and elucidate the mechanisms of continuity and change. Whereas their focus was on the institutional pressures that influenced specific hospitals to adopt EHR's, my focus is on the institutional pressures that impacted GM's adoption of GMS, a lean manufacturing system in addition to the pursuit of corporate bankruptcy as a means to returned profitability. Despite the subject matter being different the impact of institutional pressures may be very similar. Fareed et al. (2015:28) write "The expectations [for EHR's] have diffused across several institutional stakeholders (e.g., insurance companies and government agencies) in the US healthcare environment, who in turn pressure hospitals to have EHR capabilities even in the presence of weak technical rationale for the technology." I borrow from Fareed et al. and examine the same factors to explore GM's response to institutional pressures.

In addition to the concept of institutional pillars, Scott also contributes a very useful and necessary discussion during his description of profound institutional change (2000:24). Scott identifies the following characteristics of profound institutional change: multi-level (change occurs at a variety of levels from individual actors to field level), discontinuous (change can occur gradually as well as radically), new rules and governance mechanisms (rules governing behavior, regulatory systems, and informal structures), new logics (logics that direct and legitimate behavior), new actors (new types of social actors and changes in the identities of existing actors), new meanings (meanings are modified and changed), new relations among actors (relations among actors are transformed), modified population boundaries (boundaries blur and change), and modified field boundaries (borders of fields change or realign). These characteristics of profound change in combination with an understanding of institutional pressures help orient and frame my collection of ethnographic data at LDT—foremost, I am able to articulate and demonstrate with examples the manner in which the theme impacts routines, if that impact suggests continuity, change, or both and what characteristics of change and/or continuity are evident. As the dissertation will show, the ethnographic themes that emerged during content analysis are analyzed and interpreted in relation to the field level phenomena of GMS and/or bankruptcy (each phenomena itself is grounded in understanding of the impact that institutional pressures exerted in the adoption of GMS and GM's bankruptcy). Most importantly, each ethnographic theme is named and summarized, the specific organizational behaviors which are associated with that routine are described and propositions regarding continuity or change to routines are then grounded in evidence of new or old logics (described below), meanings, relations, practices, rules, and actors. This analysis is significant because it highlights the manner

in which routines (understood to be patterned, persistent, collective, non-delibrative, embedded and processual) function as mechanisms of continuity and change.

Institutional Logics

"Institutional logics refer to the belief systems and associated practices that predominate in an organizational field" (Scott 2000:170). Institutional logics offer the organizing principles that supply behavioral guidelines for actors within the field (Friedland and Alford 1991: 248). "Institutional logics specify what goals and values are to be pursued within a field and indicate what means for pursuing them are appropriate; tap into cultural-cognitive and normative dimensions of institutional environments; and dominant logics represent consensus of powerful institutional actors but secondary or repressed logics representing other, subordinated interests, may over time become more influential" (Scott 2000:171). The concept of institutional logics is significant to understanding the manner in which routines promote continuity or change.

As will appear later in this dissertation, I use the expression continuity *in* change, this term attempts to capture the processual and evolutionary nature of change within the field as was observed to occur at LDT in relation to GMS as well as the level of stability that the government bridge loan furnished to GM simultaneous to massive restructuring processes. Continuity with previous organizational behaviors and routines is evident in many examples of change. As this dissertation will demonstrate, many of the ethnographic themes are multifaceted and include elements of persistence and stability (*continuity*) with old patterns, practices, and ways of thinking; however, there is also *change* as these themes were observed occurring within GM's broader institutional field that was in the process of continuing to incorporate a new production system GMS as well as a undergoing bankruptcy and restructuring.

A primary task of this dissertation is to present the web of various institutional pressures, actors, and organizational behaviors related to changes within GM's auto making process in Lansing. All ethnographic themes will be presented based on their relationship to GMS and/or bankruptcy and the routines in which they offer evidence of impacting either of these phenomena in a manner which promoted continuity or change or both.

Divergence from Existing Ethnographic Accounts

At the time that I was conducting research at LDT I was unaware of how my data and the trajectory of LDT would diverge so significantly from many accounts of change in U.S. manufacturing. The existing anthropological literature on globalization and changes in American manufacturing typically focuses on the story of plant closure. A survey of the field leaves one with the impression that outsourcing and off shoring has effectively ended industrial labor in American manufacturing. Accounts such as Nash (1989), Pappas (1989), and Dunk (2002) concentrate on communities as they are impacted by plant shutdowns and community wide unemployment with a specific focus on the impact at the individual level (including ramifications on cultural transformations and identity). These authors in their analysis of globalization have focused on the manner in which global restructuring has impacted individuals and communities.

Furthermore, the work of Jonathan Friedman (1994) *Cultural Identity and Global Process* tackles social movements, cultural identity, and global processes and helps marry discussions of globalization and the world market with discussions of cultural transformation and identity. Foremost, he is able to demonstrate the complex interrelation between local social processes and world system processes—overall Friedman argues that "local processes are aspects of the larger global process" (1994:198). Friedman's point offers support to my research

interest that highlights both the local and the global. Too often research privileges only one perspective or the other; however, as the work of Zaloom showcases—the simultaneous privileging of the local and global contributes to understanding the multiplicity of people and variables impacting and influencing each other. Zaloom's (2006) work is evidence of a balanced field theory approach, an orientation that contributed to both the nuance and thoroughness in her understanding of traders in Chicago as the financial industry underwent massive technological change.

Although the story of plant closures is well documented, Newman (1985), Kearns (1990), Dandeneau (1996), Dudley (1994), and Fine (2003); there exists a need for the story of plant adaptation and change—in particular, the focus on the process and mechanism of change. GM's LDT plant is just such a story of transformation; hence it offers a minority account and contributes to filling an existing void in the literature. In addition, the ethnographic research conducted diverges from the existing literature on lean manufacturing in significant ways and promises to contribute to discussions of lean manufacturing as implemented in North America grounded in a particular union-labor relationship embedded in a particular regional context.

GM's Lansing Delta Township Assembly Plant

Lansing Delta Township (LDT), General Motors' newest North American manufacturing plant, is located in Lansing, MI. The Lansing Delta Township plant opened in 2006 and from its construction was built to the specifications needed to support GMS. LDT currently runs three shifts; this translates into more than 3,000 hourly workers and close to 300 salaried workers. The hourly workforce is represented by UAW Local 602. LDT currently produces the Buick Enclave, the GMC Acadia, and the Chevy Traverse. The reasons that this plant and workforce are ideal for the research questions presented in this dissertation fall within two main categories. As

previously mentioned, ethnographic research was conducted with this same plant population (Local 602) between 2002-2005 by Briody—hence there is existing ethnographic material on this population. Briody's research was conducted during the planning phases of the new plant with the intention of informing the overall design and plant environment. Her research incorporated the idea of an "ideal" plant culture. This construct was used in order to elicit employee feedback on both the current organizational culture as well as areas for improvement and transformation. The Briody data is captured in the book *Transforming Culture.* Briody's work directly contributed to my understanding of the LDT context, history of GMS, as well as my original research questions related to the implementation of GMS.

Overview of Chapters

This chapter, chapter one, introduces the theoretical orientation that grounds the dissertation questions and guides the data analysis—that is new institutional theory (Scott 2008) and understanding of the institutional field (Bourdieu 1993). Furthermore, an explanation of the characteristics and roles that routines (Becker 2003) fulfill within organizations is outlined in order to lay the foundation of how routines are helpful in analyzing and proposing explanation of institutional continuity and change, in particular the manner in which routines function as mechanisms of continuity and change. Furthermore, a presentation of Fareed et al. (2015) outlines significant institutional pressures that will be used in the dissertation to understand GM's adoption of GMS and its bankruptcy proceedings both comprehended as field level phenomena. In addition, several histories are shared within the chapter. These include the history of ethnographic research and change initiatives at GM, my personal history with GM as a student intern, an experience that happened prior to the conduct of my dissertation research. Most significantly, both the research objectives, which guided the data collection, as well as, the

research questions that the dissertation addresses, are presented to the reader. Also covered in chapter one is a brief review of both studies of organizational change, lean manufacturing, and ethnographic accounts of manufacturing in order to provide relevant context and background; and lastly, this overview of chapters.

Overall, this dissertation recounts several profound changes within General Motors occurring most acutely between 2002 through 2014. This time frame is not lengthy with respect to GM's century-long plus history; however, several noteworthy events occurred within this time frame which will be expounded upon here in reference to organizational continuity and change—specifically with a focus on continuity *in* change and the implications on GM as an organization as well as broader American society.

Chapter two introduces the reader to GM's interest in and experimentation with lean manufacturing as a response to increased global competition. The chapter documents why lean manufacturing was viewed as an appealing alternative compared to more traditional styles of manufacturing homegrown within the United States. This background is significant because it describes the multitude of attempts and efforts GM put forth as it attempted to become increasingly lean. One well-known example that is highlighted is GM's joint venture with Toyota (NUMMI). The rationale of what lean had to offer in terms of improving competitiveness will be described. Lastly, this chapter will outline GM's development of GMS—its very own lean manufacturing process and a central topic to my ethnographic research at LDT.

Chapter three presents the history of Lansing as an automotive town. This chapter recounts the early days of Lansing and describes the role that the REO Motor Company and the Oldsmobile Motor Works played in fostering a unique style of labor and management relations. Also covered is GM's decision to build their newest North American assembly plants in Lansing,

MI—both Lansing Grand River and Lansing Delta Township. This history is told in reference to the unique impact and development it had on management and labor bargaining. Overall, the decision to build in Lansing will be explained in reference to political, historical, and cultural themes that helped the city advocate for the construction of the plant.

Chapter four recounts the research methods utilized during the data collection and analysis of this dissertation, in particular it presents both the ethnographic data collection methods as well as the process of collecting and analyzing secondary data. Additionally, chapter four presents the anthropological data analysis techniques used to develop ethnographic themes through content analysis as well as the use of constructs such as Becker's (2003) construct of routines and Fareed et al.'s (2015) institutional pressures to aid in the analysis and interpretation of ethnographic themes. Chapters five and six present the dissertation data and the ethnographic themes. Chapter five, presents the idea of continuity *in* change—a reference that is intended to capture the notion of evolutionary change in the social realm, an argument that builds upon the work of Nelson and Winter (1982). Original ethnographic data is presented which entails the following themes as they relate to continuity *in* change: modification to the production system; continuity with previous norms in GM manufacturing; changes to Lansing's GM "family"; alteration in the economic security of auto-working; continuity in notions of pride and identity as auto-workers; continuity with previous eras when American nameplates equated to American built.

Chapter six presents significant details in relation to establishing how GM was undergoing change within the institutional field. The main categories of change include: bankruptcy and restructuring efforts; chapter 11 bankruptcy protection; as well as TARP funding and its attendant loan conditions. Most importantly it presents an analysis of the manner in which

the data, analyzed in reference to Becker's construct of routines, help elucidate explanations regarding how routines function as mechanisms of continuity and change. Special attention is paid to the data presented that is useful in offering propositions regarding how institutional change occurred within the field. Lastly, the explanations presented are scrutinized for their ability to offer insight into continuity and/or change and contribute to and extend the legacy of focus on routines as an orientation to understanding evolutionary explanations of change. Institutional theory needs to be both grounded and abstract and the combination of institutional pressures and routines allows the accomplishment of that pursuit.

Chapter 7, offers a discussion of the data. This chapter includes three primary topics of discussion: first, a proposal regarding the impact and influence that GM's bankruptcy may have on the progress of GMS; second, the manner in which I propose bankruptcy functioned as the literal "leaning" of the company—hence GMS the lean production system may in fact be bolstered in some respects through the process of GM's bankruptcy; and third, the chapter offers discussion of my various ethnographic themes through reference to relevant literature and the manner in which my data extends and contributes to ongoing conversations related to auto working, economic nationalism, and worker identity. This chapter also offers a discussion of conclusions related to the challenge of conducting the research and completing the dissertation writing process, a reflection on the usefulness of an institutional framework, and conclusions related to new institutional theory and organizational change.

Conclusion

The General Motors Corporation is an American icon. GM along with Ford and Chrysler helped shape the American landscape in profound ways—they produced a means of transportation that ties directly to the development of both urban and rural communities,

industry, and infrastructure; furthermore, employment with these companies helped establish and define an American middle class in addition to a labor movement. GM as a topic has been written about and researched in myriad ways, including its role in the history of mass-production, consumerism, as well as business and management. In the late 1980s another topic emerged as a prevalent research theme within automobile manufacturing—that is lean manufacturing. Business, management, and auto industry experts eagerly examined this topic as they saw it as a means to improve competitiveness by bolstering efficiency, reducing cost, and improving quality.

Recently, two anthropological works added to discussions of lean manufacturing and automobiles in the United States—Brondo and Baba (2010) and Briody et al. (2010). Brondo and Baba (2010) offer a case study of GM's first North American manufacturing plant to be built according to GM's Global Manufacturing System (GMS) a lean production system. Their case study addresses both local and global factors as they relate to the "long-term sustainability of lean manufacturing." Their discussion emphasizes two areas of breakdown regarding lean practices and American firms. These include first the tendency of American plants to run at full capacity—a practice that is particularly stressful (physically and mentally) in the context of a lean facility. Second, American workers tend to stop offering suggestions once a plant becomes increasingly lean (Brondo and Baba 2010:271). Similarly, Briody et al. (2010) present a practical approach to implementing and sustaining cultural change initiatives from inside a manufacturing environment. This book outlines a series of tools that were developed and piloted within the company for the explicit purpose of enhancing collaboration and fostering cultural change. This dissertation continues the conversation that those works initiated with a focus on how institutional change happens.

This dissertation's greatest contribution is to offer an analysis of an organization in a time of unprecedented transition. Cultural and institutional change processes remain insufficiently understood—since the time of Durkheim questions of how social forms become institutionalized and how they change over time have loomed large within social science. This dissertation attempts to contribute to this line of inquiry by examining both GM's attempts to implement lean manufacturing and their bankruptcy proceedings via the presentation of ethnographic data capturing organizational behavior. This dissertation argues that both GMS and bankruptcy—each radical changes in their own right—did not break and entirely transform the cultural architecture that constitutes the foundation of the corporation. The implementation of GMS, GM's lean approach, left untouched many beliefs, behaviors, and practices within the corporation; similarly, bankruptcy served to sever many financial contracts and obligations; yet, the corporation retained many cultural cognitive attributes—in fact, a surprising conclusion is the manner in which bankruptcy and the government loans offered profound stability during dramatic restructuring efforts and also furthered the lean agenda.

CHAPTER 2: BACKGROUND AND CONTEXT: GM'S INTEREST IN LEAN MANUFACTURING

GM's Interest in Lean

This chapter offers insight into the contextual backdrop that contributed to GM's interest in lean manufacturing as an alternative and improvement to their existing production processes. In particular, the chapter describes what lean production techniques promised to manufacturers and why there was interest and appetite to do things in a new way after three quarters of a century of industry dominance based on the execution of mass production.

GM's interest in Toyota's production system was influenced by GM's own performance and level of competitiveness (Babson 1995, Magee 2007). It is rare and in fact exceptional for companies that are leading an industry, with market share on the rise, to look at the competition and ask what can I learn, what do they do better, what advantages do they have? However, as was the case for GM in the face of rising manufacturing costs, increasing oil prices coupled with changing customer preference for small cars, degraded vehicle quality, and market share in decline, they eventually began to interrogate the competitions' products and processes. After initial denial regarding the threat posed by Toyota, GM began to ask questions of how and why. "Until the energy shocks of the 1970s opened the U.S. market to foreign automakers by spurring consumer interest in small fuel-efficient cars, General Motors, Ford, and Chrysler sold nearly 9 out of every 10 new vehicles on the American road" (Train and Winston 2007: 1469). A shift in consumer preferences as it occurred during the 1970s, grounded in global economics and oil production, helped expose fragility in GM's corporate enterprise, weaknesses that directly contributed to its eventual bankruptcy.

There are a handful of primary hypotheses that have been offered to explain the loss of market share by American Automakers, including: an overall cost advantage for the Japanese automakers, essentially their ability to build the same vehicle for less money and often in less time; other arguments explaining the erosion of GM's competitive advantage as a result of increasing healthcare and pension costs; and explanations centering on consumer preferences and behaviors. Other explanations focus on the reputation Japanese automakers have for building high quality products—a view that is supported by industry reports such as JD Power and Consumers report (this was especially true during the 80s and 90s). With respect to the third hypothesis, consumer tastes and brand loyalty have been used to explain GM's loss of market share. These explanations include discussions of Japanese automakers that center on the development of "product lines that anticipate and respond quickly to changes in consumer preferences" as opposed to be American manufacturers who were less nimble and responsive to changing design trends (Train and Winston 2007: 1473). This last hypothesis regarding product lines and responsiveness is a characteristic that makes Toyota stand out—the required time to launch products is notably shorter than GM's.

A more recent hypothesis used to explain GM's decline is presented by Helper and Henderson (2014), who argue that GM's decline is rooted in their management practices and relational contracts. Helper and Henderson (2014) outline GM's stark decline between 1980 and 2009 during which their US market share fell from 46 to 20 percent (2014:49). Helper and Henderson (2014:49) explain, "GM's historical practice of treating both its suppliers and its blue collar workers as homogenous, interchangeable entities; its view that expertise could be partitioned with minimal overlap of knowledge amongst functions or levels in the organizational hierarchy; and its faith that decisions should be based largely on well-defined financial criteria"

as characteristics which defined their management practices. Supplier relations are significant to auto making because they directly impact overall vehicle quality as well as contributing to the total number of engineering hours required, "… defect rates of parts supplied by Japanese companies were on the order of one-tenth the rate of those supplied by US firms" (Helper and Henderson 2014: 52).[5] Helper and Henderson don't dismiss outright any of the possible explanations that account for GM's decline but they do call attention to one hypothesis that has thus far received too little attention. They argue that one of the main skills that underlies and enables other key Toyota behaviors is that of "relational contracts—agreements based on subjective measures of performance that could neither be fully specified beforehand nor verified after the fact and were thus enforced by the shadow of the future—and that GM history, organization structure, and managerial practices made it very difficult to maintain these kinds of agreements either within the firm or between the firm and its suppliers" (Helper and Henderson 2014: 55). In essence, GM was not able to establish the required level of trust because their history included treating both suppliers and operators as interchangeable (Baba 1999).

This notion aligns with the discussion of the concept of "truce" discussed in chapter one, as a function fulfilled by routines. The organizational routines of each company were dramatically different (as described in an example provided below). The brief explanation provided here regarding relational contracts and why they were unsustainable in the GM context does not reference institutional fields. Yet, I argue that unbeknownst to the authors Helper and Henderson (2014) they are in fact describing the institutional field of GM and its level of

[5] This discussion approaches a much larger topic, that is, the various component parts that comprise TPS. As a lean system, TPS, is characterized by the elimination of waste, the elimination of waste; however, is supported through a systems approach that when robust includes the entire value stream including production, engineering, design, and supply chain. Empowerment and active participation grounded in trusting relationship are critical to lean systems because they enable the high level of participation and ownership at various levels, in this instance suppliers.

hospitability to particular types of field relationships both internal and external to the firm. Helper and Henderson (2014) argue that GM's approach to managing was characterized by "command and control" whereas Toyota was much more collaborative and a "joint" approach which fostered strong relational contracts. In sum, the organizational behaviors captured in routines function as mechanisms of continuity and change within the field—an understanding that foreshadows the analysis which this dissertation will address in chapter seven.

A key example of what Helper and Henderson (2014) mean by relational contracts is explained in reference to the andon cord[6]. In the Japanese context workers were empowered to pull the andon cord when needed, this was grounded in trust and a sense of common "company" good. In the GM scenario, this was a hurdle because often management was not confident "… that a worker deciding to pull the andon cord would have both the knowledge and the incentive to exercise sophisticated judgment" (Helper and Henderson 2014: 57). Organizational routines surrounding the use of the andon at LDT will be addressed in my data chapters. Furthermore, the joint and collaborative approach aided in problem solving in the Japanese context a feature that led them to become expert problem solvers and eliminate the root cause of many problems. GM struggled with this practice; in fact, one of Briody et al. (2010) main findings related to the LDT workforce was their expressed desire to be more collaborative—this was documented in Briody's ethnographic material as an unachieved goal.

The relational contracts that Toyota was able to establish with its suppliers were also very dissimilar to the relationship GM established with its suppliers. The most profound difference was the typical short term nature of the arrangements GM established whereas Toyota's were

[6] An andon cord, andon meaning lantern in Japanese, refers to a visual system that enables operators on the manufacturing line to signal the need for help. In most instances, the andon is a physical cord that runs above the production line, when pulled it signals the need for help. The andon also enables operators to stop the line in order to address quality concerns as well as the completion of their work within their workstation.

much longer—a ramification of this is that the long term relationships tended to enable relationship building—Japanese suppliers were willing to make investments in product development work because they believed that in the long run the length of the contract with Toyota would be worth while. For GM suppliers, the relationships were mostly disposable, and supplier's had little assurance that there would be any return on investment. Lastly, in a similar manner to Toyota's problem solving approach that was collaborative and included many voices, Toyota allowed its suppliers a certain degree of latitude in designing parts—they believed their suppliers knew the most about their own capacity and would often give them particular specifications for parts as opposed to comprehensive designs. This practice represents a similar philosophy in lean manufacturing that privileged operators as the experts—essentially lean systems value the input of those closest to the product, process, or part. This again differed from GM's approach, "There was little communication between suppliers and either the central engineering groups who designed the parts or the assembly plants responsible for using them—a reflection of a deeply held belief at GM that experts should do the planning and designing" (Helper and Henderson 2014: 57-58).

This division—was again seen in how GM addressed product design and development. The GM system was historically highly bureaucratic and divided, and the system was managed by three separate organizations (Helper and Henderson 2014: 59). This complex arrangement was backed by layers of formal relationships and processes that crowded out the informal arrangements and the development of relational contracts which require trust. This piece meal approach to design is exemplified by a failed GM product known as the Aztec[7]. In some respects,

[7] The Aztec is a mid size SUV that was derided upon hitting the market as representing everything that was wrong with GM decision-making. Despite early feedback from consumers that suggested its lack of appeal, GM executives wanted a cross over vehicle and wanted it built

the Aztec was ahead of the curve in that it was one of the very first cross-over vehicles or as they are more commonly referred, an SUV. However, the divided approach that was dominated by the finance function meant the vehicle would be built on an existing mini-van platform which wrecked havoc on the proportions—"…the underlying bits of the Aztek were set in stone before stylists ever lifted a pencil" (Helper and Henderson 2014: 60). This is of course in contrast to the design and production process at Toyota, which was characterized by teams, comprised of cross-functional members.

These descriptions regarding differences between GM and Toyota have been described previously, however something is gained by understanding the significance of informal relationships on how the company actually performed. Furthermore, Helper and Henderson help shed light on the intangible elements of the Toyota Production System—their insights are particularly savvy because they extend previous conclusions that have been made arguing that the intangible elements of TPS were the most difficult to replicate for GM, I suggest that the difference stemmed from attempts to mimic only partially understood and embedded Toyota routines, that were a mismatch to the GM context. Helper and Henderson (2014) make clear that the intangible elements of TPS were grounded in differences in behavioral practice that promoted positive relational contracts—a development that translated into appropriate use of the andon cord, active problem solving as well as suppliers that sought to improve quality and were willing to pay for development costs for the sake of a Toyota contract because there was confidence in the longevity of the partnership. The significance of trusting relationships in organizational settings has been well established in the literature (Baba 1999, Fukuyama 1995, Bachmann and Zaheer 2006). "General Motors faced problems of credibility and clarity. The

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on an existing platform; hence a product with compromised aesthetics and lacking a consumer base.

credibility issue arose because it appears to have been hard for GM to alter past patterns of behavior "routines" and hard for GM's workers and suppliers to believe that these patterns were indeed changing" (Helper and Henderson 2014: 62).

The Concept of Lean becomes Mainstream

In *The Machine That Changed the World*, Womack, Jones, and Roos announce to the world, "Our conclusion is simple: Lean production is a superior way for humans to make things …. It provides more challenging and fulfilling work for employees at every level, from the factory to headquarters. It follows that the world should adopt lean production, and as quickly as possible" (2007:231). What is so fascinating about lean production and what makes it an intriguing topic today, is that it did not just represent a new managing trend but instead encapsulated a production system that when implemented fully broke from a previous well established production system, the former referred to as lean and the latter referred to as mass production. Investigations of how organizations adopted and implemented lean are case studies in institutional change processes. Most interesting for those who study organizations and institutional change is the tremendous effort that corporation's like General Motors exerted in their effort to get "lean." In the failures, missteps, and challenges to transform the organization GM's underlying organizational behaviors, routines, priorities, and logics are revealed. Just as mass production "…was then widely copied and used by enterprises in practically every industry all over the globe—including Ford and General Electric—for nearly seventy-five years. The other business system—lean production—was pioneered by Toyota in the twenty years immediately after World War II and is now rapidly diffusing to every corner of the world" (Womack, Jones, and Roos 2007:vii).

Many books have told similar stories relating to lean, that story tells the historical context which led to the development of the Toyota Production System and documents the advantages, efficiencies, and competitive superiority of lean production over mass production in terms of driving out waste and improving product quality. This chapter will not recite that well known narrative—instead it emphasizes the factors which contributed to GM's curiosity with lean techniques and its appetite to do things in a new and different way—a way which demanded change to the status quo.

The Changing Marketplace of Automobile Competition

Before elaborating on the reasons why companies were enticed to entertain what "lean" had to offer it is important to explain that their motivations were grounded in the market place and changes occurring within the institutional field. Foremost, there were new actors impacting and influencing the field. The era during which the Big Three (General Motors, Ford, and Chrysler) competed amongst themselves for US market share was ending. Initially, there were attempts to block the competition they viewed as a threat, "…they were focusing their energies on erecting trade barriers and other competitive impediments, which we thought simply delayed dealing with the real issue" (Womack, Jones, and Roos 2007: 1). The landscape in which the auto industry is situated had changed. There was new competition—most significantly companies like Toyota were offering consumers vehicles that they found desirable. Where GM was losing market share Toyota was gaining—under this scenario GM and the other American automobile manufacturers began asking the question why? Why was Toyota winning market share in the United States when they were losing market share—what organizational practices and manufacturing processes did Toyota have in use that translated into higher quality and efficiency? These questions all suggested one answer—that is, Toyota was unique in its

production system—a system that was first known as the Toyota Production System (TPS) and eventually translated to "lean" in the American context.

Adopting "lean" as the answer to achieve improved competitiveness was not a difficult response to come up with after initial resistance and denial on the part of American manufacturing subsided and industry leaders came to terms with the fact that Toyota was producing vehicles which scored higher on objective measures of quality. The key question for American firms was not what was Toyota doing differently – it was clear that their lean manufacturing process was crucial. The central question was how could American firms do the same? "Many Western companies now understand lean production…. However, superimposing lean-production methods on existing mass production systems causes great pain and dislocation" (Womack, Jones, and Roos 2007:10). This pain and dislocation as mentioned by Womack, Jones, and Roos (2007) is the profoundly difficult part of implementing lean production. The process whereby organizations of the size, complexity, and age of General Motors parts ways with previous routines, logics, behaviors, and processes for new ones is a very complex and contested evolution. The challenges for a company like GM as it attempted to manage and implement such change was great.

The reflections of a former GM employee (captured during a personal conversation) who recalls this era of GM's history frames the pain and dislocation well. They express the following:

> *But the question was how to integrate TPS into existing plants. Plants outside California (NUMMI). Individuals were keenly interested; the idea was go work at this plant even though no one was sure what it would evolve into. But it met head on the "immune system" which is resistance to change -- it was difficult for people to take. People can get lost with change at GM it was a comfort zone thing. We experienced having our tail between our legs and politics. … People often ask why it takes so long to change. The answer is because you are changing things; they (the employees) need to come to that place of reality. Management and Unions, it's evolution not revolution. However, there are accelerants—and*

> *we were trying to learn that. The premise of change can be benefits both obvious and not obvious. There is a culture part of it and a behavior part of it. What is needed is a subtle catalyst that helps with the diffusion and evolution.*

This commentary and reflection on change at GM foreshadows themes that will be examined and explained further—most significantly the corporate vernacular resistance to change (Batteau 2013) and the lengthy process of evolutionary change with respect to organizational behaviors.

It is also significant to point out the unique historical context of the invention and development of the Toyota Production System at Toyota by the engineer Taichii Ohno—a socio-technical system that is not fully transferable when American firms attempt to adopt the system within a US context. In particular, the role of the worker[8] in manufacturing is distinct in the US versus Japanese context as are the cooperative relationships shared between union and management. The following characteristics play a central role in the manner in which TPS developed; first, by necessity post World War II, Toyota needed to eliminate all forms of waste—this necessity was tied to shortages of resources required to produce automobiles. The pursuit of TPS translated into flexible equipment, operators assigned to multiple jobs, very low levels of inventory, as well as enhanced worker authority. The new system as it was being developed carved out a distinct level of worker empowerment and participation—in fact "Ohno's capacity to address workers' (initial) objections to his new manufacturing methods may be attributed in part to the structure of Japanese labor union"[9] (Baba 2008:51) and this level of engagement contributed to addressing concerns and assuring agreement to the new lean

[8] In the Toyota context, based on the development of the "core worker concept" authority was transferred to workers. The core worker concept entails creating a system that enables them to use their full capabilities both physical as well as intellectual assets (Price 1995, Baba 2008). Workers were incentivized to offer suggestions in part because this participation provided a reprieve from harsh physical labor.

[9] In the formative phase of TPS in the Japanese context the unions were militant and could and did resist TPS, however that initial resistance was overcome through involvement and engagement in the development of TPS, which enhances its eventual acceptance.

production methods. In addition, the structure of the union allowed lower level management to serve as officials in the union, something that Ohno did, this opportunity helped create positive and collaborative relationships something which was leveraged by Ohno as he attempted to generate acceptance of his new lean processes (Cusumano 1985, Baba 2008, Sugimori et al. 1977). The notion of collaborative relationships will be discussed in chapter three as it relates to the unique labor management relationships developed in the Lansing, MI context.

GM's Experiments with Lean Techniques

For the purposes of this chapter and dissertation, there are two efforts at lean attempted by GM that deserve further explanation. The significance of these efforts rests in the reality that GM as a large and complex organization had a particular type of challenge when attempting to do things and a new and different way. These brief summaries of NUMMI and GM's Eisenach, Germany plant help illustrate the role that specific actors played in the institutional change efforts. In the GM context, both of these plants were early forerunners to GMS, as such they are considered significant actors in the institutional field which each contributed to preparing the way for GMS in the GM context. NUMMI once it was running presented GM with an opportunity to expose its leadership to experiential learning. The lessons were not scripted at that point; however, there was confidence that being there, observing, and documenting would prompt an educational experience. It is rather fascinating to learn of the level of documentation that was instituted—even the development of an office to gather learnings and share them with GM's headquarters in Detroit, Michigan. This process of documenting explicitly in an effort to then be able to replicate has been discussed in the literature. Typical criticisms of this approach center on GM's hyper vigilance with tools and technology and inadequate attention to

relationships and all other intangible components of lean—foremost the role of employee empowerment.

NUMMI was announced in 1983 and was a 50:50 equity joint venture between GM and Toyota. The common explanations proposed to explain what each entity sought to gain from the arrangement centered on Toyota's interest in gaining experience working with an American worker and "GM's primary goals were a small car supply and utilizing an idle plant. Learning was a GM goal but there was no consensus within GM about the value of the learning opportunity (Weiss, 1997). CEO Roger Smith was interested in learning about Toyota's cost structure and how Toyota managed its plants (Keller, 1989: 88)." Smith described the joint venture saying it was a, "…learning experience—why not take the opportunity to get an insider's view of how the Japanese do what they do" (Keller, 1989: 88).

NUMMI was to be operated by Toyota; however, some manager roles were filled by GM staff. Also significant in the learnings that GM was gleaning from the NUMMI facility were that the productivity and quality numbers were out performing all other GM facilities—these numbers stimulated increasing interest in TPS. However "There was an expectation that the advisors [GM managers assigned to NUMMI] would be able to learn about Toyota and then once reassigned to GM would 'bring back this magic that exists in the Toyota production system' (Keller, 1989: 133)" (Inkpen 2008: 449). This plan to diffuse the lessons learned in NUMMI via individual plant managers returning to various plants was not robust enough to overcome the "countervailing forces" or resistance (existing routines, embedded understanding, and overall organizational stability/inertia) that existed within larger GM to TPS.

Inkpen (2008: 449) argues, "By the early 1990s, a viable learning and knowledge transfer system was emerging. A pivotal event was the appointment of Jack Smith as GM CEO in 1992.

Smith actively supported learning from NUMMI." Rather than a causal experiential learning scenario as it was in the beginning phases of NUMMI—the learning expectations were guided through more infrastructure this included more structured training, orientations, and mentors. Furthermore, efforts were made to prepare advisors to be redeployed—this included having them capture their learnings in written summaries or GM white papers (Inkpen 2008: 449). Inkpen (2008) reports that between 1989 and 2002 approximately 21,000 GM employees traveled to NUMMI.

The process of diffusion of TPS throughout GM may not have been the most expedient however GM's understanding of TPS and approach to implementation were in constant development. GM was not following a script but instead writing it as they went. Done (1992:23) describes the role of the NUMMI alumni in the following manner, "We call them advisers but in another sense they are more like missionaries—and we are in need of conversion. It is close to religion, it is a life philosophy, it is that different. It needs a complete change of thinking." As described in the preceding vignette, this was a process of "evolution not revolution" and the tactics changed through time. I propose that what in fact was changing was the institutional field. As the advisors learned from NUMMI and returned to different GM plants even non-receptive facilities the larger context of GM continued to progress this includes their continued demand to remain competitive, a growing appetite to have all GM plants attain similar quality and efficiency metrics—and as Inkpen (2008) argues the CEO Jack Smith was a convert so from his position of influence he could establish new demands—for example a more formalized recording and sharing of NUMMI lessons. In addition, GM began a second general strategy of experimentation and that was using greenfield sites—which refer to new locations for manufacturing plants as test sites and further experimentation of implementing lean.

Eisenach, Germany

One such greenfield site was, Eisenach, Germany. Briody et al. (2010) labeled Opel Eisenach as an "Incubator for Diffusion and Learning"—a concept also articulated by Inkpen (2008). Unique to Eisenach was the extensive recruiting of managers with Toyota experience—such pervious experience could suggest particular categories of tacit knowledge and embedded routines grounded in experience of Toyota's organizational behaviors that support lean production. The efforts to improve upon TPS at Eisenach contributed to helping GM diffuse the principles of lean and convert more and more of the enterprise. "Eisenach played a pivotal role in the development and diffusion of what would come to be known as GM's Global Manufacturing System (GMS)" (Briody 2010: 46). One Briody (2010:46) interviewee reported, "GMS became our bible. It was a vision of where we were moving." Other interviewee's report that the success of Eisenach stemmed from individuals working the line in Eisenach. It was common for leadership, visiting Eisenach, to not only spend time working the line but also to work as a group leader, area manager, and assistant plant manager. These experiences functioned to align the group and also were reference points for leadership to draw upon when they left. Another Briody (2010:46) interviewee reported, "We came back [to Shanghai] as a team that solved things the same way. We found ourselves asking each other once we were back in Shanghi, 'How would Eisenach do this?'" This learning mechanism was different than that experienced at NUMMI, Briody et al. (2010:47) explain "What was different compared with GM's approach to NUMMI was that there was a conscious diffusion strategy for implementing an innovative production process. Employees from later greenfields, and even from some brownfields (older existing production facilities), traveled to Eisenach for in plant GMS training. Eisenach, as a 'benchmark facility,' offered the opportunity for training consistency. The diffusion process created a critical

mass of new adherents." The process of bringing employees to Eisenach for training on GMS contributed to alterations in the institutional field of GM as a whole and helped serve as an institutional force exerting influence on GM's adoption of and implementation of lean.

This process of building a critical mass of new adherents is discussed at length by Inkpen, but through a different lens—that of knowledge transfers and alliances that create exploitable learning opportunities. Inkpen (2008:450) explains GM's efforts to capture and share the knowledge learned at NUMMI as a series of experiments during which GM became more proficient at "systematically and continuously" transferring knowledge. Some critics of GM's ability to implement lean manufacturing in its facilities reference the amount of time it took for GM to gain traction, however Inkpen's viewpoint centers on the process whereby GM was building a "learning system." This system was shaping new routines which served as the mechanisms of change. Furthermore, I argue that not only was GM building a learning system that would enable the diffusion of lean knowledge but also that they were in fact participants of a much larger institutional field, that is the auto industry as a whole which was moving toward lean manufacturing practices. Over the two decades during which GM sent employees to learn from NUMMI there were simultaneously active and passive participants in this institutional field—as such they were both influencing and being influenced. Inkpen's explanation centers on knowledge transfer however it works equally well under the lens of new institutional theory, "As GM learned how to manage its alliance and learn about its partner (which was willing to share knowledge), the value of alliance knowledge became more apparent and the opportunities for exploiting the knowledge were identified, beginning with Eisenach and then spreading to other sites. Over time, GM developed a collective competence in knowing how to capture and transfer complex alliance knowledge" (2008:451). This "learning process" was in fact a change in the

institutional field. Primary actors included GM, Toyota, the auto industry, as well as key individuals foremost Jack Smith, the NUMMI alumni, and those workers learning on site in Eisenach, Germany.

Inkpen, explains "The tacit knowledge of the TPS became part of many individuals' shared experiences, which helped create a strategic vision for the company (i.e. that GM needed to become lean in its manufacturing)" (2008: 451). Another particularity regarding what GM was trying to learn centers on the subject matter. Many of the most powerful elements of Toyota's lean production system were socially embedded knowledge—these tacit competencies were difficult to capture especially using the means promoted in the GM Technical Liaison Office at NUMMI. "NUMMI knowledge was tightly connected to Toyota's manufacturing context and was not a random collection of ideas from which GM could pick and choose" (Inkpen 2008: 451). This explanation is supported by the concepts of organizational behaviors and routines. A pick and choose approach captures one of the most common missteps companies have made when implementing lean manufacturing; which should be thought of more as a symphony of practices which when played together produce the desired sound. Individually lean elements have much less impact. At LDT, GM's suite of lean practices were rolled out collectively as part of GMS as a comprehensive system. However, as the data chapters and analysis will reveal, despite GMS being a system, particular lean elements have been more thoroughly implemented and therefore relate to corresponding changes in organizational routines, whereas other elements suggest continuity with previous institutional logics.

It is significance to point out the challenge that GM staff newly trained in Lean, based on experiences at NUMMI faced upon returning to home plants. "Initially, the advisors transferred from NUMMI to GM were poorly prepared. These managers were expected to create a

community of shared understanding and practice and were expected to be the 'brokers' (Brown and Duguid, 1998) carrying the message back to the parent" (Inkpen 2008: 451). Despite this intention in the early days these advisors returned to plants outside of NUMMI and were met with ambivalence or even worse hostility toward TPS. Over time a shared language of lean production developed within GM and there was alignment in a concerted effort to drive lean—these developments can be understood from multiple perspectives and theoretical orientations but by drawing upon new institutional theory the changes in the field can be appreciated as happening over time—and key figures like Jack Smith and the NUMMI advisors can be appreciated as impacting and changing the field through their power, influence, and interactions. Furthermore, I extend the arguments made by Inkpen related to knowledge transfer and underscore that GM's success at indoctrinating mangers at Eisenach, which was based partially on the formulaic approach that required them to work various jobs for weeks at a time—exposing them to new processes and routines upon which they could then draw for insights in the future. This process was referenced by the Briody et al. (2010:46) interviewee who commented on his practice of asking "What would Eisenach do?" But more significantly we can examine what else had changed—relying on Scott's (2008) pillars of institutions.

Insight is gained when covering this piece of GM's history with lean in reference to the regulative[10], normative, and cultural-cognitive institutional pillars (Scott 2008) at play. The shift in GM's approach to knowledge diffusion as has been described thus far includes modification of the regulative pillar of institutions—the behaviors and expectations of managers in the early days of NUMMI were open and unscripted however overtime became more established. The process whereby every manager sent to NUMMI was required to study a specific element of the lean

[10] Regulative systems refer to those processes that constrain and regulate behavior through established rules which reward and punish accordingly—the influence of regulative system is grounded in legal sanctions which can be formal or informal.

system and draft a GM white paper for dissemination among peers was a highly scripted requirement. Also, jumping forward in time, as GM pursued its "lean journey" they documented their version of TPS, that is GMS, "GMS was seen within GM as a core competence" (Inkpen 2008: 450). As I write this chapter GMS is now a system that is evaluated on a regular basis in all of GM's facilities by corporate auditors—this evaluation generates a lean calibration score that triggers for all intents and purposes rewards and punishments for a cross section of GM personnel.

In relation to the normative[11] systems of institutions, the process whereby TPS impacted and influenced GM's goals for itself and helped define the manner in which GM should achieve those goals demonstrates activities and transitions within the normative pillar of institutions. Two terms that Scott uses to describe the normative pillar of institutions is "morally governed" behavior. Much of the language used to describe early adopters of TPS alludes to the moral dimension of the normative pillar of institutions. This includes the references to GMS being "our bible," or "converts to lean." As the institutional field shifted and changed through time it became more hospitable to those that "believed" in GMS and lean, through time lean increasingly became the "right" thing to do for GM, its shareholders and eventually individual managers. Overtime GM's goals included specific ambitions regarding the implementation of lean in both their old and new manufacturing plants.

[11] Normative systems of institutions which refer to the "… normative rules that introduce a prescriptive, evaluative, and obligatory dimension into social life. Normative systems include both values and norms. *Values* are conceptions of the preferred or the desirable together with the construction of standards to which existing structures or behaviors can be compared and assessed. *Norms* specify how things should be done; they define legitimate means to pursue valued ends" (Scott 2008:64).

Lastly, the history of NUMMI and Eisenach as they relate to GM's longer history with lean manufacturing should be analyzed briefly in relation to the cultural cognitive[12] pillar of institutions. Scott (2008:69) describes, "cultural-cognitive theorists point to the power of templates for particular types of actors and scripts for action (Shank and Abelson 1977). For Berger and Luckmann (1967), roles arise as common understandings develop that particular actions are associated with particular actors." One of the best examples of shifts in the domain of the cultural cognitive pillar of institutions as it relates to lean manufacturing is that of roles and the division of labor within manufacturing. Mass production as it was perfected by Ford and General Motors was based on elaborate division of labor and very narrowly defined roles. By contrast, Toyota's production system which was grounded in a very different national context requiring more flexibility in people and equipment, each needed to be able to be used for multiple processes and functions as opposed to singularly defined roles. To demonstrate the classic difference that these two orientations set up, I will reflect on each of their approaches to quality within manufacturing. In a traditional manufacturing environment in the United States one in which the process is defined as mass production operators typically view their job narrowly—they may be responsible to assemble a particular component—that is their job. In this scenario, product quality is an independent entity and owned by a different employee—most likely someone employed within the quality department. These divisions of roles and responsibilities are supported through both formal and informal mechanisms. Peers as well as superiors may chastise an operator who speaks up over quality concerns. In these instances there would be a violation of the shared understanding of the "proper" division of labor. Conversely, in the TPS system quality is understood to be a shared responsibility. As such, every operator or

[12] The cultural cognitive pillar references shared understandings and common beliefs which are held by a significant portion of a group or community. The primary significance of cultural cognitive processes relates to the manner in which they define what is and is not comprehensible.

assembler understands that his or her role includes building with highest quality and auditing for quality issues. This orientation impacts significantly shared beliefs and behaviors. This shared responsibility for quality requires developed teamwork. This team orientation at present remains a struggle in the American manufacturing context. I argue that many of GM's challenges with implementing lean stem from hurdles encountered in this cultural cognitive dimension of institutions. The challenges encountered when returning to home plants from NUMMI or Eisenach can be understood from the perspective of new organizational routines that were rejected because they contradicted common beliefs, roles, and behaviors that had been defined, agreed upon and established over generations. Again the existing routines as they occurred within the field exerted power and influence grounded in the manner in which they were: patterned, persistent, collective, non-deliberative, and embedded (Becker 2003).

Institutional Pressures and a Changing Field

The American automobile industry, of which GM is a key player, experienced growing pressures to incorporate lean manufacturing in order to improve the quality and efficiency of their manufacturing process. Just as Fareed et al. (2015) explain in their account of institutional change, "These pressures emanated from various institutional forces: a 'cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide stability and meaning to social life' (Scott 2001: 48). Facing contemporary norms—as influenced by the aforementioned forces—new institutional theory posits that organizations will comply to these expected and accepted beliefs in the organizational environment in order to receive support and legitimacy (Scott and Davis 2007)" (Fareed et al. 2015: 29). Most significant to this theoretical approach is its ability to explain both how organizations change and also how they remain the same. The crux of how change processes unfold within organizations

like General Motors rests in the level of each of the institutional pressures that are only "… bound by the scope of countervailing forces (Pfeffer and Salancik 1978), which provide an organization with the capacity to resist institutional pressures" (Fareed et al. 2015: 30). The analysis section of this dissertation included in chapter six, offers an analysis of continuity and change within GM with emphasis on how routines changed or remained the same.

As was previously covered, Fareed et al. (2015) offer five factors that are understood as capturing significant institutional pressures impacting the field. These include: Cause, Constituents, Content, Context and Control. The table presented on page 17 of this dissertation summarizes what each factor entails. Again, the use of Fareed et al. (2015) does not extend beyond borrowing his categorization schema[13] of significant institutional pressures—as such his pressures become a lens to analyze the significant pressures occurring within the filed as they relate to continuity and change at GM. Comprehension of these institutional pressures as they relate to GM's implementation of GMS offer insight into GM's strategic response to the field.

The Institutional Pressures Impacting GMS Adoption

GM's history with lean manufacturing enables a continuum to be drawn illustrating the early days where GM employees were skeptical of lean practices and did not believe in their ability to assist in economic gains. During the NPR program *This American Life* that covered the topic of NUMMI, Jeffery Liker the co-author of *The Machine that Changed the World,* explains, "Toyota was building higher quality cars. I'm not sure it was 100% accepted at that time by senior management that Japanese quality was really better. … I think there was pride and

[13] My use of Fareed et al.'s (2015) five factors diverges from their example, for Fareed et al. each factor was assigned an index variable—this research makes use of the factors as significant categories for analysis when analyzing institutional pressures but the data presented in chapters five an six lend themselves to qualitative data analysis and not statistical analysis as was performed by Fareed et al. This is an appropriate departure that aligns itself with the ethnographic data the dissertation research collected.

defensiveness. I'm proud because I'm the biggest automaker in the world, I've been the best, I've dominated the market. You can't teach me anything, you little Japanese company" (This American Life 2010). Furthermore, as has been referenced the initial lean advisors upon relocation to plants outside of NUMMI were up against major resistance to lean—rather than assist in establishing social legitimacy it was likely to harm a plant managers legitimacy in many plants.

However, through time the institutional pressures changed, as was mentioned, when the NUMMI plant began to achieve quality and productivity numbers comparable to Toyota in Japan and GM leadership as an entity began to take notice. There was growing organizational confidence that lean was a production process that could enhance quality and eliminate waste. Of particular interest is the notion of social legitimacy as it relates to GM's adoption of lean—this factor was imbued with a high level of institutional pressure as well as several countervailing forces—in many ways it demonstrates the institutional struggles of continuity and change. The notion of social legitimacy and how it had historically been achieved by GM as an organization and by GM workers is something that is multifaceted and complex. GM's social prestige and status was intimately tied to its perfection of mass production. Mass production explicitly defined roles and responsibilities and it was undeniable that mass production as executed by GM grew the company into the world's largest automaker. The countervailing forces present in the institutional field that hindered rampant dissemination of lean included previously established routines and beliefs shared among GM employees and the American public at large regarding the superiority of their products and processes over the competition. The initial denial that existed in the face of competition from Toyota was grounded in the ideas of superiority and existing institutional logics.

Significant constituents[14] in the history of GM's relationship with lean manufacturing cross cut the organization and broader society. For example, it is difficult to reflect upon the history of GM without reference to the impact and influence of the UAW. Similarly, the UAW as a constituent exemplifies an institutional actor from the perspective of field theory. The primary constituents that will be analyzed in this dissertation include: GM leadership (both corporate and plant specific), the UAW and Local 602, the city of Lansing, MI and the former Mayor David Hollister, the local Lansing Delta Township plant personnel (hourly and salary staff), the Federal Government, and lastly the broader American public as both eventual shareholders and also consumers of GM products.

The main element I wish to examine in greater detail related to content[15] as an institutional pressure is the conflict between lean manufacturing with its emphasis on quality and the historic and well-documented goal of quantity in the American automobile industry. General Motors like many manufacturers have prioritized numbers produced as a goal—this focus is culturally embedded in the beliefs, behaviors, and practices of managers and operators alike. There is a dramatic tension that exists when implementing lean in a traditional setting. Some of tension stems from conflicting goals—imagine the challenge that is faced when an area manager's bonus is in part based on productivity[16] yet those numbers stand to drop by allowing employees access to an andon cord[17] and the instruction to pull the andon cord when quality concerns arise. The installation of the andon cord in environments that are not culturally

[14] Constituents as an institutional pressure references the various expectations of stakeholders on the organization.
[15] Content as an institutional pressure entails the manifestation of force coming from within organizational goals.
[16] Within manufacturing productivity refers to output divided by input.
[17] Andon is system that allows operators to call for help via visual or auditory cues as well as to stop the assembly line. Baba (2008) indicates that the andon emerged as part of a negotiated process that included other elements agreed to within the Toyota system of labor management relations which encompass technology unlike the system in the US context.

supportive of the notion of fixing in station[18] is ripe with countervailing forces. Even though Lansing Delta Township was a greenfield site and all employees were trained in GMS it is not uncommon to see reprisals for pulling the andon cord. Moreover the plant includes some individuals with previous auto making experience at plants that had no andon cord and instead allowed defects to flow through the line with the intention of end of line repair and who therefore carry that legacy and experience with them.

It was not uncommon during my time at LDT to hear people reference the cost per minute of downtime. Downtime refers to situations in which the assembly line is not moving and has stopped. When I was collecting my data the cost that was most often referenced was for every minute the line was down GM lost 10,000 dollars. This notion of GM loss is very specific to individual worldview and context. It has been well documented that the true cost of repairs rises exponentially the further the repair occurs from the station in which the defect originated. So for example, one of the most costly repairs is that which returns to the company via a warranty claim. However, this example once again demonstrates the conflicting goals. An area manager may be enticed to keep the line moving to ensure his/her bonus something that will occur in the near term even if this potentially subjects corporate GM to warranty claims and expenses in the long term. Furthermore, in terms of goals, the operators' goals may entail doing their jobs and keeping the line moving—perhaps speaking up and drawing attention to defects from their teams or other teams challenges their own individual member or team objectives. When you factor in the rewards and punishments for participation in the andon system at the local level they seem to challenge short term and personal goals—a presentation of findings

[18] Fixing in station refers to ensuring repairs are made within the geographic footprint of a particular job or work station.

related to andon based on ethnographic data from LDT is included in the data chapters of this dissertation.

Context[19] as an institutional pressure within GM is interesting given its history as a very insular entity. Many individuals both within in the hourly and salary ranks joined the company as young adults and worked their entire careers within the organization. Furthermore, the tight knit work community was often mirrored in terms of social and recreational events with the same group. This characteristic kept the company population insulated from outside perspectives, comparisons, and even helpful critique. From another perspective however, the interconnected nature of the company contributed to the network effect of diffusion. As was pointed out earlier in reference to NUMMI over two decades the company sent 20,000 employees to NUMMI. Interesting also in relation to GM's more recent history and the closing of many of their plants—has been the mixing of previously distinct regional workforces. In the case of Lansing Delta Township—the changing composition of the work population will be further analyzed in chapter 7. Over time, the level of geographic isolation of plant populations has been somewhat reduced as individuals from plants that have closed relocate to plants that remain open so that their employment may continue. Also significant to the notion of interconnectedness is the role that corporate downsizing has played as a result of bankruptcy. The total company head count was reduced by 16%, from 92,000 on the day of bankruptcy filing to 77,000 afterwards (Gregory 2011:1). As an aside, yet relevant to concepts of field theory are the subsequent work roles GM retirees have taken up after retirement. For example, just as the Eisenach, Germany plant intentionally hired individuals with Toyota background and experience so too are American manufacturing entities outside the Big Three automobile firms hiring individuals with work experience in the American auto industry (individuals who have retired from working full time in

[19] Context as an institutional pressure refers to the density of relations within a field.

the American auto industry) to help implement improvements in corporate competitiveness—in some cases the ex-auto industry employees have been hired to help implement lean transformations in other domains of manufacturing.

Control, refers to the manner in which the institutional pressure is imposed. As Fareed et al. (2015: 31) describe related to their case study of institutional change, "Over time, the independent actions of hospitals may have collectively driven EHR adoption in the industry. Actions of competitors in a focal hospital's market and the growing visibility of the competitors' EHR might motivate a focal hospital to have EHR capabilities, known as mimetic isomorphism (DiMaggio and Powell 1991), in order to avoid being behind industry norms, and thus, maintaining their competitive advantage and ensuring their control of important resources." Likewise, in the world of manufacturing—Toyota's growing market share positioned them as a competitor of interest and the growing visibility of their lean production system contributed to the motivation that GM and other American automobile companies felt in adopting their own lean practices. Similar to the way in which mass production was copied across numerous industries and it became the best practice to manufacture goods be it apparel or automobiles—lean manufacturing influenced the world of auto making and is now impacting and influencing many other industries such as health care and even software design.

Despite the countervailing forces that opposed and resisted lean manufacturing's ideas, processes, and strategies there also were substantial institutional pressures being imposed upon GM for the adoption of lean production processes. Over time these pressures became more forceful as did GM's efforts and energy at implementing lean. As the remainder of the dissertation will demonstrate, the analysis of ethnographic data within an institutional framework provides a deeper understanding of GM's adoption of lean manufacturing as well as their

experience of corporate bankruptcy. Furthermore, the remaining chapters will demonstrate the usefulness of integrating an institutional framework as a theoretical lens with Becker's (2003) construct of routines to show how routines are manifested in the ethnographic data as evidence of continuity in change. As the analysis in chapter six will present, routines are suggested as a mechanism of continuity and change— the institutional change process this research highlights is evolutionary change.

CHAPTER 3: LANSING, MICHIGAN

Introduction

This chapter presents two primary topics that are significant to the dissertation. First, it offers insight into the how labor-management relations are integrally connected to the implementation of lean manufacturing generally and more specifically at LDT. Second it explores why labor-management partnership and/or relatively harmonious relationships are necessary for lean manufacturing. These topics relate to parallel themes in the historical developments of the Toyota Production System (TPS) within the Japanese context, the eventual development of which included not only a focus on waste elimination through lean manufacturing tools and technology but also an equally important focus on employee participation and respect for the intellectual contributions of workers as well as their physical contributions (Baba 2008, Cusumano 1985, and Sugimori et al. 1977).

Overall, as will be described in relation to Lansing's context, Lansing offered a promising location for the implementation of lean manufacturing based on the unique development of labor management relations in the city. As many case studies of lean manufacturing in the US context point out, lean manufacturing implementation often fails because the approach over emphasizes tools and technology, and insufficiently empowers workers—empowerment that is rooted in collaboration and trust. Unique forms of collaboration and trust between labor and management within Lansing will be described in relation to the implementation of GMS and the acceptance of new local labor agreements prior to the opening of the Lansing Grand River and Lansing Delta Township assembly plants.

As chapter two described lean manufacturing in the Japanese context matured and developed to include both a focus on the elimination of waste as well as robust employee

participation. A concise summary of TPS as a system describes the following, "This approach is a complex and multidimensional way of making goods that includes specific shop floor practices, vehicle designs that enhance manufacturability, timely coordination of the supply chain, close working relationships with customers, and highly disciplined management of the entire enterprise" (Baba 2008). It is important to highlight that lean manufacturing is a "system" and as such, it is much more complex than merely specific shop floor practices. Furthermore, the intangible elements—specifically relationships shared among actors—play a profound role in lean's ability to drive continuous improvement. This discussion relates to the description of relational contracts as presented by Helper and Henderson in chapter two and their emphasis on trust or lack of trust between parties impacting each party's contributions in pursuit of improvement.

The historical context of automobile making in Lansing and its unique labor management relationship is significant as it informs our understanding of relationships shared between labor and management—relationships that I argue positioned Lansing to more skillfully engage and empower its workforce. In some respects, the selection of Lansing as the location of GM's two newest North American manufacturing facilities is explained in relation to the institutional forces and pressures influencing that decision. This chapter will highlight significant actors such as regional management, the union, as well as the local mayor and the Chamber of Commerce in their shared pursuit of sustaining GM manufacturing in the region.

The location and context of my field site the Lansing Delta Township Plant, in Lansing, MI has a very particular history given Lansing's background as an automobile town and the unique impact that R.E. Olds had on this community through the development of two automobile making endeavors within the city. Each automobile making company impacted the development

of the specific style of labor relations within Lansing—one that was more collaborative and agreeable than experienced in other industrial cities such as Flint and Detroit, MI. Factors which contributed to the level of collaboration included the fact that Lansing was very homogeneous and there were ample opportunities for laborers and managers to interact outside of the workplace—this reality contributed to amicable relations (Fine 2004). These interactions that took place in schools, churches, and neighborhoods promoted friendly and more trusting relations. The two most significant automobile manufacturing operations in Lansing were begun by R.E. Olds—first, Olds Motor Works which would become Oldsmobile and second Reo Motor Car Company.

Lansing's labor history and early automobile production is documented by Lisa Fine (2004) in her work, *The Story of Reo Joe*. Fine highlights many unique characteristics of historical importance to the development of automobile making in Lansing. Noteworthy regarding this background of Lansing is evidence that there was little diversity in terms of race as well as little evidence of segregation by class (Fine 2004). Data provided by the National Historical Geographic Information System and the United Census Bureau document the homogenous population that made up Ingham County, the location of Reo and Oldsmobile. In fact, Ingham County was nearly 100% white until 1950, at which point 98.01% of residents reported as white and 1.87% reported as African America. Even as late as 1970, Ingham County was 93.61% white, 5.51% African American, and .60% Asian (Ingham County History 2016). The lack of racial diversity contributed to the fact that the REO workforce (inclusive of laborers and managers) had families that attended the same schools, churches, and lived in the same neighborhoods. As interesting as this historical fact is, it is even more interesting to learn of the very active Chamber of Commerce that advocated for specific types of industry and immigrants.

The level of homogeneity in Lansing was something that the Chamber of Commerce actively attempted to maintain and engineer (Fine 2004).

The Chamber of Commerce promoted many of their activities by couching them in the themes of stability and economic promise. There was regional gratitude for the automobile industry in Lansing and the Chamber of Commerce wanted to avoid problems and developments that they interpreted as threatening to the stability and success of automobile making in the city. The lack of diversity was by design as they saw it as a mechanism to ensure stability and reduce conflict (Fine 2004). As a result, this homogeneous community promoted notions of local identity and localism. Fine describes one consequence of this localism stating in reference to labor stating, "Their antipathy to outside interference from the nation-state, international unions, or radical organizations could sometimes lead them to alliances with the business class" (Fine 2004:6). This notion of labors' alliance with the business class is significant as it relates to more recent history during which the Lansing workforce accepted new labor contracts that allowed for the implementation of GMS (lean), as well as suggesting Lansing's capacity to honor the second primary component of a lean manufacturing system as practiced by Toyota, that is employee empowerment and participation grounded in trust and respect for all employees' contributions both physical as well as intellectual.

Joint Responsibility Unionism

The modern day equivalent to these alliances with the business class as described by Fine is "joint responsibility unionism" (Block and Berg 2009). This notion encapsulates modern day collaborative efforts between labor and management to secure automobile manufacturing work regionally. Most significant is the manner in which labor and regional management partner to

ensure product allocation[20] to their regional facilities. Rather than all of labor standing united, labor and regional management partner for product allocation. The first instances of this style of labor management agreement are documented in Lansing, MI –first, in the LGRA local union contract and second in the LDT local union contract. I suggest that it was not chance that positioned LGRA and LDT both located in historically significant Lansing, MI to be the first manufacturing plants to agree to joint responsibility unionism. This location's predisposition to embrace such an arrangement characterized by labor and the business class partnering for perceived mutual gain is historically grounded and embedded in the local context and institutional field.

The historical underpinnings of labor relations in Lansing, offers a unique point of comparison to recent experiences of collective bargaining and unionism. Block and Berg's (2009) concept of joint responsibility unionism describes a shift from "job control unionism to a collective bargaining system based on explicit employment security and worker participation through joint activities" (2009:61). As was prioritized by the Lansing Chamber of Commerce in the early days of automobile making in Lansing, job security took center stage yet again. This concept of joint responsibility unionism is unique from previous decades of unionism. It appears to be a response to new forms of competition. Rather than viewing the company as the antagonist there were new rivals or adversaries—that is the foreign automakers who were year over year gaining market share as GM and the other American automobile makers lost market share. Furthermore, this form of unionism is unique because it partnered managers and operators together to advocate for product allocation. Product allocation as described refers to the

[20] Product allocation refers to the distribution of required vehicle builds to particular manufacturing facilities over other capable facilities. In essence, this means corporate decisions regarding which plant gets selected to produce which vehicles. This process of allocating products among competing manufacturing facilities aligned plant management and plant production operators in novel ways—it drove collaboration.

corporate decision making process to assign specific vehicles to particular manufacturing facilities over other available plants. This joint responsibility unionism however is reminiscent of Fine's description of collaboration between labor and the business class in Lansing. Furthermore, it also parallels characteristics in the Toyota context that instituted a logic that defined what was good in manufacturing as what was good for the Toyota enterprise. This type of logic and rationale will be discussed further in relation to union concessions and corporate restructuring and bankruptcy where institutional logics were impacted by harsh realities related to GM's corporate viability.

The transformation in the form of collective bargaining just described also mirrors other changes in the industry. Whereas job control unionism fit well "…both with market dominance by the Big Three U.S. automobile manufacturers during this time and with the associated Taylorist production system. In response to changing product market competition in the late 1970s and early 1980s, however, labor relations in the US domestic automobile industry shifted from job control unionism to a collective bargaining system based on explicit employment security and worker participation through joint activities" (Block and Berg 2009: 61). Joint activities refer to a new level of worker participation and ownership over plant quality, efficiency, and production. Joint activities and worker participation directly relate to the second feature of lean manufacturing – that is, worker empowerment.

As the production system was changing and the American automobile makers were implementing lean manufacturing techniques in their production processes—there was a parallel change occurring in the form of bargaining and the relationship between labor and management. While the traditional bargaining system involved extensive job demarcation and a division between management and labor, the new bargaining agreement (and the new production system)

required minimal job demarcation and partnership between management and labor. This partnership was not novel, and understanding the historical development of TPS in the Japanese context illustrates the process whereby joint collaboration was established—especially the system whereby lower level management was able to serve as officers in the union (a fact which contributed to Toyota engineer Taiichi Ohno's being able to persuade the company union to embrace TPS by 1955). Lastly, whereas previous decades of union management negotiation in the US were characterized by an emphasis on wage adjustments—the context prior to the opening of LGRA and LDT was most interested in product allocation. In exchange for job security labor accepted GM's new demands for flexibility, productivity, quality, and team structure.

Another element of this transformation and change in negotiations, was that it also changed where these negotiations were occurring—rather than on the national level these negotiations were occurring on the local level. Again, this is where Lansing's history was advantageous—unlike Flint and Detroit, Lansing had a reputation for being collaborative. This historical context helped make Lansing an appealing location to rollout new styles of bargaining and production. Prior to the 1970s the notion of product allocation would not have had any impact or influence on bargaining—there were numerous manufacturing facilities and for better or worse they would *all* be making products. As will be elaborated upon later, I also argue that the initiation of a two-tier wage system was only feasible based on the leveraging of individual's fears related to job security and also a broader context of US economic hardship. Despite the fact that tier two wages are approximately half of what top tier automobile workers earn at GM; they are simultaneously twice as much as Michigan's minimum wage. "The issue, a source of controversy since the UAW reluctantly agreed to a two-tier system in 2007 amid plant closures

and layoffs, is shaping up to be the centerpiece of next year's contract talks. Workers contend that the automakers now can afford to pay top-tier wages to everyone. But the companies say any material increase to labor costs risks landing them in financial trouble again" (Automotive News 2014). The result of the most recent UAW contract with GM established a process whereby over several years tier-two employees can migrate to top-tier pay. In addition to UAW concession related to two-tier wages individual workers also were accepting full time positions at tier-two wages, in place of their status as temporary workers—it is this group of full time tier two employees who based on the most recent contract now have a path to pay increases. Noteworthy is the fact that full time tier two positions were accepted prior to this path being established, demonstrating the interest and emphasis on job security even though the specifics for how to progress up to a tier one status were poorly understood and specified. This practice of accepting tier two positions will be further explained and analyzed in relation to my ethnographic findings, which suggest persistent logics, related to economic incentives and employment in the automobile industry.

As the auto-industry became more competitive there was a shift in outlook that began to focus on the long-term perspective. It was no longer safe to assume that demand would stay the same or grow in fact it appeared a safer bet that the opposite would occur. Year over year demand and market share were being lost. This new context led to greater interest in maintaining employment over time for those employed in the automobile industry. One way in which management responded to this interest was to harness it to facilitate competition among plants. This contributed to new emphases on minimizing costs by jointly creating new forms of work organization, manufacturing process improvements, as well as increasing productivity and quality (often through the implementation of lean). These new emphases became the yardsticks

upon which plants would be measured and compete with one another. It is important to highlight that these changes were developing in response to complex contextual, embedded, and historic elements (several of which have been highlighted here). Block and Berg (2009: 69) describe this natural history in the following manner, stating, "What we are calling joint responsibility model was not imposed on LGRA but developed overtime through the close relationship between local 652 and plant managers. It is a model that rests on the history of automobile production in the Lansing, Michigan area and the trust developed by local union leaders and management." In other words, the local history and relationships as they existed in Lansing enabled a unique partnership that allowed local 652 and plant managers to respond to the global institutional field in a particular way—most striking was the joint effort between two more typically adversarial parties—the union and GM management.

Block and Berg's (2009:69) assertion that, "Thus an Oldsmobile labor relations subsystem developed organically in Lansing" will be extended here and explained in reference to new institutional theory—as I have done previously, I will interrogate this development by analyzing the various institutional pressures and countervailing forces as they relate to cause, constituents, content, context, and control. GMS, GM's lean manufacturing system is designed as a global system—but the interface of GMS on the ground is context specific. GMS as it was implemented in Lansing was a context specific occurrence—as arguments made by Block and Berg support, Lansing's history and unique labor relations played an important role in the initiation of both a new labor relationship and a new manufacturing process. Lean manufacturing became accepted, not without some resistance and controversy, by both management and labor as a means by which to become more competitive and generate more employment stability via product allocation.

Lansing's Unique Labor Relations

As was described in Fine's account labor and management groups in Lansing had a long history of amicable relations. Locally both parties had plentiful social capital. In fact, the style of relationship that took root in the early days of Reo and Oldsmobile history appears to retain a number of its earlier characteristics. This is particularly true in regards to a regional autoworker identity as it relates to concepts such as hard work, pride, and notions of family these themes will be explored in relation to my data chapters as they impact the local implementation of GMS and also local interpretations and understandings of GM's bankruptcy. Just as Fine's book, *"*... is an experiment in perspective; it is labor history that is rooted in the life of a company, and it is local history that explores the impact of national and international events on a moderate-size mid-western town" (2004: 8) this dissertation is an experiment in new institutional theory where events and negotiations between a regional workforce and a global employer are dissected in reference to key factors that promoted or and hindered continuity and change at LDT.

Fine argues that to understand why GM is building new automobile plants in Lansing the history of automobile making in this town needs to be investigated. Fine comments, "…the desire to create family ties, even between community members unrelated by blood, continues in the workplaces of Lansing and elsewhere. If we want to understand a significant segment of the twentieth-century working class (and why GM is building new automobile plants in Lansing at the start of the twenty-first century), we need to tell the story of Reo Joe" (Fine 2004: 10). In addition to the role that homogeneity and localism played in maintaining more collaborative and peaceful relationships between workers and mangers (both required and foundational to the implementation of lean) in the early automobile plants other characteristics also appear to be significant. Foremost, Lansing's notions of exceptionalism, its work ethic, and feelings of pride

as automobile workers. Lansing's factories drew from Lansing as well as the rural communities surrounding it. It was not uncommon for workers to also be farmers.

> Within walking distance of the state capital were factories, residences, a vice district, churches, retail and service establishments, and farms. Farmers could send their sons, known as "buckwheats," for education and work in the city. …If a farmer tired of the toil and uncertainty of life on the land, he might come himself and try his luck at the new opportunities for work in mills, machine shops, and stores, and perhaps own his own business one day. Or if the smoke, noise, and crowded streets held no charm for him, or if a slow economy made jobs scarce, he might stay on or return to the farm. He would have to venture only a few miles to be back in the country again (Fine 2004:16).

Land grant money was used to establish an agricultural and technical college in present day East Lansing, now Michigan State University. Not surprisingly, the first manufacturing in Lansing was dedicated to farming implements and machines. Dating to as early as 1873 there were organized approaches to bringing business to Lansing. One early example includes the Lansing Improvement Company. This entity and its activities offer an early example of a tradition that has been continued—most recently in the work of the Blue Ribbon Committee[21]—which helped secure GM's future in Lansing. The Blue Ribbon Committee's efforts are documented in a recent film entitled *Second Shift: From Crisis to Collaboration.* "Produced in part by former Lansing Mayor David Hollister, the film recounts a regional effort in the late 1990s to convince what was then General Motors Corp. to reverse its decision to stop building cars in Lansing's aging factories after the run of the now-defunct Oldsmobile Alero ended in 2004" (Lansing State Journal 2014). The Blue Ribbon Committee was comprised of business, government, education and community members who were interested in convincing GM to stay

[21] The Blue Ribbon Committee was a group established by Mayor Hollister for the explicit purpose of ensuring GM not completely leave of the Lansing Community. It included a cross section of stakeholders who as a collective successfully launched a campaign to convince GM to stay in Lansing, MI.

in Lansing. As the documentary recounts these efforts cross cut a variety of stakeholders and were successful in securing GM's future in Lansing.

As mentioned, Lansing, MI during the establishment of the automobile industry was remarkably homogenous in its labor force, as Fine argues, this was not by accident. The labor force was characteristically, white, male, rural, and native born. These demographics had a unique impact on the "…management and working-class culture in the early factories" (Fine 2004:19). Fine highlights the significance of family, church, and community as significant institutions impacting those settling the area. Relevant to the development of the automobile industry in Lansing were the "prosperity on the land and the personnel from the land" (Fine 2004: 19). This background also helped lay the foundation for more amicable relations between workers and management. Most important are the ample opportunities for relationship forming outside of the manufacturing environment—the social ties that were developed cross cut the workplace and were enhanced and reinforced by broader community ties to church, school and recreation.

In fact, in direct response to labor relations, R. E. Olds relocated Olds Motor Works back to Lansing from Detroit in response to labor unrest in Detroit. "By August 1901 Olds had decided to move the plant to Lansing. This episode revealed Old's shrewd calculation that Lansing's skilled workers would be cheaper and less militant that their counterparts in Detroit" (Fine 2004: 24). Noteworthy also is that within three years Old's extracted himself from Olds Motor Works and went on to build an even more popular car company in Lansing, Reo Motor Car Company which became one of the most popular cars until 1920.

During the early 1900s in Lansing the automobile industry was taking hold—an active Chamber of Commerce that sought to minimize conflict assisted this development. This was

accomplished through efforts at limiting and controlling what types of industries were welcome in Lansing. "Lansing has not invited a large influx of population on account of the many problems which follow in its wake… It results in labor troubles and industrial unrest, particularly during dull business periods" (Chamber of Commerce quoted in Fine 2004: 26).

GMS & The Platinum Agreement Background

In order to offer further understanding of both the institutional pressures impacting GM's adoption of GMS as well as what GMS entailed for GM I present the following relevant data and background. GM's newest North American manufacturing facilities both Lansing Grand River and Lansing Delta Township were each launched using GMS. This means that the 5 principles of GMS: People Involvement, Standardization, Built-In-Quality, Short Lead Time, and Continuous Improvement, guided everything from the physical layout of the manufacturing plant inclusive of tools, parts, and equipment, as well as how the work was to be performed using standardized methods, how individuals were to be involved and participative, as well as how quality and continuous improvement were to be obtained.

GMS was a new and unique approach to manufacturing for GM's assembly plants. As such during the on-boarding process of new employees at LDT explicit training is conducted to educate the staff on GMS as a production system. The stated training objectives included: "Describe why GM-GMS is critical to the future of Lansing Delta Township; Describe the relationship between GM-GMS and LDT Mission, Vision and Values; Recognize the competitive business climate in which we operate and the need for change; Recognize all of the 5 principles and 33 GM-GMS elements; Describe what the acronym GM-GMS means" (GM Training Presentation: 2008). The fulfillment of these objectives was attempted in a variety of ways and I will elaborate on the content of the training. First, was the manner in which the

critical nature of GMS as required was presented. The training included showing a film entitled "Competitive Threat Video." This film on Harley Davidson was intended to "… show that we must change, we must get better" this point is made in the video by showing the change process that Harley embraced in order to remain viable (GM Training Presentation: 2008). The video is followed by a few slides that show a Toyota production facility being constructed in TX—the slides present Toyota as the competition and the notes section of the slide show highlights that the "Big difference is our skilled workforce." It was not uncommon for the idea of "competition" to be reduced to Toyota; similarly, it was a commonly held view that their Lansing workforce was exceptional. As evidence of this belief people referenced Lansing's history of car building, cited Lansing's agricultural roots, and lastly, offered GM's decision to construct its two newest North American facilities in Lansing as indisputable evidence of Lansing's incomparable workforce.

The training slideshow reinforces these ideas as well, and transitions to content on awards that the Local 602 workforce has won and highlights the Lansing legacy of car building. The slides include a picture of a vintage poster— it advertises Lansing Car Assembly and includes a 1935 Fisher Body Motor Coach and the iconic Oldsmobile logo—in the notes section of this slide LDT is called out as "Our Future." After these slides which attempt to motivate the audience to embrace change and stir feelings of pride the training presents the history of GMS—the term evolution is used and the slide explains that "Over the last 2 decades, GM has built new plants, learning each time." The examples of plants from which GM learned as they developed GMS include: NUMMI (1984), Saturn (Late 80s), Germany (1992), Poland, China, Brazil, Thailand and Argentina (Late 90s), and Lansing Grand River (early 2000s). The slide states that

"From this, the Best Practices have been developed and captured as General Motors –Global Manufacturing System (GM-GMS)" (GM Training Presentation 2008).

Also interesting in this presentation is the content on the mission statement, as previously described the LDT mission statement was drafted on 4/28/04 and reads: "Building on our heritage, we commit to producing the world's finest vehicles in an environment that supports and empowers our Team Members" (GM Training Presentation 2008). More interesting are the messages and language included in the notes section of this slide as they describe the significance of the mission statement but also point out the new behaviors associated with the new production system:

1. Point to the people "Building on our heritage"
2. "An environment that supports our Team Members" is exactly what statement #9 of the LDT packet was asking for "You want to drive a clear understanding of who the customer is – it's the people on the line. They need to be supported."
3. The last 4 words, "empowers our team members" should be emphasized as this was a follow-up item from item #6 of the LDT Story Packet. The point of this item was that when we empower the people to make decisions we must follow through on those expectations.

As these highlights captured in the training notes express, an empowered and participative employee who is active in problem solving and suggestions—this was the intention of the new empowered worker at LDT supported through GMS. As will be elaborated upon further, this promise and the changing level of participation and input from the hourly operators is one example of a GMS principle which despite its attempt at initiating change in the production process and manufacturing facility—was stifled by legacy relational contracts and organizational behaviors.

Speaking of relational contracts, the relationship between GM and the UAW was a relationship that was analyzed and eventually engineered in support of change. That change

came in the form of Competitive Operating Agreements (COAs), which impacted the LDT Platinum Agreement, negotiated between GM and UAW Local 602. As Wasser reports, "Negotiations at LDT emerged out of a greater management strategy at GM developed in the 1990s … Yellowstone, an internal think tank at GM, devised basic principles for the operation of new U.S. plants. Out of Yellowstone came the basic proponents of Competitive Operating Agreements (COAs) and related 34 performance objectives, referred to as 'imperatives and enablers'" (Wasser 2010:35). During the planning stages of Lansing Grand River, Local 652, was tasked with agreeing to the first version of a COA at GM. Local 652 both "…needed to agree to the first iteration of a COA at GM and obtain ratification from their membership in order for GM's Board of Directors to approve the tentative plans (for new plant construction)" (Wasser 2010:42). The COA's introduced change in the relationship between GM and the Local. These included: "the shift to less job control, fewer skilled trades classifications, and the introduction of GMS and its team-based work organization" (Wasser 2010:42).

The COA's were in fact new but they were not without history. The forerunners to both COA's and GMS included what is referred to as the Quality Network. In the 1987 Toledo Accord the Quality Network was established this aligned with GM's "master plan" which was a focus on customer satisfaction. This emphasis on quality and customer satisfaction was a response to the global market place. According to a UAW training presentation as of May 1989 only 17 of the 38 Quality Network Action Strategies had been approved. However, the 1990 UAW/ GM Agreement institutionalized the Quality Network and a corresponding quality council at all levels of the organization (UAW Training Presentation 2006).

The goal of this approach was a "Synchronous Organization," defined as "… an integrated business system that rapidly converts raw material into profit. This is achieved

through the identification and elimination of waste and non-value added activity. By focusing and utilizing the full talents and resources of our people we can assure continuous improvement in our processes, products and services" (UAW Training Presentation 2006). This same presentation describes that "LDT is an evolution of new plants in GM focusing on lean execution and GMS implementation beginning in Europe. … LDT implemented LGR's learnings" (UAW Training Presentation 2006).

GMS which is an integrated manufacturing system consisting of 5 principles and 33 elements that support stated goals surrounding: People, Safety, Quality, Responsiveness and Cost. Of the five principles, two relate most specifically to manufacturing, those include Continuous Improvement and Standardization; the remaining principles are People Involvement (personnel department), Built in Quality (quality department), and Short Lead Time (material department) (UAW Training Presentation 2006).

As mentioned, the implementation of GMS required a specific lean labor agreement, UAW Training Presentation (2006:34) identifies the components of a lean labor agreement and outlines the following features: "Two classifications for production workers: Team Member and Team Leader; Fewer skilled trades classifications—production maintenance partnerships; reduced ability to transfer between jobs and shifts; job rotation; Team Leaders selected based on merit, not solely seniority; smaller team size (average 5); living agreement that either side can change as needed; alternative forms of dispute resolution and bargaining." The UAW Training Presentation further outlines the unique contextual factors surrounding the Platinum Agreement, highlighting the following characteristics: "Contains all the elements of a Lean Labor Agreement, based on the Lansing Grand River Agreement (the basis of new investment); skilled trades votes against ratification; the union leadership is defeated except for one shop

committeeperson (new President and Shop Chair plus five new members of the bargaining committee)" (2006). The platinum agreement paved the way for the implementation of GMS at Lansing Delta Township and met the requirements of corporate GM in relation to competitive operating agreements—these efforts were in response to what GM saw as necessary changes as the corporation attempted to enhance their successfulness and remain competitive in an era during which other manufacturers were eliminating waste and improving quality. GM as they specified was pursuing a focus on customer satisfaction.

As the secondary data support, GM adopted GMS based on its promise of economic improvement; GMS offered an avenue to meeting the expectations of its stakeholders—both in relation to enhanced profitability and employment security; GMS aligned with longstanding corporate goals of serving customers; the interconnected nature of the institutional field in which GM's manufacturing operations were located also exerted pressure to adopt what the world was embracing as benchmark best practice—Lean Manufacturing; lastly, despite resistance and countervailing forces, specific actors within the field were pushing for the adoption of the GMS (lean) system and under sustained pressure through time, GM evolved its approach to lean—this included early disorganized methods of exposure to learning lean (NUMMI) to more scripted and formalized approaches culminating in handbooks, training decks, white papers and shop floor materials.

Regional Workforce with Regional Values

The homogeneity of Lansing and a set of core values that included religion, patriotism, work ethic, family, and localism were so powerful that they contributed to making it an inhospitable location for national unions—it is important to point out that these values surfaced in my ethnographic data suggesting institutional continuity. Fine (2004) documents the numerous

venues of social interaction that helped solidify shared values between the working class and business leaders. Fine concludes (2004: 36):

> Nevertheless, the arrangement of Lansing's residential housing is consistent with the goal of the city's business elite to create an environment in which class difference and class conflict would be contained, both by acts of covert repression and by overt cooperation and mutualism. That the sidewalks of Lansing provided common ground for the working and business classes during the early years explains the type of company culture developed during these years in the Reo plant.

The work of Brondo and Baba (2010) contributes to this historical discussion regarding Lansing's background and context. In particular, their work connects work performance to individuals' rural backgrounds. Most interesting, given the current discussion of the Lansing workforces' farming heritage is the impact that Brondo and Baba outline as a consequence of numerous transfers into LGRA—they document that despite LGRA's initial success in relation to plant metrics that track quality and efficiency the team structure which supported the production process was undermined by an influx of individuals who transferred from other plants beyond the Lansing area. The consequence was not only an influx of "outsiders" but it created a domino effect in team composition as operators used their "bumping" rights[22] to change teams. Brondo and Baba (2010) conclude that despite comprehensive planning and due diligence by management to ensure plant performance goals were met, organizational and institutional processes from beyond the local scene were impacting the LGRA plant—they warn that larger processes put GMS at risk. Overall, this case study is another example that demonstrates the connection of unanticipated events at the global economic level with that of the local level. The objective performance changes that Brondo and Baba (2010) observed corresponded to changes in the employment patterns of the local plant which were directly tied to requirements of the

[22] "Bumping" rights refer to a union negotiated practice that allows for employees to change jobs based on seniority and thereby transfer to other teams in a plant.

GM-UAW agreement as outlined in the national agreement but had not been adequately prepared fro in planning LGRA. As will be described in relation to my findings, a similar event occurred in the employment patterns at LDT in response to GM's bankruptcy and restructuring which ushered in a new group of transplant employees to LDT—an influx which similarly put GMS at risk.

Brondo and Baba's (2010) article highlights that a new emphasis on lean manufacturing generated more focus on production workers and as described LGRA operators were required to go through a week long GMS training. Furthermore, as previously mentioned the LGRA launch required a new local labor agreement to have GMS as the foundation, as well as to include language related to team structure. More specifically, the local labor agreement describes the production system and highlights its flexible and team based nature. The trust and loyalty that existed between workers and managers in the LGRA context exemplifies the role of informal relations, social networks, and social capital. In many ways the contextually based cooperation between workers and managers meant that Lansing was "pre-adapted" to GMS. Brondo and Baba (2010: 266) explain:

> For example, UAW Local 652 maintained a single slate of officers for more than 25 years, reflecting stability in union-management relationships, and Lansing experienced fewer grievances and strikes than other GM-Michigan cities. Data on "crisis situations" at GM from 1979 to 2000 reveal that while situations defined as disputes often resulted in strikes at units located in Pontiac, Saginaw, and Detroit, disputes never resulted in strike in Lansing (Block and Belman 2003).

Overall, Brondo and Baba (2010) outline themes that are consistent with Fine's historical account of autoworkers in Lansing and themes that were common in my own ethnographic data. These include worker identity and pride stemming from work for GM and a family heritage of automobile making—it is very common in contemporary GM facilities in Lansing to find second

and third generation autoworkers. In fact, Brondo and Baba (2010: 267) present a specific theme, "…'Social Networks,' suggesting that social networks linking families and communities to people in the plant account for strong support and loyalty to the plant. Working at a plant with others who have been socialized in the same manner re-enforces and enforces expected normative behavior." The significance of this observation must be highlighted as my own data will extend this finding related to the manner in which LDT's specific routines emphasized loyalty and pride as automobile workers in Lansing.

Another interesting parallel that can be made between my research and that of Brondo and Baba's (2010) is the manner in which their research project was altered in response to changing events. Initially, they sought to examine whether the rural or urban background or current geographic residence of a team's membership influenced the team's performance. Yet this objective was modified during analysis when they discovered what they labeled as "the transfer phenomenon" (i.e., transfer of employees from plants beyond the Lansing area). Team composition was not stable and in fact highly variable as team members transferred to other teams—this process created rampant bumping of team members and ever changing team composition. This insight led Brondo and Baba (2010) to suggest that an important factor to consider when researching this population; that is, "volunteer status." By volunteer status they are referring to the fact that employees choose or volunteered to be a part of the new LGRA—the first wave of employees had self-selected into this group it was a choice they made (in addition they had to be chosen). Brondo and Baba explain, "Our sample had been significantly skewed toward individuals representing the first wave of workers entering the plant: all but one individual had participated in the plant's launch" (2010:270). Brondo and Baba (2010) go on to suggest that pre-production (a term which refers to the plant activities required prior to actual

production of saleable vehicles as the facility prepares, organizes, and works out the issues associated with a new vehicle build) workers were more dedicated to GMS, transfers did not appear to be as motivated to work in the same manner at the volunteers and could have affected employee empowerment.

I offer two additional explanations; first, rather than commitment to GMS perhaps the transfers were less committed to maintain collaborative relationships with management because their home environments were unlike the local Lansing setting with trust and amicable relations as a context. Secondly, as was suggested to me during an informal conversation with a previous member of LGRA's management—perhaps what undermined the efforts at LGRA were changes not only in the hourly composition but perhaps also changes in the salary composition of the workforce—it would be interesting to know how many members of management were the same as during the plant launch. As the Brondo and Baba article explained "…transfers from 'other' plants will 'pollute' the work environment" (2010: 270). The previously mentioned retired manager from LGRA with whom I spoke further explained how changes in leadership served to undermine LGRA's efforts. They explained that because LGRA was GM's showcase facility rising managerial stars were shuffled through the facility as a stepping stone during their advancement—with this shuffle came a cohort of individuals that lacked thorough lean manufacturing knowledge and also lacked the social and familial ties to the Lansing specific workforce. Most likely all of these factors in combination challenged the efforts to institute GMS at LGRA. My data will show a similar risk to GMS at LDT based on changes stemming from bankruptcy.

Labor Management Partnership

This Chapter, thus far has paid significant attention to Lansing as a location with a very specific relationship between labor and management. However, greater details regarding the local union contracts are needed to thoroughly understand the manner in which the informal Lansing relationships served as a platform for what would be formalized in the local union contact—and broader changes occurring in the style of labor negotiations. As Wasser (2010: 30) explains "Management and labor now negotiate in a decentralized manner, with industry negotiations pushed to the company level and company level negotiations pushed down to the plant level. These shifts in the structure of labor negotiations alter the sides' frame of reference and bargaining power in a way that positions management to use negotiations for implementing the practices and processes required of the business strategy." It was precisely this approach that led to the explicit description of the production process in the LGRA contract.

Beginning in the 1980s negotiations in the U.S. automobile industry demonstrate the effects of a global marketplace and the new emphasis of bargaining as a tool to assist in the economic performance of a company. More than ever before, there is explicit language to describe labor-management collaboration. These change in negotiations aim to achieve company outcomes and ensure competitiveness. As mentioned, labors' interest in employment securities and guarantees took precedence and this changed many previous labor management dynamics—this new emphasis can be seen as a response to changes within the institutional field. As a result of the new emphasis on competitiveness various changes ensued these included: "U.S. automakers used decentralized, plant-level bargaining to negotiate flexible work arrangements, greater worker involvement, and the greater use of modular production, a build system that shifts work to suppliers" (Wasser 2010: 32). In particular the reference to flexible work arrangements

and greater worker involvement are directly related to the requirements of lean—this required ending a one operator one job arrangement, most specifically it enabled teams and job rotation. Furthermore, the reference to worker involvement comprehends the role of employee suggestions, active problem solving, and continuous improvement. As described the priority became securing work for union membership even if that entailed cost-reduction programs and other collaboration with management. The enticing element of this approach was the rhetoric that argued that cost reduction would not be achieved through wage and benefit reductions but through enhanced productivity. The Saturn Plant in Springhill, TN, represents the most extensive example of labor management partnership in a GM and UAW contract. Though the Saturn brand has been retired—the "partnership" as defined in the bargaining agreement lives on in present day agreements. All of the Big Three, "negotiated agreements with policies inherently based on partnership meant to compliment the lean manufacturing production principles of flexible, team-based work arrangements and worker involvement" (Wasser 2010: 34).

The LDT collective bargaining agreement is entitled the LDT Platinum Agreement and includes "the basic proponents of Competitive Operating Agreements (COAs) and related performance objectives." (Wasser 2010: 35). Based on confidential interviews Wasser (2010: 36) further reports the following:

> Soon after agreeing to build LGR, GM sought another new U.S. assembly plant. GM's manufacturing leadership sought to reward Art Baker (Local 652 shop chairman) by building the new facility in Lansing and staffing it with an expanded Local 652 membership. UAW leaders at Solidarity House objected to this plan because of the large number of workers on layoff or soon to enter layoff status at other UAW locals. … However, GM intended to build an assembly plant at a location where the local union agreed to an updated COA.

As Wasser's research reports, Local 602 would need to agree to a New Product Allocation Memorandum of Understanding which specified particular targets as they

related to hours per vehicle, operator load, value added content, manufacturing costs, and quality targets. Wasser argues that "Agreeing to the product allocation memorandum of understanding and its mandatory performance targets for a new plant represented the only guarantee of work for Local 602's membership" (2010:36). This reinforces the previous assertions that job security had become the most significant factor in negotiations with management. Furthermore, despite being represented by two separate locals, LGRA (Local 652) and LDT (Local 602) they were both based in Lansing.

In a manner similar to LGRA, a sense of localness contributed to levels of trust experienced between management and Local 602. Again, the new demand for worker participation and labor management collaboration which was required to support the new lean manufacturing process was supported by style of labor management experienced in Lansing—rooted in the history of REO and Olds—this history is significant and directly contributes to institutional logics and meaning embedded and shared in Lansing. In addition Wasser's research documents the extensive planning, training and joint participation between labor and management as LDT was being prepared. These activities outside of work further developed and strengthened the existing relationships. In particular, Wasser relays a story told by an informant to his research that describes the joint leadership team's trip to a GM plant in Mexico that was already using GMS—this visit was significant based on the learning related to GMS but also it was an opportunity for the team to spend extensive time together and learn about each other as individuals. This joint training bonded the group. LDT's locally drafted mission statement captures both its heritage and its future focus, "Building on our heritage, we commit to building the world's finest vehicles in an environment that supports and empowers our team members" (LDT Mission Statement—April 28, 2004). This mission statement includes three significant

elements: first, reference to the past; second, a reference to quality; and third, a reference to empowered operators—key ingredients to a lean manufacturing facility.

It is important to highlight that based on objective measures of quality and efficiency metrics—LDT is a successful manufacturing facility with a consistent direct run rate of 95%[23]. Furthermore, a recent news article celebrated LDT's 2 millionth vehicle built at the plant. A General Motors official is quoted stating, "It's more than hot wheels; it's a reflection of Michigan employees hard work and dedication" (Rosado 2015). Furthermore, GM has made additional announcements regarding their long-term investment in the area and has plans to "…expand its Lansing-area factories with three new additions—a 44.5 million dollar logistics center to sort and deliver parts to the assembly line and a 174 million dollar stamping plant, both at GM's Lansing Grand River plant; and a 63 million dollar expansion at the Delta plant" (Lacy 2015:1). The continuity between the early interests of the Lansing Chamber of Commerce, the Blue Ribbon Committee, and the words to the present day Mayor regarding the role of GM in Lansing is profound. The current Lansing Mayor, Virg Bernero, in response to the described investment states, "It signals a continued commitment to Lansing… That means jobs for our people, job security, and economic health for this community. It's great news at a time of global competition" (Lacy 2015:1). In Lansing, for as long as there has been an automobile industry it has been something the community found worth protecting.

Insight into the unique labor relations as developed in Lansing are better understood in reference to labor historian Perlman's analyzes. Perlman, argued that American labor prioritized the role of security. He argued that Americans were opposed to overthrowing systems through revolution and instead focused extensively on brokering deals. In particular, he argues that the impetus for unionization was to suppress "competitive menace foreigners, convicts, and the

[23] Direct run rate is a measure of first-time quality.

untrained" (Kapuria, Foreman, and McCann Jr. 2012: 516). A consequence to this orientation of labor was the manner in which it limited objectives—the foci became wages and job opportunities. These foci appear consistent between the early days of automobile making in Lansing as well as during the modern era of joint responsibility unionism. Kapuria, Forman, and McCann offer the following summary of Perlman's understanding:

> This disillusionment (by labor) came as a result of the acceptance of the closing of the frontier—the "American premise of an existing abundance of opportunity for every industrious person" had been transformed by "conspiring monopolists" into a reality of increasing "scarcity" (198). As a consequence, the antimonopoly perspective, which to Perlman "denoted a mental subordination of the wage earner to the farmer" and had produced "a labor movement in the grip of a rural ideology" (198), had been replaced in the guise of the American Federation of Labor with "both an urban and a wage earner's ideology," one "based on a consciousness of limited job opportunities" and a subordination of the individual to the welfare of that segment of the labor market to which he felt attachment (198–99).

This conclusion authored in the early 1900s seems equally appropriate to summarize the transformation in bargaining as it occurred between labor and management. With the advent of foreign competition—labor and management partner in an effort to ensure product allocation and job security—even at the sacrifice of wages as seen in the two tier wage system. As will be shown, increased use of two tier wage employees became one of the required actions stemming from bankruptcy. The potential ramifications of this as a risk to GMS will be discussed more thoroughly in chapter seven.

Regional and Local Population Demographics

The following demographic trends reveal patterns at the State as well as regional level and should be highlighted. In relation to the region, the City of Lansing has seen year over year population loss, however, the population of the Lansing Metropolitan Significant Area (MAS) has seen growth (Scorsone et al. 2013:8). This same report summarizes the following change to

racial distribution of the City explaining, "The racial distribution of the city has also changed since the 1940s. … The percent of white people in the city declined from 97.9% in 1940 to 61.2% in 2010. The city has become more diverse over the last few decades" (Scorsone et al. 2013:11). This report also calculates unemployment and income, concluding, "The city of Lansing's jobless rate is returning to pre-recession levels. City level unemployment for 2012 was at 10%, 11th highest in the state. Lansing's jobless rate ranks 5th amongst some benchmark communities" (Scorsone et al. 2013:13). A very significant number presented in this same report shows changes to the city of Lansing's median household income which in 2010 was $37,666 down a total of $13,319 dollars compared to the median household income of $59,850 in 1980 (Scorsone et al. 2013:14).

This pattern is further illuminated by the Michigan Future Inc. Report (2013) which indicates that in the year 2000 Michigan had the 18th highest per-capita income nationally yet ranked 34th in the attainment of four-year degrees. This contrasts with 2010, when income sank to 39th and the attainment of four-year degrees remained the same. This pattern corresponds with job loss in the manufacturing sector throughout the State. The authors highlight that "Employment earnings per capita from manufacturing, adjusted for inflation, declined 29 percent over the two decades. The share of private sector employment earnings per capita from manufacturing fell from 21 percent to 12 percent" (Michigan Future Inc. 2013:10). The authors further compare changes in manufacturing between the nation as a whole and Michigan, "Michigan manufacturing employment fell by 318,000 from 1990-2011, a decline of 37 percent, compared to 32 percent nationally." Michigan jobs in manufacturing fell from 18 percent to 10 percent, compared to the national drop from 13 percent to 7 percent (Michigan Future Inc. 2013:12).

The *Michigan League for Human Services* Labor Day Report (Ruark 2012:1) highlights the state employment landscape outlining, "Michigan's employment-to-population ratio is at its lowest since 1982, when the state was in its worst recession. Only 42% of Michigan's black population age 16 and over is employed, compared with 55% or higher for other racial groups. Michigan has the highest proportion in the Midwest of working families who are in poverty, and more than a quarter of its workers work in low-wage jobs. Of the seven occupations with the highest number of workers, five have a median wage that will not bring a family of four out of poverty, and three will just barely bring a family of three out of poverty."

This review, in particular the economic trends of both Lansing and the state offer significant contextual information regarding employment opportunities for Michigan workers. This background offers added insight into the pattern observed in my data regarding interest in tier two positions at LDT, as well as employees overall interest in maintaining manufacturing jobs in Lansing and GM as an employer.

CHAPTER 4: DATA AND METHODS

Introduction

This chapter, dedicated to my research methods, will describe the processes and materials used during the research, analysis, and drafting of my dissertation—my methods are rooted in the recommended ethnographic practices as outlined by Schensul and LeCompte (2010), Bernard (2011), and Bernard and Gravlee (2015). I underscore the nature of this dissertation and its use of new institutional theory to call attention to the multiplicity of data sources required to accurately understand and analyze processes of continuity and change within the auto industry specifically and as they manifested themselves in the activities and organizational routines observed and experienced at the Lansing Delta Township plant. As has already been exhibited this dissertation relies on and incorporates historical accounts of Lansing, other social science research on lean manufacturing and General Motors, analyses and research on labor relation patterns, and media coverage of General Motors. In the proceeding chapters, especially covering the topic GM's corporate bankruptcy I draw heavily upon government research, documentation, and findings, in particular reports authored by the Government Accountability Office—an office which was tasked with providing oversight of the government provided auto loans and conditions.

Reliance upon this multiplicity of secondary data and content, in addition to my own ethnographic data, helps comprehend the complex institutional field of the automobile industry. Based on this dissertation's reliance on new institutional theory—these various sources in combination with my primary data help elucidate the significant actors, events and institutional pressures which directly impact the implementation of GMS at LDT, local interpretations and experiences of GM's bankruptcy, as well as the manner in which bankruptcy impacted and

influenced GMS at LDT. The approach employed is partly ethno-historical, and accordingly it presents history from the insiders point of view augmented with other sources as required. Overall, the dissertation is multi-method not only due to the requirements of theory but also the phenomena encountered in the field.

The creative research methodology stems from both demand and necessity. Whereas my initial research questions were narrowly focused on the implementation of GMS at LDT they were modified and expanded through time. I contribute the development and maturation of my research foci to two main events. First, as referenced, during my data collection at LDT, GM's economic viability was rapidly deteriorating, largely as a result of the global financial crisis of 2008-09. The phenomenon is portrayed in then CEO Rick Wagoner's plea to the US Congress for loans—the details of which will be elaborated upon in chapter six. As GM's corporate viability became more tenuous I began investigating how the situation was being experienced and understood on the ground at LDT. Furthermore, once GM declared bankruptcy my interest in understanding bankruptcy's specific ramifications on the LDT plant were elevated. Practically speaking I went from a narrow focus on GMS to a much broader topic which could comprehend the field level phenomena of GM's bankruptcy. This elaboration in focus was in direct response to events as they were unfolding, however, it left me studying a topic which was very complex, multifaceted, and still unfolding in real time.

One of the consequences of such a turn of events was a new research task—that was, how would I connect in a meaningful way my research on the implementation of GMS and GM's corporate bankruptcy? Each topic was distinct, yet they were not independent. The process of comprehending a manner in which I would be able to investigate each phenomena while also analyzing their inter-relationship was a question which was not easily nor efficiently resolved.

However, through continued research and analysis a theoretical lens which could accommodate both phenomena as well as help illustrate their relationship was established. This lens rests in understanding, the frameworks and orientations as promoted by new institutional theory. As advocated by Scott (2008) the institutional field serves as means to understand how institutions both persist and change through time. My research, inclusive of both GMS and bankruptcy, highlights profound change—however, my ethnographic data as will be shared in chapter 6 also documented continuity with previous organizational routines and behaviors (these embedded logics served to coordinate and control, reduce uncertainty, and embody organizational knowledge). Overall, this theoretical orientation contributed to the emergence and integration of an emic and etic categorization scheme[24]. My primary data collected during my ethnographic research captured extensive emic categories; however understanding of these categories and themes was deepened through additional analysis and interpretation guided by Becker's (2003) construct of routines and institutional pressures as categorized by Fareed et al. (2015). Use of ethnographic data in combination with these borrowed etic categorization scheme enhanced the institutional analysis and offered enough structure via a systematic approach that I was able to overcome the challenge of connecting the multifaceted and complex phenomena of GMS and bankruptcy in a manner that sheds light on how routines as captured in qualitative data serve as mechanisms in processes of institutional continuity and change.

[24] New institutional theory facilitates the development of emic and etic codes. New institutional theory is etic; however, it also enables the development of emic codes related to cognitive constructs, norms and informal rules. For example, if a group of employees have a belief, for example that buying "American cars" is significant, this is an emic category that is real for them and it can be related to behavioral norms about car purchases and informal rules of how to do things such as who gets to park where and what the consequences are for those who do not heed the rules. New institutional theory can be used to explain what is going on while the categories of data are emic.

To sufficiently comprehend the field level phenomena my ethnographic data required a theoretical lens that would be able to frame both continuity and change as well as integrate local LDT specific ethnographic data with global economic events, government control of the automaker, national concessions made by the UAW as well as, other loan conditions. These multifaceted and complex factors representing different actors within the field are identified and integrated within the analysis and become more manageable when contextualized in reference to Scott's normative, cognitive, and regulative pillars of institutions.

In order to understand the processes I witnessed at LDT prior to and post-bankruptcy required a broad and historical understanding of the nature of auto making, General Motors, and Lansing, MI. Furthermore, to understand GM's implementation of GMS as a production system at LDT (and bankruptcy's potential impacts on GMS) requires thorough appreciation for the various influences and actors within the institutional field. Thus far, in chapters two and three I have attempted to summarize the unique contextual factors which acted as levers of influence culminating in the selection of Lansing for the construction of both LGRA and LDT—GM's two newest North American manufacturing facilities producing vehicles using GMS—their lean production system.

The remainder of this dissertation will be used to further analyze a broad swath of data in an effort to explicate factors which link global to local scales and elucidate the mechanism of continuity and change in the institutional field. In summary, in addition to my ethnographic data, I use data sets that include historical accounts, policy reports, other qualitative data as reported in the works of other social scientists in the fields of labor relations, economics, human resources, anthropology, and GM sponsored research. Whereas other research efforts related to the implementation of lean manufacturing have focused more exclusively on a particular plant

population my dissertation's focus is that of an institutional field—as such there is no distinct physical boundary that surrounds Lansing Delta Township and indicates those people and artifacts that are within scope or outside of my research scope. The forthcoming chapters are dedicated to presenting evidence of both institutional continuity and change with attendant explanation and theorization.

Data Sources

In addition to my primary data sources collected during ethnographic research onsite at LDT (outlined in the chart below), my secondary data sources include: historical accounts of General Motors and more generally auto making in Lansing, MI; national and local media coverage of GM's activities and investments in Lansing, policy documentation—foremost the congressional record and the Government Accountability Office's reports on mandated changes and the loans that sustained GM through bankruptcy; and existing organizational research on GM's manufacturing facilities in Lansing (Briody et al. 2010, Brondo and Baba 2010, and Wasser 2010).

Table 2: Data Sources

GM Training Material	1500 power point slides
GMS Handbook	90 pages
Delta Daily Newsletters	300 pages
2008 GMS Plant Survey	Summarized in an excel workbook and accompanying power point presentation
Participant Observation Field notes	250 transcribed pages
Interview Transcripts	240 pages
Interview Notes	130 transcribed pages

*Page counts are approximate

As my sources suggest my dissertation is supported by empirical backing from both primary and secondary data and shows the value of institutional analysis by identifying significant actors and naming their action and interactions. This analysis is enabled through triangulation of data

sources and is guided through use of Becker's (2003) construct of routines (understood to have specific characteristics as well as serving particular roles) in addition to use of Fareed et al.'s (2015) five institutional pressure: cause, constituents, content, context, and control. Through the integration of this theoretical lens and analysis of emic and etic data, the dissertation contributes to our understanding of GM's adoption and implementation of lean manufacturing according to a new institutional theory perspective. Explicit attention is paid to occurrences in the field where the institutional forces were great enough to influence change (for example, the adoption of new lean manufacturing techniques and/or new organizational routines) and also instances where the countervailing forces were greater and the organization resisted institutional pressures (the failure to implement lean techniques; outward rejection of new techniques; and continuity with previously established norms and logics). The analysis and discussion of continuity and change in featured in chapter seven.

Fieldwork

As General Motors' newest North American manufacturing plant, LDT is located in Lansing, MI. The Lansing Delta Township plant opened in 2006 and from its construction was built to the physical specifications needed to support GMS. LDT currently (2016) runs three shifts; this translates into more than 3,000 hourly workers and close to 300 salaried workers. The hourly workforce is represented by UAW Local 602. LDT currently produces the Buick Enclave, the GMC Acadia, and the Chevy Traverse. The reasons that this plant and workforce are ideal for the research questions asked in this dissertation include, as previously mentioned, ethnographic research was conducted with this same group and is captured in Briody's data—hence there is existing ethnographic material. Furthermore, my data were collected during a

highly unique time in GM's history—that is the months leading up to the corporate bankruptcy, the corporate bankruptcy proceedings, and the months following GM corporate restructuring.

As a participant observer I logged approximately 300 hours on location shadowing employees at LDT, engaging in informal conversations, and even lending a hand in work tasks where possible and helpful to my research participants. I conducted participant observation at LDT weekly for eight months—these sessions would typically last 4 hours several times a week. To the extent achievable, I attempted to interfere and influence the work situation as little as possible—however, I have no doubt that my presence influenced people's behaviors and what they felt comfortable saying and doing in my presence. When interacting with employees at LDT I would explain that I was a graduate student at MSU conducting a project at the plant on organizational change, and that I was interested primarily in GMS and corporate viability linked to restructuring efforts—more times than not workers equated my dissertation to an undergraduate class paper. This impression, though unintentional, aided in my efforts to be unthreatening and inconspicuous—people were generally welcoming, helpful, and encouraging to my efforts.

In addition to extensive participant observation and informal conversations, I also conducted semi-structured interviews with plant employees of different ages, racial backgrounds, and job categories to confirm and extend impressions regarding the implementation of GMS at LDT and employee impressions of the corporate bankruptcy. Over the course of 15 months, between February 2009 and May 2010, I conducted informal interviews and shadowing with over 100 LDT employees, in addition I conducted 25 formal interviews 12 were audio recorded and 13 were captured in notes. In total, I interviewed 16 hourly employees and 9 salaried

employees. Twenty-three (23) of the interviewees were white and two (2) were black.[25] Furthermore, there were 6 women interviewed and 19 men. Though I did not collect explicit information on age the majority of my informants' ages fell within a 30-year range from early 30s to early 60s. As my sample demonstrates I interviewed more hourly employees than salaried employees—I attribute this to two things; first, because I often recruited interviewees while conducting participant observation this most often occurred on the plant floor as opposed to upstairs where salaried employees and members of management have their cubicles and desks; second, I was using snowball sampling techniques and hence I was more frequently put in touch with other hourly employees by the hourly employees I was shadowing during participant observation.[26]

During my fieldwork I actively sought to collect documents whenever possible, in addition to those mentioned in that chart above other examples included: fliers, paper handouts, and emails offered to me. I attempted to create a paper record through these various documents of how particular concepts and ideas were formally presented to the workforce and captured in the written word. Furthermore, it was often very interesting to document the subject matter of the plant newsletter as an indicator of topics the plant either felt proud of, comfortable discussing, or relevant for plant wide distribution. I also monitored a handful of Facebook pages dedicated to this workforce as an avenue to learn of topics that the plant workforce was discussing.

The demographics of my interviewees are similar to that of the broader plant population during the time of my data collection. However, at the time the plant population was at its most homogeneous due to the fact that LDT was only running one shift. Based on the negotiated

[25] For a historical account of the hiring practices based on family references which contributes to GM's whiteness see Brondo and Baba 2010.
[26] My interview sample is over-represented by salaried persons; however, this was to compensate for my shadowing which was almost exclusively with hourly personnel.

layoff process hourly employees with the highest seniority would populate the remaining shift. Those LDT employees with highest seniority were predominately white males of middle age—one weakness of my data is that I did not collect more specific demographic data on the plant population as a whole. I have addressed and compensated for this weakness through incorporation of regional reports that help articulate more general demographic patterns in both Michigan as well as the local Lansing community in relation to population, income, racial distribution, as well as employment status. These reports include those produced by *The Michigan League for Human Services* (2012), *The Michigan Future Inc. Annual Prosperity Report* (2013), in addition to a City of Lansing Staff Paper entitled *Report of the Lansing Financial Health Team* (2013).

My fieldwork was conducted in two primary phases, the first comprised setting up contacts, meeting with various management, personnel, and employees who would aid me in introductions and orientations. It was during this initial phase that I began collecting training materials, the local plant newsletters, and went on a series of guided tours to become acclimated to the facility. During this first phase I also become familiar with the industry specific acronyms and terminology of the plant. Beginning in March 2009, I conducted extensive shadowing and informal interviews consisting of informal conversations with a range of individuals including: management staff, personnel, hourly workers holding appointed positions, as well as hourly line workers. These events were documented in field notes. The second phase of research began in April 2009, this is when I started conducting my semi-structured interviews using an interview guide. Interviewees were identified using a snowball sampling technique. The interviews focused on their history with GM, the current financial crisis, as well as broad questions in relations to GMS and their knowledge of the system's elements.

During my field work and participant observation I would introduce myself and describe my research interest upon interacting with all employees. Informal conversations occurred in English, and field notes were collected during and following participant observation sessions. The informal conversation topics were refined and revised on an ongoing basis as the project proceeded and were based on emergent themes. Most generally, topics included three main categories: history and experience working with GM, perceptions of GMS, and perceptions of GM's financial crisis. There were numerous potential topics to investigate within the plant—due in part to Lansing's evolution over the last decade and the serious nature of the financial crisis. However, I preferred to keep the focus broad—given the rapid and unpredictable fluctuations in the external environment.

Data Analysis

To interpret my ethnographic data, I utilize content analysis, which relies on the coding of transcripts and field notes in addition to other qualitative data analysis techniques using both computer aided and manual procedures (Fairclough 1995). The coding of data included identifying significant themes—which were marked with a series of codes, which were extracted from the text. From these concepts, categories were formed which were used as the basis for the creation of explanations regarding continuity and change within LDT. In addition, particular themes that stemmed from Briody's published work offered me insight into to particular beliefs and behaviors emergent in my data. Briody's research as summarized in her book, *Transforming Culture,* focuses on both the obstacles and enablers of going from an old way, "directive, authoritarian" to a new way "a collaborative approach" (2010:135). The old way entails an emphasis on "micromanagement, blaming, conflict, individual work, distrust, and quotas whereas, the new way or the articulated "ideal way" would entail a focus on: plant environment,

work force, relationships, and work practices. These concepts of "old" and "new" will be extended and elaborated upon in relation to my analysis as they relate to both evidence of continuity and change.

My process of analysis involved two primary phases. The first phase, as described previously, entailed traditional coding of data into themes comprehensive of emergent categories; however, the second phase of data analysis required analyzing my themes as evidence for continuity and/or change. Each ethnographic theme was interrogated. I questioned how the theme related to and/or offered insight into GMS and/or bankruptcy, as well as how GMS and /or bankruptcy impacted and contributed to the theme. Once I established the relationship between the theme and either of the field level phenomena (GMS/bankruptcy) I began a process of documenting what organizational routines the theme presented evidence for; lastly, once the themes and their corresponding routines were outlined I went through a process of compiling further evidence which would function to demonstrate the manner in which the routines suggested continuity or change. It was during this process that I drew heavily upon both Becker's (2003) construct of routines as well as Scott's (2008) elaboration of what profound institutional change entails. Both Becker (2003) and Scott (2008) served as a reference point and guidepost that helped inventory appropriate evidence of continuity and change from my ethnographic data.

The content analysis, as just described, revealed various themes of significance to understanding processes of continuity and change and LDT, as well as, impacts on organizational routines (understood to serve as the mechanisms of continuity or change). The most salient themes included: (1) the notion of a GM family; (2) pride and identity as an auto workers; (3) fear of loss of material possessions and buying power associated with GM bankruptcy; (4) normalization of "lay-off" processes; (5) partial understanding of GMS; (6) a

perception of a failed promise related to worker empowerment; (7) persistent focus on keeping the line running; (8) explanations of GM's bankruptcy grounded in corporate mismanagement; and (9) outward resentment of foreign cars and foreign automakers. These categories summarize the broadest content areas and represent the most commonly held beliefs as discussed and demonstrated by employees at the Lansing Delta Township plant during data collection. These categories capture the topics that were discussed with greatest frequency during both informal and formal interviews. For a chart summarizing specific routines as they relate to the ethnographic themes see chapter five.

Limitations

Despite the compilation of ethnographic data and strength of the informal and formal interviews, media reports, and archival material that are used throughout this dissertation there are limits to both the data and methods. Foremost, regarding methods, I often reflected that the best approach to understanding processes, meaning, and challenges of work practices would be to engage in those work practices personally. Since data collection, I have thought at length regarding what would have been gained had I assumed an actual position on the line as a temporary worker. The logistics and feasibility of this approach would have presented many challenges however it would have offered me a more robust education in GMS and the opportunity to experience personally the pressure to keep the line moving (an embedded norm within manufacturing). The other strength of embracing a role as a true participant observer would have been the access it afforded me in terms of observing, hearing, and gathering less filtered reflections and explanations—despite unescorted plant access I was still identified as an outsider, employees knew that I was neither a fellow employee nor a member of management. My unrestricted access to the shop floor at LDT was in fact "restricted" based on my status as an

outsider. I was issued a badge that specifically labeled me as a visitor. In a manufacturing facility where work is regimented and fast paced any individual who is not performing such work stands out. I was often self-conscious while standing on the line during observations—my inactivity and fixed position was very conspicuous. In fact, the most rich data collection opportunities stemmed from shadowing individuals on the floor. While shadowing, I tagged along as employees went about their work—this approach afforded me a more authentic experience on the shop floor one highlighted by movement, interaction, and rapidity.

Aside from limits regarding methodology, limits in relation to data stem from the fact that only a subset of my data collection was compiled during recorded interviews. Other data relied on note taking or were grounded in observation sessions. More recorded interviews could have offered even more verbatim data which would have offered further insight into the beliefs, behaviors, and practices of employees at LDT. The last limit that I will mention was the substantial learning curve in relation to understanding the basics of a manufacturing operation, vehicle assembly, and the unique terminology, abbreviations, and jargon. In the early phase of my data collection, I was limited in my understanding of what I was both seeing and hearing because I lacked a baseline literacy in manufacturing and vehicle assembly. In addition, given the primacy that "routines" played in my analysis I would conduct my data collection in a more rigorous manner if given the opportunity. Perhaps I would have selected an a priori subset of the GMS elements for which to intentionally collect evidence of organizational behaviors as opposed to the grounded and emergent process that materialized in the existing research approach.

CHAPTER 5: ORGANIZATIONAL ROUTINES AT LANSING DELTA TOWNSHIP OFFER EVIDENCE OF BOTH CONTINUITY AND CHANGE WITHIN THE WORK PLACE

Introduction

This chapter will present the themes of my ethnographic data identified during 15 months of fieldwork at GM's Lansing Delta Township (LDT) plant. I offer explanation of the manner in which these themes intersect with particular routines at LDT and serve as mechanisms of continuity and/or change within the field. These themes, as they illustrate organizational routines, will be discussed further in chapter six, together with additional secondary data also presented in that chapter, to elucidate the relationship between bankruptcy and GMS and between each of those phenomena and their influence on the institutional field. This analysis will incorporate Scott's (2000) characteristics of profound institutional change[27].

Themes, Routines, and Continuity and/ or Change

The following chart is a high level summary of my ethnographic findings and should be used as a reference during the reading of the data presentation in this chapter and whenever the chart is referenced; the process of data analysis, and my use of both emic and etic categorization schema are described in chapter four. The chart serves as a summarizing illustration of how ethnographic themes were used to establish insight on various organizational routines[28] (inclusive of the roles and functions they fulfill). The left hand column lists the ethnographic

[27]Profound institutional change can include any of the following characteristics: mutli-level, incorporating new rules and governance mechanisms, introducing new logics which legitimate behavior, as well as incorporating new actors, new meanings, and new relations among actors (Scott 2000:24).

[28]Borrowing from Becker (2003) routines are understood to be patterned, persistent, collective, processual and embedded; they are also understood as functioning to coordinate and control, reduce uncertainty, provide stability and embody knowledge. In this respect they are similar to Scott's understanding of institutional logics that serve as carriers of beliefs and practices.

theme, the middle column lists the institutional pillar(s), and the right hand column includes the routines that that theme encompasses.

Table 3: High Level Summary of Ethnographic Findings

Ethnographic Data Themes	Institutional Pillar	LDT Routines
Lean Elements in Use 1. Takt Time (Line Speed) 2. In Process Control & Verification (Error Proofing) 3. Andon (Line Stop)	Regulative & Normative Pillars	1. The assembly line speed and pace of work 2. The use of electronic tools and devices 3. Pulling (not pulling) the Andon cord
Legacy of Mass Production 1. People Involvement 2. Standard Work 3. Business Plan Deployment	Regulative & Normative Pillars	1. Employee participation (lack of participation) in continuous improvement activities on the shop floor 2. Performing (not performing) jobs according to written instructions 3. Use and interaction with BPD boards on the shop floor
Economic Nationalism 1. Buy American Campaign 2. Significance of Auto Name Plates	Normative & Cognitive Pillars	1. Bumper sticker distribution and campaign at LDT 2. Using and sharing GM discounts for vehicle purchases with friends and family 3. Informal rules and parking behavior at LDT
Legitimacy of Autoworking (Pride & Identity) 1. Work Ethic 2. Notions of Exceptionalism	Normative & Cognitive Pillars	1. The practice of employees maintaining small businesses 2. Employees continuing to work well after retirement eligibility 3. Telling stories of Lansing's car building legacy and GM's faith in the workforce

Table 3 (cont'd)

Economic Incentive of Autoworking 1. Wage System 2. Lay off 3. Benefit System	Regulative & Cognitive Pillars	1. Employees accepting fulltime work at Tier 2 wage 2. Employees planning for layoff using past experiences to define possibilities 3. UAW approved concessions in benefit packages
Lansing's GM Family 1. Composition of Work Force 2. Labor Pool	Regulative, Normative, & Cognitive Pillars	1. Celebration of birthdays, anniversaries with dinners and highlights in the plant newsletter 2. Sharing stories of GM family lineage 3. Employees transferring to LDT from outside of Lansing and Michigan

GMS Lean Elements in Use (Error Proofing, Takt Time, and Andon): Continuity & Change in GM Production System

As has been explained previously GMS, GM's lean manufacturing approach, is a departure from previously established manufacturing techniques. The best way to interpret the significance of GMS as an influence impacting and influencing General Motors as well as LDT is to dissect some of its component parts. GM's Global Manufacturing System (GMS) is the product of intentional efforts by GM to document, disseminate, and standardize lean manufacturing techniques throughout their manufacturing facilities world wide. Many of the "elements," as they are called, are better understood as best practices in manufacturing and summarize a concept with attendant practices, requirements, and implementation techniques.

Evaluating the implementation of GMS at LDT is a significant challenge. The difficultly is complex but is grounded in the following: GMS is a defined production system—just because each element entails a definition, purpose, requirements, and implementation techniques does not

mean that each element is implemented in practice on the shop floor. Furthermore, there are pockets of lean knowledge and expertise—even though some individual team members on the shop floor may be unaware of particular elements does not accurately indicate that the element is in use or disuse by the production facility as a whole. Lastly, as in many cases, changes in production process and techniques happen over time, meaning my observations may capture the implementation of an element in mid-stream. As I will illustrate through examples, some concepts grow, mature, and evolve through time (i.e. processual nature of routines see Hirshleifer and Welch 1998). One interesting characteristic of GMS and the plant workforce is the level of effort exerted to train and coach employees on the lean elements which comprise GMS this includes week long class room training.

At one point in my research, I naively judged all the lean elements on a binary scale, either it was practiced perfectly and deserved to be acknowledged or it was not practiced perfectly hence deserved zero credit. As my understanding of this suite of lean elements has progressed, I more readily see them as developing in an evolutionary sense. Overtime, there is adaptation as particular elements offer an adaptive advantage or as particular elements are allowed to flourish because the environment is now suitably hospitable (change in the institutional field). Similarly, other elements offer little to no advantage or may in fact have a negative impact within the workplace context and hence do not proliferate.

One insight regarding a subset of lean elements that comprise GMS is that they are more independent of employee buy-in. A particular set of elements are more germane to the construction and organization of the facility—substantial employee comprehension is not required.

Takt Time. One primary example is Takt Time[29]. Takt Time is used to schedule production. It is a mathematical equation that is used to determine the optimum production rate (line speed) required to meet actual sales demand. All employees at LDT are subject to Takt Time as it dictates the line speed. Takt Time is not an individual choice or decision but rather an equation that informs management regarding the line rate. In effect, the pace of work via the line speed is dictated by Takt time. The pace of work as a routine is something that employees participate in by virtue of carrying out work on the line. Takt time (see Table 4) as a routine fulfills what Becker (2003) would describe as coordination and control of organizational behavior. For this reason, it is associated with the regulative institutional pillar as it defines a new rule related to line speed within the manufacturing plant (Scott 2008).

Error Proofing. A second example of a lean element that employees support by default through their engagement in work at LDT is error proofing (also known as in process control and verification). Error proofing includes mechanical, electronic and visual devices used as a means of process control by detecting out-of-standard (abnormal) conditions before, during, or after occurrence to contain problems within the work area and minimize losses in throughput. One concrete example of this would be a design of a part that only enabled proper installation—meaning the only way in which is would fit would be with proper installation. Many error-proofing devices exist at LDT and are integrated into the technology and tools—this means they exist independent of any one employee or operator. Another example would be torque guns that are programed for particular specifications that prevent inconsistencies. Again, the routine of using power tools and equipment at LDT that have error proofing hard wired into the device is

[29] Takt time is a mathematical computation used to determine the optimum production rate (speed) required to meet actual sales demand (consumption).

not a conscious execution of those lean elements but rather fulfillment of the element is tied to the technology. In process control and verification, as a routine, serves to coordinate and control organizational behaviors within the workplace (Becker 2003). The automated and programmable tools that are used during manufacturing represent a new routine; furthermore, the use of these new tools represent a new rule and/or standard (i.e. regulative pillar) (Scott 2008).

These lean elements and their examples offer illustration of the manner in which LDT upon construction and its doors opening were doing things in a new way, rather a "lean" way—some lean concepts do not require explicit or conscious employee understanding, acceptance, nor buy-in—rather they were constructed and installed during the building of the new facility. During the history of manufacturing for GM and Lansing's GM workforce there were times when line speed was not based on the calculation of Takt Time as well as when error proofing was not integrated into tooling nor part design. The simplistic question of whether or not LDT had implemented GMS or whether or not employees understood or embraced GMS—is not elucidating. Instead GMS and each of its component elements need to be viewed as an influence and force within the work place environment. The technology-mediated elements are some of the easiest examples to cite as being implemented within LDT; however, that is not true across all elements.

Andon. The best example of a technological change that required complementary behavioral change is the use of andon. The andon is a process control system that communicates the need for assistance when out-of-standard conditions occur. Manual, electronic and automatic devices are used to signal, by means of visual and audio alerts, which process is out of standard. At LDT, andon is implemented by means of a cord that hangs across each workstation. Technically speaking, when an operator is unable to finish their standard work within their

designated cycle time or when they observe a quality concern, they are to pull the andon, which then sends a call for help. This call for help signals via visual and auditory clues where on the line the assistance is needed so that they team leader can quickly go to the operator and assist them.

Casual observations of the shop floor at LDT would offer evidence of andon, an observer would see the andon cord, they would hear the music playing when work stations were down (not running) and in need of support, as well as see the flashing lights signifying the need for assistance in particular areas. These sights and sounds are documented in my field notes, I watched as team members pulled the andon and as team leaders came to their assistance. However, it is an understatement to say that the andon is a contested artifact on the shop floor. During the time of my fieldwork management still prioritized the final number of vehicles off the assembly line and the "numbers" were more of a priority than fixing in station and stopping the line for quality concerns. "Downtime," a term that refers to when the line stops because of error, part shortage, injury, etc. is still very much unacceptable. In fact, a former member of LDT management disclosed to me that they remember a time when middle management cut the andon cords in their areas to prevent its use by operators.

The politics and contestation surrounding the andon cord is a good illustration of continuity *in* change (i.e. processual nature of routines see Cohen 1991). In this instance, the lean element of andon was installed during the construction of LDT, the physical technology changed (an andon cord was installed in LDT), the instruction and coaching of employees changed (during employee training team members are instructed on the proper use of andon and training has them practice using andon); however, the routines and behaviors of pulling or not pulling the andon still emphasized no downtime despite the cost and contradiction to GMS and notions of

empowered workers. The behavior of stopping/not stopping the line is a routine that embodies knowledge (Becker 2003) in this instance it embodies previous norms in manufacturing. At its most severe resistance took the form of middle management cutting the cords but even when not cut employees were regularly reprimanded for its use (normative pillar of institutions) (Scott 2008). This is a mess of contradictory messages and priorities—however this is also what *change* looks like, false starts, incomplete execution as well as contradictions. Andon has been implemented at LDT, and every day it is both used and avoided, the simultaneous teaching of andon's proper use during new employee training and the consequence and negative feedback received on the plant floor exemplify the power struggle occurring between actors within the institutional field.[30]

The Legacy of Mass Production: Continuity with Previous Norms in GM Manufacturing

As mentioned, one of the most intriguing questions that I wrestled with during fieldwork was teasing out the contradictions in practice as it related to the production system at LDT and the manner in which it remained consistent with older production systems despite the implementation of GMS, GM's lean manufacturing approach. My current understanding related to particular lean elements is that I was witnessing the messy side of an institutional transformation, a shift from traditional manufacturing processes and priorities to an approach that privileged lean techniques, behaviors, and emphasizes. By "messy" I am referring to the partial implementation, understanding, and acceptance of new beliefs, behaviors, and practices in GM's Lansing Delta Township plant (i.e. context dependence and embeddedness see Clark

[30] A discussion of bankruptcy's impact on GMS is included in chapter 6.

1997). For explanation's sake I will select[31] three lean elements of the GMS system to dissect and present as evidence of continuity with "old" ways grounded in a legacy of mass production techniques. These three examples come from the following lean elements: People Involvement, Standardized Work, and Business Plan Deployment.

People Involvement. As a concept, People Involvement refers to the systems, procedures, practices, and programs that involve all employees as active participants in continuous improvement activities. This concept is a major departure from mass production in which jobs were broken down into their most narrow and specific component by manufacturing experts, and individual production operators were asked to do nothing more than their small piece. This approach was grounded in the belief that expertise by managers was required and beneficial. This contrasts starkly with lean manufacturing techniques and assumptions that emphasize the deep knowledge held by operators related to performing their jobs. This new paradigm is often explained in GM training in reference an inverted pyramid. Whereas in previous eras the operators were the lowest rung on the hierarchical latter that built up to the pinnacle of the "manager" or the "CEO" the inverted pyramid privileges the individual operators as the pinnacle. The explanation given entails the idea that the operator is the individual that is actually adding value to the vehicle from the perspective of the customer. The auxiliary support functions are necessary; however, those groups are not performing what is termed "value added" work. In other words, the customer is more than willing to pay for someone to install a wheel; however, uninterested in paying for someone to stock wheels line side, despite the fact that stocking wheels is required that is not explicitly value added work.

[31] As mentioned there are 33 distinct lean elements within GMS, the elements highlighted in this data presentation are those that I had acquired the most robust understanding of based on my observations and interviews during fieldwork.

The topics of people involvement and its contributions to continuous improvement generated conversations that included discussions of the risks associated with improvements. Field notes capture two employees discussing some issues that they have with GMS they include the following problems:

> *"If you make an improvement to the system then you possibly cut a job, it's somewhat anti-union,"* also *"people are asked to do more with less, and there is an age thing between new guys and old guys, where the old guys might say 'slow it down don't go that fast or we will all have to.'"* In addition, my notes document that these employees seem to think that people involvement *"seems like extra work, we are forced to make suggestions and also forced to work towards eliminating ourselves or our jobs."*

Another informal conversation documented in field notes captures a related sentiment regarding people involvement and the continual elaboration of work tasks and responsibilities:

> *The Team Leader explained that his committee man had said he would ask for a raise for the Team Leaders, he would ask for 3 and accept nothing less than 2, in the end the raise was 50 cents, he said that they deserve more than this, because they keep giving them more jobs to do, this includes some jobs that are quality. He also alluded to the fact that sometimes even with GMS, the team members and team leaders aren't listened to. He cited an example of something that it took him awhile to get someone to fix. He mentioned "Not everyone really cares about GMS to the same extent, some things work others don't."*

The GMS training content which contains language around the "inverted pyramid," "value adder," are meant to introduce employees to the new appreciation held for their knowledge and expertise, yet as the two field note excerpts document requests for participation often felt like added work without added compensation in addition to inadequate follow through to some recommendations and suggestions. Overall, this scripted appreciation of employee input in the training and the new language that was used to communicate these ideas were introducing the individual operator to their new role. Furthermore, in concept they lay the foundation for active participation in problem solving which is integral to the element of people involvement.

The reorientation of the significance of the operator and the privileging of their expert knowledge is meant to foster and create an environment where employees and all team member offer input and that input is welcomed, encouraged, and expected. The underlying goal is that this environment will empower workers to be active participants in process improvement. This concept also is intended to help activate an army of problem solvers and waste eliminators—rather than having solutions and improvement come only from managers, for which there are fewer representatives compared to utilizing each and every operator as a problem solver and source of improvements and suggestions.

This concept of people involvement and active participation was further explained to me in during an interview in the following manner:

> *GMS is a team build strategy for manufacturing and if properly applied and followed it is an advantage to the operator and assembler, unlike the Henry Ford days when you did your job, you shut up and if you got hurt they drag you off and put in another breathing body, you aren't paid to think you are paid to do, GMS gives us some input on the manufacturing process some input on our job—both in terms of quality and in terms of the mechanics of the job. It used to be the engineers would say this is how you do it and if you don't like it then get another job but now they make a point, our JES (Job Element Sheets) are filled in pencil because they are dynamic and there should be improvements and they should be changed and improvement doesn't come from engineering it comes from teams and operators. GMS is finally a system that understands the guy that knows more about installing an emblem is not the designer but the guy that installs 1,143 of them a day. GMS is the first system where that type of input is seen as valuable and employed in the workplace. I think everybody pretty much buys into GMS—but I don't think anyone likes the totality of it, but it is a start.*

The manifestation of this concept of involvement on the shop floor was complex. Foremost, it contradicted two historic beliefs and practices of traditional manufacturing. First, managements behaviors would have to accommodate an empowered and participative employee—this was in contradiction to the authoritarian and hierarchical structure that was most historically

experienced. An example which summarizes the old way is illustrated in the following remark captured while an individual was describing their early years working for GM, they explain events that led up to their being terminated, "*I was terminated because I had come up with a system to make it more efficient and faster in the junk scrap yard, and I had diagramed it out—this was '76 I went in and showed the supervisor my idea, he then told me I was a stupid Mexican, to which I took offense."*

Besides the blatant racism of the supervisor captured in this passage it also highlights the assumed role of operators, which was to do their work as instructed. Another dynamic of "people involvement" that challenged the previous status quo was the manner is which jobs and functions were defined—in particular, the realm of production work versus quality inspection. Historically, production workers would not be motivated nor incentivized to perform quality checks—that was another individual's work, the legacy of this thinking is directly documented in the team leader's reference to having to perform a quality check. As has been described these narrow definitions of work were defended by the union shops and by individual employees. Everyone had a narrow and specific role to play and management and workers alike enforced these roles.

Another informal conversation, captured in field notes includes a conversation I had with a team leader around GMS training:

> *Everyone had training in GMS before they opened the plant, he said they had had training before at Fisher Body, on the flavor of the week, and they always went away. He said it was a mixed bag in terms of effectiveness here. He also said that "sometimes you need the old school way." He doesn't know how to improve the buy-in for the system, some people do it and others don't. I then asked about negative ramifications for not following it and he explained that there aren't that many.*

Significant to this passage is the team leader's assessment that the effectiveness was a mixed bag and that some people do it (GMS) and other don't. Also significant is his reference to previous organizational behaviors and practices, captured in the term "old school way" and his belief that sometimes the old school way is needed. Routines related to People Involvement capture Becker's (2003) notion of coordination and control—in other words these routines help outline what behaviors workers should engage in (i.e. normative pillar) (Scott 2008).

Standardized Work. Another example of a lean element that ran in contradiction to previously embraced norms in manufacturing was that of standardized work. Standardized work as a lean element refers to documented work instructions that clearly specify the most optimal sequential work steps and methods for performing a task, or function, in a repeatable pattern. Standardized work is touted as the baseline for continuous improvement—in order to be able to make improvements to a process requires first understanding and documenting the current state. In older production systems that more commonly functioned using a one person per job approach void of job rotation individuals performed the work in a manner that was most agreeable to them[32]. If they changed their process or approach, in particular if they innovated there was not a team for them to share that innovation with, they were more exclusively the "owner" of that operation. The importance of standardized work, as it enables continuous improvement, was not well understood on the plant floor at LDT. Despite documented instructions specifying work sequence and steps, individuals still were prone to perform work according to their own preference.

Field notes capture the following events observed during participant observations:

[32] The individuality of these jobs was still limited in some respects due to scientific management principles and Taylorism that analyzed work flows in arranged work in manufacturing.

There were parts hanging by the robot cell that were originally going to be used for loading; however, I was told it is everyone but one person's preference to go to the bins and load three parts on their arms and rest these in their place. The TL said that not everyone that does that job would be able to do it that way. In fact, the one man that does it is restricted and puts parts on a trolley that he then lifts from there, the TL said he wouldn't want to have to bend down 400 times a day, but that is this guy's preference. The TL also said that there is so much programming that when something goes wrong it can be a problem if a particular mechanic isn't there. Another hourly employee involved in this conversation expressed that he thinks the robots are slow and add time. I suggested that perhaps the benefit is in quality or safety. The TL made the point that he doesn't know how he would write a SOS or JES for these jobs, which process he would follow?

This vignette and the team leader's confusion regarding which of his operators practices he would capture in the SOS (standard operating sheet) or JES (job element sheet) demonstrates the partial understanding. The question the team leader should be asking if he had had deeper understanding of standard work is, How do I drive consistency between my operators in the conduct of the job? Which practice ensures highest quality, efficiency, safety, etc.?

Another vignette captured in field notes describes the disconnect between using standard work during the training of both team leaders and team members. The Team Leader expressed the following:

The TL describes that when he arrived he didn't have the right keys or the walkie (two way radio), or other important information. Rather than shadowing a TL for 2 weeks then taking over he just takes over. He says that all but two people of his (6 person team) are new to their jobs, he describes that they learned their jobs by learning what the last guy did. He mentions this didn't include reference to the SOS or JES Sheets, this seems to hurt standardization, yet, he said that it would also be hard to create a standard because each person seems to do their own thing. In addition there are many people on restriction so they have to do it differently. His SOS and JES materials were dated 2006 which is when the plant launched.

Standardized work inclusive of minute details such as which hand to grab screws with appeared to challenge the promise of employee empowerment and the privileging of operator expertise. Pursuing the correct channels to update standard work instructions to match what an employee believes is an improvement requires obtaining buy-off from other shifts and support functions such as the quality department and engineering. This complex reality of standard work instructions on the shop floor created challenges for workers' acceptance of this significant lean element.

The variation in what different employees think should be the standard is captured in the following field note excerpt:

> *He (the TL) also commented, that it's harder with so many of the first shift more senior guys, they tend to retain the old school ideas, where as the young people are more flexible and open minded.* He talked also about the fact that sometimes *"when younger people set up a job they don't mind running for things but it's harder for the older guys*. (This refers to the ability of younger workers to move faster and perhaps do more within the designated Takt Time)

During fieldwork a focus on the standard work instructions picked up in the weeks prior to a GMS calibration that would involve GM auditors coming through the plant to assess GMS. Field notes capture a TL who was seeking help to update his SOS sheets in advance of the calibration:

> *The team leader was under the impression that some of his SOS sheets were not accurate. We were in engine dress team 4. We began by fixing the SOS. The TL was new and did not have any prior training or experience as a TL. Overall he seemed overwhelmed and was doing his best. What ended up happening which is only natural is that as you make changes to the SOS, (standard operation sheet) you inevitably create changes that will have to be made for the JES (Job Element Sheet). The hourly employee (a GMS coach) who was helping the TL said that his analogy for how the SOS and JES are related is the SOS is like the table of contents for a job, it will let you know each chapter, but for more information and specifics you need to go to the individual chapters and read more. While we were standing around helping the TL who originally asked for help, another TL explained that they also need help. People seem interested in fixing their stations*

in preparation for the upcoming calibration, no one seems to want to be the one that doesn't have their stuff right.

Similar to the pressure the upcoming calibration had to motivate TL's to work on the shop floor paperwork another important shop floor practice which did help drive the use of the standard work instructions as they were documented were layered process audits, which is a term that summarizes shop floor audits, where a cross section of plant leadership would investigate job performance on the floor this included auditing for personal protective equipment, workplace organization and tidiness, as well as the fulfillment of standard work. The procedure entails a cross functional leadership team going to different areas of the plant and monitoring an operator's completion of their job in reference to the standard work instructions. This document captures step by step and in sequence how every job on the floor should be completed. In many respects compliance to standard work during audits emphasizes another characteristic of GM, that is, how metric driven the organization is, this concept will be further explained as it relates to the element Business Plan Deployment. Standard work as performed or not performed at LDT exemplifies Becker's (2003) notion of routines embodying knowledge—in this respect workers were performing what they understood and comprehended to be their work, this practice relates to the cognitive pillar of institutions (Scott 2008). Employees had existing constructs of work defined based on the legacy of mass production.

Business Plan Deployment (BPD). This element refers to an enterprise-wide target setting process focused on achieving goals and objectives by cascading-down and ascending-up metrics and plans. The use of cascading targets is an element employees are introduced to during Simulated Work Environment (SWE) training; however, there appeared to be only partial comprehension of BPD among individual operators on the floor. Team leaders appeared to have working comprehension of the BPD boards as their jobs required updating the boards, however,

in terms of fulfilling the purpose of ensuring alignment and prioritization of goals this was not completely fulfilled to date.

During an informal conversation that occurred on the shop floor when I was shadowing a Team Leader, my field notes capture the following sentiment:

> *For this TL, he thinks that the different parts of GMS make sense, but there is too much paper work. Sometimes he doesn't see the value in all of it when things are going well. I confirmed that his shop floor paperwork (JES, SOS, and BPD board are filled in and up to date) also his team doesn't mind the sign in sheet to document job rotation. He explained that it's the best way to track problems if something is found.*

Again, the limits of BPD stem in part from historically narrow definitions of work, for individual operators that are removed from personally tracking metrics despite the fact that their work directly contributes to hitting or missing goals and targets. As BPD is manifest on the shop floor via the material artifacts of a tangible status board that lists goals and objectives and color codes status (red, green, yellow) on the shop floor in addition to the new practices of reporting out status based on the board during stand up meetings, the knowledge and significance of the boards varies.

One interviewee summarizes the focus on metrics and BPD by explaining the following:

> *They (GM) care a lot about the metrics. In there organizational development the way they track their success it is either red, yellow, or green, they base their strategy on these three colors and it doesn't make a whole lot of sense to me. And as long as you sit in a meeting and know that red we have a problem yellow working on it and green ok—I don't know how you drive that change? They have counter measures and gap strategy—but how does that relate to us on the floor, we don't give a shit we fill them in so they are correct and all that info then gets filtered and they come up with red yellow or green—I don't know if that is typical but they care but we don't.*

Another vignette highlights the focus on metrics, the individual expresses their view that GM is overly focused on metrics which interferes with real "culture change." They state:

> *And it is the same old song and dance now it is GMS it used to be Quality Network and if you don't stick to the program then it is the program du jour and everybody feels it and it's like oh here we go, it's another dog and pony show. Go up for a little more training but in reality it's meaningless. It's not to change the culture, that's why they do the training, it's to meet the metric, maybe initially, when it first came out it was to change the culture but now it is to meet the metric. And you know how much they spend on it millions of dollars for material development, training, but it's training for a dog and pony show, when you hit the floor you forget about it.*

This passage can be examined along several lines. Foremost, the emphasis on metrics, and the fact that the BPD boards are for the metrics. This is a mutation of what BPD was intended to accomplish. As the SWE demonstrates, the tracking of the goals helps align all employees to the goals and there is active problem solving and brainstorming to accomplish the goals. For example, a typical issue employees have in SWE as the work instructions dictate in round one of the training is something called "operator interference." This term refers to two operators accomplishing work in such close proximity that they tend to run into each other—overall this raises safety concerns as the operators are walking holding power tools and run the risk of colliding. The instances of "operator interference" are tallied during round one and included in the total count of safety issues observed—the team then engages in problem solving to mitigate operator interference and cut down on the number of safety concerns. By round three it is typical for the number of safety concern counted to be cut in half—this reduction comes from employee feedback and suggestions related to rearranging the sequence of the work.

In reality, this active participation in impacting the metrics positively as a team is hardly realized. Instead of a tool which helps align efforts and tracks progress it is more frequently a tool fulfilled by team leaders to appease group leaders who are subject to scrutiny related to the

BPD boards, not in their effectiveness at driving improvement and aligning the organization but rather in that boards can serve as a report card upon which teams, groups, areas, and plants can be graded. In fact, during fieldwork was privileged to the pre-work that was undertaken by plant staff as they prepared for the plant's "calibration." This was a process whereby GM personnel from outside LDT would come to visit and assess the plant. The calibration would result in scores according to GMS elements. A workplace that embraced continuous improvement would be open to accurate feedback and instruction for improvement. Instead there was tremendous effort to update the artifacts of GMS on the floor, which included updating BPD boards, countermeasure sheets, workplace organization standards such as taping floor markings to show where shop floor content should be kept—using color coded tape and specifying where all materials on the shop floor should be kept, typically associated with "5S". "Five S" (or "5S") is a popular activity related to lean manufacturing and refers to the process of sorting, setting in order, shining, standardizing, and sustaining. These terms summarize activities that correspond to the steps for accomplishing work place organization.

The phrase I readily heard to summarize the shop floor activities in preparation for the calibration were *"We're putting lipstick on the pig."* These details are not intended to critique anyone—rather they offer illustration of the challenge and difficulty of transitioning from an old way to a new way. In this instance, the transformation entailed a shift from an organization that audits, counts, and ranks almost everything to an organization attempting to embrace continuous improvement through the cascading of goals and the tracking of metrics as a strategy of visual management and employee empowerment. These two examples, both standardized work and BPD, offer illustrations of manner in which each lean element and the concepts it entailed were either supported or challenged by the existing institutional field. What is clear is that the various

actors within the field were responding to their own motivations, legacies, and institutional forces and the efforts were occurring within a context and they were encountering existing organizational routines. The limited level of participation related to the BPD boards is another example of embodied knowledge (Becker 2003) in that the new routines contradicted previously established constructs defining work (Scott 2008) within the manufacturing environment.

Economic Nationalism: Continuity with Previous Eras when American Nameplate Meant American Built

The theme of economic nationalism, as will be outlined, is significant to the phenomena of GMS and GM's bankruptcy because it helps elucidate predominant logics and meanings within the institutional field that were persistent through time. As the data will show feelings of nationalism and defensiveness of American built vehicles[33] functioned to guard historic patterns of employment in the auto industry as well as functioned to influence and legitimate behavior, in this case was what an acceptable versus unacceptable car to drive (i.e. distributed see Simon 1992). More specifically, routines were observed as they related to using and sharing GM vehicle discounts with friends and family to promote the sales of GM vehicles. The Delta Daily, the LDT plant newsletter would often highlight when an employee contributed to a vehicle sale—it functions as a public display of endorsement and approval. Furthermore, the behaviors demonstrate the promotion of locally built LDT vehicles in the community and endorsement of their quality and value. Another behavioral routine that demonstrates this institutional logic that will be described entails the informal policing of the parking lot and rules related to parking.

Auto Name Plates. In the parking lot of LDT, I rarely observed foreign cars; on the occasion I did observe a foreign car it was typically parked at a noticeable distance from other vehicles—as if to say, "I know I don't belong." There are also stories and rumors of foreign cars

[33] This refers to American built vehicles by American owned firms.

being intentionally damaged when parked in the lot, one story I was told included someone "keying" a car—essentially using their key to scratch a line in the side of another, I believe this story to be true; however if the motive was based on the car being foreign or not is unknowable.

On several occasions during my fieldwork at LDT, GM employees asked me what kind of car I drove, my response, "a Jeep" always felt as if I had passed some type of test. Pragmatically, I felt fortunate to drive a Jeep because, although it was not a GM car, at least it was an American brand. This emphasis is also reinforced by a sign that is posted at the local union hall just as you enter the property, stating that that only North American vehicles may park in the lot surrounding the building and that cars in violation will be towed. In relation to this sign, I was told by a Michigan State University faculty person, also doing a project on GM, and having been invited to visit the hall that she felt apprehensive about parking her Honda in the union hall lot so she parked on the street. Although this story is anecdotal, it demonstrates the tangible and real significance of owning and driving an American car in a city that is home to two different GM assembly plants.

These sentiments were captured in a bumper sticker campaign that occurred while I was conducting my fieldwork, the slogan on the stickers that were circulated at LDT read "What You Drive Drives America!" I was the recipient of this bumper sticker myself as were many others at LDT that rallied around the notion that American cars play a crucial role in the American economy—a rational that was shared by the backers of the auto loans in pursuit of saving the American automobile Industry. Another bumper sticker that I observed while conducting fieldwork at LDT read, "Out of a job yet? Keep buying foreign." A local Michigan newspaper, *The Macomb Daily*, featured an article on this bumper sticker in December of 2008 and reported:

> [That]…a trio of Macomb County Ford factory workers reignited their 2-year-old effort in selling bumper magnets with the phrase, "Out of a Job Yet? Keep Buying

> Foreign." The campaigns are fueled by some of the frustration that grew out of the recent controversial wrangling in Washington D.C. over the auto industry's request for billions of dollars in federal-government loans in order to survive over the next few months. President Bush finally approved the $17.4 billion bailout last week for General Motors Corp. and Chrysler Corp. "People's emotions are running high after the hearings in Washington," said Brian Pannebecker, who works at the Ford Axle Plant in Sterling Heights. "People are ticked off about it. They're looking to vent their anger. Instead of keying a foreign car or slashing the tires, this is a constructive way to vent your anger or frustration. Put your frustration on your rear bumper. It gets the message out to other people who don't give it much thought. It really makes a difference what you drive.

This sentiment is both common and narrowly interpreted. As the catchphrase articulates, foreign cars are presented as the enemy and antagonist.

How does an American nameplate signify and represent an effort to continue a pattern of employment that has been present in a community for generations? For local Lansing autoworkers the purchase of a GM vehicle demonstrates a commitment to the local labor force as participants in the regional, state, and national economy. Furthermore, the purchase of a non-GM vehicle, if it is still one of the Big Three, supports the broader UAW family composed of brother and sister union members. This "economic nationalism" is the common explanation that is told to members, and functions as the foundation and rationale for buying American (Frank 1999). Essentially, the purchase of a GM or American nameplate supports family in either a literal or figurative sense and contributes to feelings of honor and pride. Furthermore, to buy American is also a demonstration of the trust that employees have in the quality and value of the product. I remember one instance, in particular, when an individual proudly told me that he and his wife, also an employee at LDT, had purchased a new GMC Acadia—he described the pride he felt in owning the car that he had helped produce. I also remembered that his owning a car he

built was a testament and endorsement for the production facility seeing as he was acutely aware of the processes, standards, and quality.

There is a tendency to equate a company's "nationality" with its vehicles despite where they may actually be made. This works in two ways; first, foreign automakers that manufacture vehicles on American soil—in some instances using union labor—are seldom recognized. Similarly, vehicles that are produced outside of the US by American companies are mostly perceived and treated as American. This contradiction highlights the symbolic power contained within nameplates. The bumper sticker campaigns and efforts I documented during fieldwork to circulate messages such as "What you drive, drives America" and "Out of a job yet? Keep buying foreign?" are significant because they represent several cultural cognitive beliefs and processes that demonstrate the institutionalization of ideas surrounding American made. This theme and its associated routines (see Table 4) suggest that the parking behaviors and the bumper sticker campaign were serving to reduce uncertainty (Becker 2003) in an unstable time and reinforce previously established norms (Scott 2008) related to American nameplates in an auto town.

Buy American. Anti-foreign rhetoric as it is being spoken or posted by American autoworkers was occurring simultaneously to the company's bankruptcy in a town that has historically relied upon jobs in the auto industry. The timing and geographic context are inseparable from the message and its local audience. Overall, despite knowledge of the global nature of the industry and the ability to articulate some of the factors that contributed to GM's bankruptcy there was significant power in narrow definitions of American made. I argue that these ideas were part and parcel of an institutionalized cultural framework that helped foster feelings of stability. Through both explicit circulation of these ideas through bumper stickers and

implicit circulation of these ideas through owning and driving a GM or American nameplate the workforce was promoting a concept that helped solidify group cohesion and foster feelings of stability.

In Lansing efforts to promote buying American have become institutionalized and are evidenced in the practices, logics, and ideas of autoworkers. Autoworkers are asserting their agency as actors and attempting to affect the social world and their efforts are readily seen in the "symbolic systems, relational systems, routines, and artifacts" surrounding life and work in Lansing (Scott 2008: 79). When autoworkers beliefs and practices are viewed as "carriers" of an institutionalized effort to buy American the behaviors and events transform into a robust social structure with significant power and influence in Lansing, MI. Furthermore, Frank (1999:178) offers an explanation of why the Buy American campaign and nationalism became an enticing movement. He argues that concessions experienced in the union and changes in the industry overall created anger—the anger was directed not at UAW leadership or American corporations but instead at foreign people, imports, and cars. However, the American automobile industry does not stop at national boarders—automobile production is a global enterprise and national boundaries are not productive places to establish lines of demarcation of "us" versus "them." Nonetheless, despite dramatic change in the industry and far greater complexity in the global market place simplified and historic "us" versus "them" mentalities persist through routines such as promoting sales of GM cars through the sharing of GM discounts with friends and family and the informal rules shaping parking behavior in the LDT parking lot.

Social Legitimacy of Auto Working (Pride & Identity): Continuity in Meaning and Logics

This theme is significant as it relates to GMS because it was so pervasive and persistent that even in the face of profound change such as the new labor agreements and the incorporation

of GMS as the production process, employees interpreted these events through a lens which promoted the pride and identity that they have as autoworkers (i.e. path dependence see Levitt and March 1988). Whereas it could be possible to interpret the implementation of a new production system as evidence of prior shortcomings that was not the case. As will be demonstrated, LDT employees readily interpreted GM's decision to build new plants in Lansing using GMS as evidence of their work ethic and exceptionalism. Despite the changes in GM's Lansing family as well as changes in the economic stability of auto working both forces that could undermine notions of pride and identity as autoworkers—instead both remained resilient. Pride and identity as autoworkers among LDT employees was palpable. This concept is very similar and related to the idea of Lansing's GM family that will also be presented.

Exceptionalism. There is a pervasive sense of heritage and identity as an auto making town in Lansing, this is carried forward in time through stories the workforce shares that documents its role and participation in car building in Lansing. Furthermore, during fieldwork it was not infrequent to hear explanations of Lansing's car building expertise as the rationale for why GM chose to continue auto making in Lansing. Individuals I interviewed spoke about Lansing's heritage as automakers and truly purported capability that they believed was irreplaceable—an exceptionalism that was exclusive to Lansing. In fact, the LDT mission statement speaks to this history and identity, it states, "*Building on our heritage, we commit to building the world's finest vehicles in an environment that supports and empowers our team members. LDT Mission Statement -- April 28, 2004"* (GM Heritage Center).

This history and relationship between GM and Lansing and the decision to build LDT was discussed at length by one of my interviewee's they explain the following:

> *But once Olds was shut down, we shut down a shift, then a line, there was concern about what will happen to the rest of us, and miraculously through that*

> *was the decision to build a new plant out there (LDT), it is a lot different to know your plant is closing or your plant is closing and there is somewhere to go. But working with Mayor Hollister and the Blue Ribbon Committee it was quite an experience—we went into the details this is good for Lansing and the communities. And we worked with groups that normally don't see eye to eye, like the Chamber of Commerce. But we were all involved for the common good of Lansing and the surrounding communities and I wish we would go back to that. So as Fisher body lost work and slowed—there was a ground breaking in Delta Township and people thought this isn't so bad.*

This passage highlights the unique relationship that the community had with auto work. The joint effort is described as is the fact that even with the closing of Oldsmobile which was a sad and emotional event, there was hope grounded in the construction of the new plant. This offers further evidence of the significance of LDT, it was the promise of the future of auto working in for Local 602.This individual further reflects on GM's decisions saying, "*And how odd, not odd, but GM how much confidence did they have that they would build the two newest manufacturing plants in North America in Lansing."* It is exactly these elements of Lansing's history with GM that helped foster ideas of exceptionalism and permanence—unlike numerous other plant closings being experienced in neighboring towns like Flint, MI, Lansing had "won the lottery" not just once but twice, Lansing had both LDT and LGR in its community. Furthermore, a specific behavioral routine in this case could be the continued seeking of jobs in the auto industry by bright, motivated young people leaving high school, including family members of current auto workers, taking into account the need of the industry to become more diverse. Despite the two tier wage system in the UAW contract and uncertainty in auto making, the auto industry was socially legitimated by workers and the community as a place for young people to vest their job seeking. Furthermore, this could have a beneficial effect for the industry vs. their desertion of this industry as has happened in some cases (e.g., truck driving, welding). The impact on GMS is that state of the art technology continues to have young people available to work and learn at

its disposal going into the future as older people become less interested in the new environment of the plants and retire.

As mentioned, the common explanation of why GM would have two manufacturing facilities in Lansing is summarized in the following statement:

> *I think one of the reasons GM built the Cadillac plant* (LGR) *and the Delta Plant* (LDT) *was because of the remarkable workforce and work ethic and because of the remarkable relationship that we have with General Motors. Now have we had bumps yeah, but, keep in mind when we were still at Fisher Body, GM put together what was called a shelf agreement of what it would be like out there. And imagine, sitting at a table trying to negotiate something that was not there. The agreement was that we would work with the corporation to continue the history of what we had done with quality but take it to the next level and become more efficient and effective."*

This "shelf agreement" is a reference to the agreement as previously described that laid the foundation between GM and the local UAW as it related to the new production system, GMS. Again, this appears as evidence of GM's trust and endorsement of Lansing and adds greater support to the workforce's beliefs in their historic ability as automakers—a fact that bolsters and reinforces their sense of pride.

This finding related to notions of exceptionalism bolstered by levels of pride and identity that workers experienced at LDT and as members of the Lansing community. This concept is significant in relation to the manner in which GM's bankruptcy was experienced locally. If you will recall the efforts previously described in the early 90s by the Blue Ribbon Committee. Those efforts were not only successful but ushered in dramatic influences. The Blue Ribbon Committee's efforts were responsible for billboards on local highways that advertised the slogan "Lansing Works." There was a radio spot that played a similarly themed jingle, and regional actors including staff from the Mayor's Office, members of the Chamber of Commerce, as well as faculty at Michigan State University all rallied around the ability of Lansing to meet whatever

need GM required so long as it ensured GM's production in the area. These efforts and their effectiveness in securing vehicle production in Lansing were part of recent history for employees and no doubt functioned as reference points that helped individuals filter and buffer the threats bankruptcy entailed—in fact, they are referenced above in relation to the notion of exceptionalism. Overall these events contributed to the shared belief that the workforce at LDT was in fact exceptional and offered a level of confidence during GM's bankruptcy. However, it was exactly what this pride and identity are rooted in that was threatened by bankruptcy—the notion of job loss in the auto industry entailed loss of that which allowed individuals to define themselves as hard-working and industrious—characteristics for which they felt proud—this will be further discussed in chapter seven.

Also, my field notes capture plentiful references to what losing a job at GM as an auto worker would mean. One conversation in particular stands out and captures the common reference to both material possessions and providing for families. I was told by a middle aged man who had over 15 years with GM that losing his job at GM would mean losing his cabin in Northern Michigan and most likely threaten his ability to put his daughter through college. For him, the fear was not just job loss but the loss of a job that he knew based on his background and education was irreplaceable. A common theme in the informal discussions I shared with GM employees about their fears related to GM's bankruptcy was their recognition that their current positions were mostly irreplaceable outside the auto industry. For them, being an auto worker was synonymous with a lifestyle and capacity to provide for themselves and their families. Furthermore, for many who began working for GM since high school, they had grown up and matured with GM. For many GM was their singular employer and it was challenging to think of themselves independent of their work in the auto industry. Their lives, lifestyles, and financial

responsibilities were predicated on this employment and a threat to the work was a simultaneous threat to a very personal foundation, sense of self, and even image within the community. The routines (see Table 4) related to this theme of exceptionalism demonstrate behaviors which were functioning to offer stability (Becker 2003) to this work force during an insecure time. Stories of Lansing's auto making legacy and exceptionalism helped bolster and promote their sense of identity (i.e. cognitive pillar Scott 2008).

Work Ethic. In addition, as has already been explained, the LDT workforce often expressed their belief that they were a superior workforce. Two distinct routines help demonstrate this construct as it takes form in behaviors; first, Lansing's work ethic is evidenced in the practice of maintaining employment for GM well beyond retirement eligibility—it was common to learn of employees having 30 plus years of seniority with GM. Second, it was very common to learn that employees at LDT also maintained a small business (or secondary source of income) in addition to their work at LDT. During informal interviews I learned of employees maintain work in the following businesses: interior painting, accounting, real estate, farming, and auto repair. My field notes capture plentiful references to both Lansing's history as an auto town in addition to individuals' reference to their family background with GM. It was very common upon interacting with someone that they share with me, unsolicited, the number of years they had worked for GM as well as mention of family members that also worked for GM. The Lansing workforce had singular rights to its role and history of Oldsmobile in Lansing -- a piece of history that promoted a sense of pride, identity, and legitimacy[34].

One conversation with an operator captured in my field notes documents his sentiment regarding the Lansing workforce:

[34] By legitimacy, I refer to the community endorsement and approval of seeking work in the auto industry. Evidenced in routines such as referrals and the work of the Blue Ribbon Committee.

He thinks that the work force in Lansing is exceptional, that it is a special group of workers. He came from Oldsmobile, not Fisher-Body, but both of these would fall under Lansing Car Assembly. In relation to the Lansing workforce, he thinks GM the corporation thought that they could use the high quality and distribute it, he thinks they spread it out. "Although you still have a lot of that same attitude." With this comment the operator added that he thought, "even the Delphi people who joined LDT just adopt the way it is out of self-preservation, you do what is the new way in this plant with this work force. At LDT the Lansing families are still present." In relation to work-ethic, he thinks the Fisher-body people just have a great work ethic, and that Delphi, maybe not as much, he relates his personal work ethic with his upbringing on a farm.

Another conversation captured in field notes documents an operators comments regarding the Lansing workforce. In her mind, even in the face of the stress they were experiencing, they were still working hard:

Related to morale, she reported that she thought the morale was pretty good, because people are feeling like there isn't anything they can do and they should just not think about it and keep working. She commented on the fact that people are still paying attention to quality problems and fixing them. "It's not like, oh well screw it we have nothing to lose." Hard working was a term she used to describe the workforce in Lansing, "So even if they are stressed, they are still working hard."

Similar to notions of exceptionalism, during the stressful time of bankruptcy the LDT workforce continued to "work hard" and demonstrate through their behaviors their work ethic, these practices functioned to reduce uncertainty (Becker 2003) during a time of instability. Furthermore, through their behaviors and stories they were promoting existing constructs (i.e. cognitive pillar Scott 2008) which were foundational to their identities as auto workers. This theme of "Social Legitimacy of Auto working" also ties directly to GMS—in that the LDT's work ethic and exceptionalism are understood by the workforce as contributing to GM selecting Lansing to be the location to debut its lean production system in its newest North American plants (LGRA and LDT).

Economic Incentive of Auto Working: Continuity & Change in Economic Stability of Auto Working

This section draws attention to changes in the economic stability of auto working, some of these changes preceded bankruptcy. The significance of this theme as it relates to both GMS and bankruptcy is that despite changes in the economic incentive of auto working, as well as changes to the production process—there was acceptance of change, grounded in historic logics relating to economic opportunity in auto work (this theme is primarily a focus on hourly perspectives). For example, the earning potential for tier-two employees was much less than their traditional counterparts, as they were making approximately half of the traditional employees' 28 dollar an hour pay (Green and Naughton 2008). There are three main topics within this subject of economic incentives and auto working—first, as mentioned, the two tier wage system; second, layoffs; and third, diminished worker benefits. The following paragraphs discuss each of these topics in turn. Overall, as has been addressed previously, employment in the auto industry especially in Michigan has historically been assessed as a secure means to a solid middle class livelihood. For many individuals, they followed in the footsteps of their fathers and became autoworkers after high school.

Two Tier Wage System. One of the conditions of the government-sponsored loans was an all-in labor cost that was competitive. This was achieved through the use of a two-tier wage system. The language surrounding a two-tier wage system already existed in the contracts, but the loan terms initiated more reliance on the two-tier system in order to achieve competitive labor costs. In practice, the two-tier wage system was experienced as unfair on the shop floor. During observation on the shop floor, while taking notes on the system of job rotation whereby all the members of the team rotated at particular intervals (i.e., each team member did each of the jobs for a period of time) one of the team members confided to me how unfair he thought the

two-tier system was. "*We all literally do the same work,"* and it was hard on him knowing that the other team members made almost twice as much per hour.

During an interview, another respondent explained the following in reference to tier-two employees:

> *We have called back all of our Tier 2 people, the only people that can bump Tier 2 are laid off local regional area hires—a traditional person. But we have called back all tier 2 and we have made an agreement to call back all of them on a temporary basis. There are 140 Tier 2, there is no one left to bump them we have picked up all the traditional employees who can bump them. …The Tier 2's are getting a pretty raw deal and the answer would be go get another job, but if we had 100 more Tier 2 positions we would probably have 5000 people apply.*

The existence of the two-tier employees exposes broad economic and employment realities—even at half the rate of a traditional employee people are still applying and filling the positions (the routine of seeking work in the auto industry). Furthermore, as was previously hoped for and partially realized in the most recent UAW (2016) contract, the two tier employees did see an increase in their compensation as well as a "ladder" system which over the course of 8 years slowly increases their pay until they are level with traditional employees. This dynamic of a two-tier wage system presents a delay to traditional wages, yet individuals are still signing up to work in the auto industry. Interestingly, the two-tier system also distracts from the fact that compensation for traditional employees has remained stagnant for nearly ten years. Stagnant wages for traditional employees and the persistence of the two-tier wage system are two primary examples of the changing economic stability of auto working. Nonetheless, both tier two and traditional employees have earning potential above other similarly skilled workers—hence it remains comparatively lucrative reflecting to a certain extent historic differentials.

Layoffs. Interestingly, even layoffs at LDT were experienced in a unique manner, routines related to layoffs entailed employees sharing stories of past layoffs during which they

received sub pay and unemployment and treating the time like a partially paid vacation or an opportunity to finish house projects. LDT is the newest GM assembly plant in North America and as such employees remained hopeful during bankruptcy. This hope stemmed from confidence that if GM survived they would be producing cars at LDT—the new building with its state-of-the-art technology, flexibility, and capacity made employees feel more secure about the future compared to other locations. One employee describes this sentiment by stating:

> *If anyplace in the country is to have some job security it is LDT, we have weathered the perfect storm, pre and post bankruptcy. We are an island of hope in a sea of despair. We are ok. And now we have more overtime than we can understand, that has all happened in one year. We went from fear, uncertainty and bankruptcy with concessions and we are coming out of it now.*

While GM was leading up to bankruptcy the LDT plant was down to a 1 shift operation, but they were still producing cars. In fact, the day GM declared bankruptcy I was at LDT, the line was moving and they were producing cars—the mood was somber yet the line was running. The day that GM declared bankruptcy -- a historic and unprecedented event -- was locally coupled with a familiar routine—that was the production of cars. Again, these were the experiences that despite true and profound insecurity for GM as a manufacturer, were being buffered and filtered for local actors. I didn't know what to expect in terms of people's reactions to GM's announcement of bankruptcy; however, what I was struck by was the manner in which the facility evinced "The show must go on" characteristics. For them there was work to be done and the employees of LDT despite low morale were performing their work roles.

LDT's newness, technology, and history did assuage some fears. Furthermore, people entertained and expressed the idea that even if GM was not producing cars at LDT some company would be. This notion was supported by employee knowledge of the capital investment in LDT—the facility is not something that could be easily moved nor recreated. Lastly, layoffs

were a somewhat normal process for union employees and layoffs were often temporary and corresponded with the ebb and flow of the number of shifts. Again, in LDT's recent history they had experienced layoffs as the new factory was being constructed. It was typical for employees to reference their past experiences with layoffs as they discussed LDT and GM's uncertain future. I was most struck by the fact that the topic of layoff was often couched in the positives experiences that layoff enabled, for example, people spoke about finishing house projects, other odd jobs or forms of employment they could participate in while on layoff, or lastly people made reference to the fact that layoff would be a break, somewhat like a partially paid vacation. This perception of layoff as a normal occurrence was very surprising to me, as my life experience and popular perceptions had taught me that layoffs were negative and ushered in serious economic consequences. Clearly GM's bankruptcy was unchartered territory; however, layoffs at GM were not uncharted and individuals normalized the unknown future by referencing experiences that they had previously. One young employee stated the following in relation to this dynamic: *"With subpay and unemployment it equals roughly 80% of regular pay. But another change is that they are forcing us to take time off in December."* As is described in this quote, LDT workers were eligible for unemployment and subpay, as this individual explains it equals almost 80% of their normal pay. Subpay, was not something I was familiar with and it is not something that individuals outside this industry can typically rely on. This example demonstrated the manner in which the current events related to GM's bankruptcy were being filtered through and understood through particular institutional meanings, logics, and histories. The experiences and facts that employees were referencing in the face of grave uncertainty were helping them normalize the unprecedented through reference to previous experiences. Again, this is a prime example of continuity *in* change, bankruptcy had never been experienced (change) but

unemployment had been (continuity with previous logics, meanings), and those experiences were used to filter impressions and understandings of bankruptcy.

Benefits. Lastly, autoworkers have experienced degradation in their benefits (however base pay, health care and pensions were unchanged—I argue maintaining stability in these categories made the concessions tolerable). Some of these concessions were made as part of the loan terms, as GM was appealing to the US government. However, with an emphasis on the process of continuity *in* change, it is important that even though there were changes in the expansion and use of two-tier employees, a suspension in their cost of living adjustments, and limits placed on overtime some things remained the same, that is the bulk of the tier one compensation structure. As the UAW explained in a letter issued to its members, "*For our active members these tentative changes mean no loss in your base hourly pay, no reduction in your healthcare, and no reduction in pensions*" (May 2009 A message to UAW Members at GM). This arrangement seems to confirm notions put forth by LDT employees, where they found comfort and confidence in the fact that their weekly hourly pay would remain the same, in addition to their access to healthcare and pensions. Another interviewee stated the following, *"Lansing is unique, because it kind of avoided a lot, the plant didn't close but with the economy we had to let 63 salaried team members go and 1500 hourly team members. That was one of the hardest things we had to do, it was the overall economy."* Ideas regarding Lansing's uniqueness are hard to deny, rather than experience plant closures Lansing boasts two active GM manufacturing plants—a reality that helps foster confidence and pride in the local workforce. Furthermore, many of the hourly workers who were let go during bankruptcy were brought back as GM reestablished it's second and third shift at GM. Most interesting is that layoffs were directly related to bankruptcy, yet individual employees at LDT interpreted through a less

intimidating lens, equating them to previous experiences referencing subpay and the house projects they would be able to complete with time off. What was a different experience that deviated from GM norms was the bulk severance of members of management. This was not an experience that was easily interpreted in reference to past experiences, instead it carried with it a more mainstream interpretation—that is fear, insecurity, economic repercussions, and the potential of long term unemployment grounded in the economic recession.

Despite confidence employees were able to draw from concentrating on how state of the art LDT was or frame potential unemployment through previous experience, they also expressed some concern regarding all the changes via restructuring as well as savvy views regarding the global nature of the auto industry and economics. Field notes capture the following sentiment made by an operator in reference to GM's restructuring:

> *When he talked about all of the changes that GM is facing he said that he is stressed about it. He said he normally only sleeps 4 hours but lately he has been sleeping even less, the economic concerns are keeping him awake. He said that he could never have imagined this, he also referenced when the last Oldsmobile was made, and how it was very sad for everyone. He then talked about the fact that they are discontinuing the Pontiac.*

This vignette includes an number of significance characteristics, admitted economic concerns, disbelief and reference to a past GM event -- the ending of Oldsmobile. Again, this reflection demonstrates this individuals reliance on the past (i.e., the end of Oldsmobile) to help interpret the current changes.

Another employee's view regarding GM's economic standing is documented in field notes:

> *The employee said that he thinks the banks collapsing brought a change in the industry sooner than he thought it would have happened otherwise. Then he said he thinks that the corporation has made the labor very lean, but they are still not that lean. He then spoke about how all the people he sees walking around, and*

not doing much. His comments centered on his idea that they (Corporate GM) should be leaner too.

This line of reasoning will be discussed further in chapter 7 as one potential consequence of GM's bankruptcy that might propel GM's lean efforts.

The theme of "Economic Incentive of Auto working" as outlined in reference to the changing wage system, interpretations of layoff, and changing benefit system demonstrate the manner in which organizational routines were functioning to reduce uncertainty and embody knowledge (Becker 2003). Acceptance of tier two wages, framing of layoff in reference to past experience, and a benefit system which maintained base hourly pay for traditional employees were organizational behaviors that were supported by previously established constructs and rules regarding the economic incentive of auto work (regulative and cognitive pillars) (Scott 2008). This theme also relates to GMS in that GMS as a lean system promised to eliminate waste, improve efficiency, and enhance quality all factors which would help GM during its turnaround. In fact, the continuation of GM was requisite to workers continuing to find employment in the auto industry in Lansing.

Lansing's GM "family": Change in Actors and Relations

Composition of Workforce. Lansing's GM family as a theme is significant to discussions of GMS based on the previously covered content that describes the role of collaboration between operators and management as foundational to implementing and supporting lean manufacturing. As has been referenced, the notion of family at LDT is multifaceted; however, there are two primary components. First, family in its literal sense -- it is relatively common for individuals to be second or third generation autoworkers and to have blood relatives also employed by GM. The second sense of family relates to notions of camaraderie grounded in shared employment, union membership, and regional identity. This

notion of GM family is promoted through various routines, this includes family like celebrations of birthdays and work anniversaries—these events are also frequently highlighted in the plant newsletter the Delta Daily. The various components of what I refer to as GM family are all interwoven and reinforcing of each other. There are many tangible ramifications of this sense of family that I will describe—but first, I will offer the following vignette to flesh out this concept. One interviewee explains the following:

> *I'm 3rd generation, my grandfather worked in the plant I worked at, my father worked in paint repair on the chassis side and I learned from the opportunities that my father had and my grandfather had of what it meant and what it means to work at General Motors because they are known for their wages and their benefits and that type of thing and the union is the one that had to negotiate that for them. It was nothing that was given to us. So I learned at an early age about those benefits working for GM which opens up opportunities for me and my family.*

For many GM employees with a family history of employment for the automaker, GM played a significant role in these individuals' lives—employment with GM garnered a level of economic stability. As this individual recounts in their reference to what it means to work for GM, they highlight wages and benefits. Furthermore, this passage also highlights the process whereby observation and knowledge of family members' careers allows them to glean an understanding of what they too will be able to accomplish through employment as an autoworker.

The notion of GM family was typically highlighted by individuals as they described their work history. Field notes capture the manner in which one employee described both her personal history with GM as well as that of her family's history with GM.

> *She described that she was a single mom. She has been in Fisher-Body, another plant, and LGR, before coming to LDT. She added that she had lots of family in GM, both of her parents worked for GM and a brother.*

Another common practice within LDT was the very familial practice of celebrating birthdays and/ or retirements with lunches or dinners as a group. Field notes capture my description of attending one such retirement lunch:

> *Today I also got to participate in a really nice lunch. The lunch was made in honor of someone who was retiring. They brought in all sorts of food, the spread included, a spiral ham, fried turkey, potatoes, cranberry sauce, veggies and dip, green bean casserole, stuffing, desserts, and soda. The woman that made most of the food is a material deliverer and was very welcoming.*

Ideas of family also were reinforced through union rhetoric which refers to other union members as brothers and sisters. Lastly, as is presented in the documentary film *Second Shift: From Crisis to Collaboration*, GM is a community member in Lansing of utmost importance for the region. The documentary tells the story of a regional effort that was pursued to keep GM in Lansing. This effort was undertaken by the Blue Ribbon Commission—a joint task force comprised of members of the Mayor's Office, the Chamber of Commerce, Michigan State University and others. Overall, atypical partnerships were forged because keeping GM in Lansing was a significant enough priority that it outweighed the differences and priorities of these regional actors. The slogan that was used to energize the effort was "Lansing Works: Keeping GM." This effort to persuade GM to stay in Lansing was spearheaded by the then Lansing Mayor David Hollister and it offers plentiful examples of the historic relationship and significance between GM and the region.

Just as individuals were keenly aware of the advantages of becoming part of the GM family through employment, so too were community and civic leaders aware of the economic impact that losing GM would take on the region. That is why in the 1990s with the threat of GM pulling out of the area the Blue Ribbon Committee pursued efforts to document the economic impact of GM's departure as well as documenting its impact if it were to be maintained. The

Blue Ribbon Committee then worked to do everything in its power to demonstrate to GM that whatever their need or requirement they had for a new production facility, Lansing was willing and able to rise to the challenge. The Blue Ribbon Committee and the Mayor's Office even pursued infrastructural improvements in the highway system surrounding GM's Lansing Grand River Plant prior to a formal agreement by GM to stay. This action, in addition to many others were an intentional effort to "court" GM and demonstrate Lansing's agreeability and desire.

Labor Pool. As these details reveal, GM in Lansing was a significant regional and community level actor which impacted and influenced individuals, families, and even the Lansing community as a whole. Returning to the multifaceted notion of Lansing's "GM family" two examples of actors and interactions within the institutional field deserve explicit attention. First, LDT following GM's bankruptcy experienced an influx of "transplants" from other now shuttered GM facilities. These transplants (GM workers who transferred from other locations) came from areas both outside of Lansing as well as outside of the State of Michigan. One interviewee provided the following list of locations and I am sure there are mor: *"We have people from Tennessee, Grand Rapids, LGR, we just picked up some from Pontiac Assembly and Lake Orion, and Flint, and Wentzville, and Shreveport and Livonian."* Compared with the historically tightknit local workforce characterized by its shared history. the workforce was becoming populated with individuals from various backgrounds, work experiences, and histories within GM. In particular, it is useful to highlight the dynamics of workers coming from shuttered facilities—unlike Lansing's GM manufacturing history which maintained a heartbeat even if weak at times during economic downturns, other non-regional workforce members were experiencing personally the closing of their plants. This influx of outsiders (the new routine of populating the plant based on the UAW contracts and bankruptcy demanded plant closures)

brought with it added opinions, beliefs, and behaviors regarding GM. The influx of transplant employees is an example of continuity *in* change—GM's Lansing family is maintained but maintained with the addition of outsiders. As one employee shared, the plant now felt different, they explained that they had never been careful to lock up their belongings but now with some many strangers they were feeling like they should. The impact of this will be further discussed in relation to Brondo and Baba (2010).

A similar example of an influence and force impacting LDT was the retirement of many members of its original LDT leadership team—it is significant to point out that just like much of the LDT hourly workforce was comprised of individuals that called Lansing and the surrounding communities home, so too did key members of its leadership team. In particular, both the plant manager and the operations manager when LDT opened were Michiganders. Just as Lisa Fine's description of REO emphasized the role of housing, schools, churches, and clubs in the relationships that developed between workers and managers—LDT was initially managed by two individuals with deep ties to the area. Relationships grounded in multiple examples of commonality helped foster and support a robust union management relationship. Post bankruptcy, LDT has served as a launching pad for GM management personnel as they climbed their career ladders. In practice, what this meant is short-term leadership stints for individuals from all over GM's global presence. This reality changes the dynamic within the plant -- rather than long-term local leadership, managers are outsiders without shared plant or regional history. As an employee explained in an interview:

> *Right now the relationship between the union and management is getting worse not better. And I'm not sure why that is, especially at Delta, it used to be at Lansing car assembly that you would work there for 30 years you would settle in to an area you liked you knew your boss who has been your boss for 10 years and would be your boss for the next 10 years and you could pick your area based on your supervisor. That guy's a good guy lets get over to that area, and there was*

that stability and being able to project what your future would be like in terms of your work environment, that is gone now. And along with people coming in from all over now and of course the place you were is always better than the place you are. And we have new supervisors coming in and when new supervisors come in they want to mark their territory—and just managing the invasion of people and processes from all over the country is raising the anxiety and is worsening the relationship between management and the hourly workers. Here you don't know who your supervisor is going to be in 3 days and they don't have relationships what you used to have are relationships. And now you don't have any relationships—hell we have had 3 plant managers in the last 4 months.

Another consequence to this changing composition of workers is it threatens the Lansing specific ideas of exceptionalism—in that the sense of locality for the Lansing population is attenuated. One consequence of this changing population was internal rivalries. Two examples offer insight into these contestations; first, original Lansing employees were apt to criticize the work ethic and capabilities of workers coming from both outside Lansing as well as outside the State. At the time when LDT was bringing employees from Tennessee the common rhetoric included criticisms that pointed out that the Tennessee population obviously were not very good—as evidence of their weakness LDT employees would cite the closing of the Tennessee plant. Other challenges related to the blending of the workforces were played out within the Union, with transplant membership becoming vocal during union meetings. One employee described an uptick in union meeting attendance, stating "*Historically what is accurate, about 10% attend 90% don't care, but there was an uptick especially with the influx of new blood, it has bumped it."* Transplant employees bring with them different experiences, priorities, and opinions that do not always easily blend with the current context.

The theme of "Lansing's GM Family" and the associated routines (see chart above) offers plentiful evidence of the manner in which the routines function to offer stability, embody knowledge, and coordinate organizational behaviors (Becker 2003). The ethnographic data

further demonstrates the manner in which this theme entails behaviors and intuitional logics including the regulative pillar (new rules defining transfers into the plant), normative pillar (defining appropriate behaviors such as the celebration of birthdays and anniversaries) and cognitive pillar (existing constructs and stories of GM family lineage) (Scott 2008). The theme of "Lansing's GM family" and its relationship to GMS will be discussed further in chapter six; however it is important to point out the role that Lansing's GM family played in the selection of Lansing to be home to GM's two newest North American facilities. Of particular interest are the implications of change to "Lansing's GM Family" on Lansing's pre-adaptation to a lean system such as GMS.

CHAPTER 6: GMS AND GM'S BANKRUPTCY EVENT

Introduction

Data presented in this chapter will contribute to the argument that bankruptcy at GM enabled institutional continuity *in* change. Previously I noted that bankruptcy, which included the distribution of loans, stabilized the automaker sufficiently that it was able to continue operations, safeguard payroll and employee insurance, pay suppliers, honor warranty claims, and continue "business as usual" all while radically transforming its balance sheets and debt to income ratio via the closing of plants, layoff of employees, UAW concessions, and the ending of vehicle brands. These institutional change processes appear to have enabled new and powerful actors (i.e., US government and the US Department of Treasury) these actors were able to exert profound influence as will be documented throughout this chapter. However, as the focus of the dissertation is GMS, I use the bankruptcy event as a lens through which to examine the implementation of GMS at LDT—most directly bankruptcy contributed to a new emphasis on financial considerations as crucial to everything that happens at the LDT plant.

In addition to the presentation of data that offers evidence of institutional continuity *in* change at GM, this chapter also provides a presentation of the institutional pressures Fareed et al. (2015) as they occurred within the field related to GM's adoption of GMS, the Platinum Agreement, GM's bankruptcy and Chapter 11 filing, as well as, the specified restructuring requirements as outlined in the government sponsored loan agreements. I elaborate on the content of these pressures using a mix of data sources including data documented by Wasser (2010) and reports from the Government Accountability Office. Additionally, I offer an analysis of how institutional forces impacted bankruptcy using the framework recommended by Fareed et al. (2015). This chapter helps fulfill the ambition of the dissertation by documenting field level

pressures in a systematic manner and offering data that will aid in the analysis and discussion of continuity and change at GM.

Bankruptcy & Restructuring Efforts Secondary Data Presentation

The US was experiencing a national economic recession in 2008 that contributed to and precipitated the auto crisis. In many ways the broader US trend contributed to the potential gravity of a GM's collapse—the US was already experiencing a profound recession which would only be made worse. The stakes were very high and the collapse of the American automobile industry threatened pervasive economic consequences, as a White House report explains:

> Amidst an historic recession and financial crisis, the liquidation of major American auto companies threatened to eliminate more than one million jobs. … President Obama also recognized that failing to stand behind these companies would have consequences that extended far beyond their factories and workers. GM and Chrysler were supported by a vast network of auto suppliers, which employed three times as many workers and depended on the auto companies to survive. An uncontrolled liquidation of a major automaker would have had a cascading impact throughout the supply chain causing failures and job loss on a larger scale. Because Ford and other auto companies depended on those same suppliers, the failure of the suppliers could have caused those auto companies to fail as well. Also at risk were the thousands of auto dealers across the country, as well as small businesses in communities with concentrations of auto workers. It was the interdependence between the auto companies and suppliers, dealers and communities that led some experts at the time to estimate that were GM and Chrysler allowed to liquidate, at least 1 million jobs could have been lost. Other estimates suggested that the near-term jobs at risk from liquidation could have been even higher. In addition, the cost to the government to provide social safety net services and health care to these workers and communities would have been substantial (The Resurgence of the American Auto Industry 2012:2).

During Rick Wagoner's initial plea to Congress he expressed his view that government action was required to "save the U.S. economy from catastrophic collapse" (Holstein 2010: x). Wagoner's warnings also cited the following implications "Three million jobs lost within the first year, U.S. personal income reduced by $150 billion, and a government tax loss of more than

$156 billion over three years, not to mention the broader blow to consumer and business confidence" (Holstein 2010: xi). As Holstein himself argues, "Thus the battle to transform and indeed save General Motors in 2009 and 2010 is arguably the largest, most dramatic, and most difficult corporate turnaround efforts in American economic history" (2010: xiii). What bankruptcy and its attendant restructuring enabled was in fact a transformation entailing both continuity and change within the organization. In total, restructuring would entail GM shedding approximately 20,000 employees and closing 14 plants and 3 warehouses (Hargreaves 2009).

This section focuses on change as introduced at GM through bankruptcy and restructuring, these changes are different and distinct compared to the efforts at implementing change through GMS as were described in the beginning of the dissertation; however the two field level phenomena are related and interconnected. Change via the implementation of GMS centered on production and manufacturing processes as well as the promotion of a team orientation that was intended to drive employee empowerment and participation. GMS represents change to the front lines of the corporation that is the shop floor. As history has demonstrated the implementation of GMS was not the only necessary change for the company to remain competitive.

Other required changes that GM as a company needed to make in relation to the business side of the enterprise as opposed to the manufacturing side were enabled through bankruptcy. These required corporate changes were driven by the necessity to remain profitable and were grounded in traditional business equations and profit margins. GM's bankruptcy appears to be the second half[35] of the equation in terms of required change to achieve a profitable GM—and as

[35] By "second half of the equation," I do not suggest that two phenomena flowed together smoothly in time, one after another. In fact, as has been presented the evolution of GMS within GM occurred over decades. It is also important to mention GM's competitiveness similarly degraded over time, a reality which did impact both GMS and GM's eventual bankruptcy. Both

mentioned these changes appear to have been enabled based on the involvement of other major actors coming into the field for leverage.

A 2008 GM-LDT training deck on the history of GMS and the necessity to change shows impressive attention to the then current financial landscape of GM. The presentation presents news article headlines from as early as 2005—in which financial analysts describe the beginnings of a perfect storm that would force GM into bankruptcy as a way to radically restructure its business (GM Training Deck "History" 2008). This same presentation outlines the case for GM declaring bankruptcy. The content of the slides describe the following: "Ability to right size the company in North America -- balancing sales with production capacity; Abrogate labor agreements to reduce costs-- no more jobs bank, reduce employee benefits and wages as well as retiree benefits; Outsource all engineering; Consolidate dealerships and brands; Top management would be replaced; Reduce the possibility of a corporate raider buying GM." The goal of these restructuring efforts enabled through bankruptcy would be to "…emerge from the bankruptcy judgment as a much smaller company with a better chance of making money in North America" (GM Training Deck "History" 2008).

It should be noted that the presentation also features arguments against GM declaring bankruptcy. The arguments include the following: "We have faced difficult times before and found solutions to our problems -- 1982 & 1992; (with bankruptcy) Consumers are less likely to buy our products; (without bankruptcy) The courts would not determine our future; Give the current recovery plan more time to work" (GM Training Deck "History" 2008). In summary, the arguments against GM declaring bankruptcy were rooted in the idea that the current turnaround efforts already underway at GM required more time and that GM has faced challenges previously

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GMS and bankruptcy were however impacted by pressures occurring within the institutional field.

that they were able to emerge from—lastly, there was concern regarding what a corporate bankruptcy would do to consumer confidence.

The aforementioned slide presentation at LDT addresses the idea of change directly. The presentation argues that LDT can't do what we have always done, highlighting that not all the required changes are within the plant's scope, "But, we can and must do the best with what we can control" (GM Training Deck "History" 2008). Within the plant's scope of control the following recommendations for behavior are made:

> Produce the highest quality, lowest cost product in a timely fashion; Eliminate WASTE; Solve problems; Involve EVERYONE – work to IMPROVE the business every day; It is NOT ACCEPTABLE to just SIT and WAIT for the next crisis; Ask questions / Share ideas; Develop strong, positive relationships between different groups inside and outside our organization; and Improve the business performance in order to SECURE THE FUTURE (GM Training Deck "History" 2008: 57).

These recommendations reinforce the principles of GMS—foremost the notions of continuous improvement and people involvement. The local plant level discussion of GM's financial landscape makes a connection between the local plant and the global corporate balance sheet, as well as a locally rooted recommendation for workers to focus on that which they can impact -- their daily work and performance.

Chapter 11

On June 1, 2009 GM filed for Chapter 11 bankruptcy protection. This action resulted in taxpayers via the US government owning a 60 percent stake in GM. As a CBS News article reports, "It's the fourth-largest bankruptcy filing in U.S. history, and the largest for an industrial company. The company said it has $172.81 billion in debt and $82.29 billion in assets" (CBS News 2009). The most significant consequences of GM's bankruptcy include; first, it closed numerous plants; second, it dramatically reduced its number of employees; third, it reduced its

fixed cost; and fourth, it radically altered its breakeven point—that is the number of cars it needed to sell in order to turn a profit was substantially lowered. In the proceeding paragraphs I offer more texture to GM's filing of Chapter 11; however, the 4 changes resulting from bankruptcy just listed most directly influenced GM and its production system GMS.

As guided by this dissertation's theoretical orientation, actions and events are understood as occurring in a larger context or institutional field, and in relation to long timelines and histories. In fact, in relation to GM's restructuring many significant efforts preceded the Chapter 11 bankruptcy filing. A CBS news article published on May 29th 2009 recounts significant corporate changes, including events occurring two years prior to bankruptcy, as well as changes as they occurred several days before bankruptcy. The significance of the timeline that follows is to emphasize the actions and interactions of actors within the field that contributed to and constituted GM's bankruptcy, and to underscore the manner in which GM's financial struggles influenced the institutional field and precipitated change in the field as GM itself served as an institutional pressure. The CBS News (2009) timeline highlights the following:

- 2007 GM loses $38.7 billion, including $39 billion third-quarter charge for unused tax credits. It's the largest annual loss in auto industry history.
- 2008 Gas prices hit $4 per gallon and truck sales plummet. GM announces plan to close four pickup and sport utility vehicle factories and plans to shed 8,350 jobs. The Hummer brand is put up for sale. By fall, executives begin asking congressional leaders for aid. GM and Chrysler talk about a merger, but talks die down as both companies' sales continue to fall on U.S. and worldwide recession woes. By December, GM tells Congress it needs $18 billion to stay afloat. It receives $13.4 billion, and racks up a $30.9 billion annual loss and burns through $19.2 billion.
- 2009 The Obama administration takes office in January. On Feb. 17, GM says it will need a total of $30 billion and its Saab unit files for bankruptcy in Sweden. In its restructuring plan presented to the U.S. government, GM say it will only keep Saturn running through 2011, but it's open to the possibility of spinning off the money-losing brand to retailers or investors. Discussions are ongoing.
- March 30, 2009 President Barack Obama, a day after firing CEO Rick Wagoner, tells GM it hasn't done enough to restructure and gives the company

until June1 to make aggressive cuts.

- April 27, 2009 GM asks 90 percent of its bondholders to participate in a debt-for-equity swap to rid the company of $24 billion by giving them 225 shares for every $1,000 in bonds for a combined 10 percent stake in the company. Existing shareholders would end up with 1 percent of the company following the issuance of 62 billion new shares and a 100-for-1 reverse stock split. The company also announces it will end the Pontiac line.
- May 7, 2009 GM reports a first quarter loss of $6 billion, with revenue falling by more than half.
- On May 15, 2009 GM says it will end contracts with about 1,100 dealers.
- May 26, 2009, the United Auto Workers agreed to job cuts, 14 plant closures and a 20 percent equity stake in the company to cover retiree health care costs.
- June 1, 2009 GM filed for Chapter 11 bankruptcy protection

The topic of GM's bankruptcy has been thoroughly covered in the media; however, it is informative to review the manner in which GM as a corporation actively sought to manage the topic of GM bankruptcy internally. On the day GM filed for Chapter 11 there were two specific communications issued by the corporation, one was in the form of an internal "briefing sheet" and the other a letter from the then CEO, Fritz Henderson. The briefing sheet was entitled "Driving the New GM[36]" and the first subject line read "Reinvention Key Messages" (Briefing Sheet GM Document 2009). The document reviewed the following key messages: "GM is using a court-supervised process to quickly launch a new, highly competitive company built upon only the strongest parts of our business; GM is here to stay—for our customers, employees, retirees, suppliers, and dealers; The U.S., Canadian and Ontario governments and the UAW and CAW, have recognized the importance of a strong North American auto industry, and GM has world

[36]The "New GM" entails two meanings, first, in a financial sense, it refers to the bankruptcy process that ended what was the General Motors Corporation and created the General Motors Company, the "new" entity which would buy all of the remaining assets of the old General Motors Corporation; however be free of the previous debts and liabilities. The second meaning related to the new behaviors, as demanded in the loan agreements, that the company would embrace to ensure profitability.

class assets that will benefit the millions of people with a stake in our future; GM is on its way to becoming a new, leaner, and fully competitive company."

This briefing sheet additionally explained that the New GM would be a leaner company and most significantly have a stronger balance sheet—the corporate balance sheet was something that the individual manufacturing plants despite thorough implementation of lean processes would have been unable to transform—this change necessitated corporate restructuring as enabled during bankruptcy. Furthermore, the various stakeholders of GM's restructuring are mentioned—their reference is in relation to the perceived support of the filing, the document states, "…we already have broad support (U.S. Treasury, UAW, substantial portion of bondholders), we expect the sale to be approved and completed expeditiously" (Briefing Sheet GM document 2009). This list is a good reminder of the scope of the institutional field in which GM's bankruptcy was occurring—the stakeholders include entities as large as the U.S. Treasury and the UAW. Furthermore, the concepts of the "New" and "Old" GM suggest that corporate actors were attempting to establish new constructs which would further institutional change. In particular, these efforts complemented alteration within regulative systems—that is new rules which regulated behavior and policy (retirement of GM nameplates, closing of plants, and reduction in employee headcount) as well as, changes in cognitive systems—new meanings, understandings and common beliefs (that the New GM would be competitive and sustainable).

Another point highlighted in the briefing sheet and significant to understanding the experience of GM's bankruptcy on the front lines, in this case the shop floor, were the steps taken to ensure uninterrupted operations. Uninterrupted operations during bankruptcy—exemplify what has been referred to as continuity *in* change. Again, this phrase, continuity *in* change, is intended to capture the notion of evolutionary change in the social realm, an argument

that builds upon the work of Nelson and Winter (1982). Based on this dissertation's interest in articulating the manner in which institutional pressures influenced continuity *in* change at GM, this chapter will articulate how particular routines served as mechanisms of organizational continuity and/or change. This analysis is extended by adopting the concept of routines (Becker 2003) as a mechanism functioning within the field. The usefulness of this concept stems from the ability to examine variation, selection and transmission related to routines—for the purpose of the dissertation as they relate to GMS. Becker (2003:2) elaborates on this point arguing, "An evolutionary explanation is a promising candidate for explaining change in the social realm, such as for instance innovation, the diffusion of innovation, the transfer of ("best") practices and organizational memory and organizational learning." The end of this chapter is dedicated to analyzing routines as the mechanisms and carriers of organizational continuity and change.

What I mean by continuity *in* change is despite true and profound transformations for example the sale of GM and the formation of a New GM which allowed for the corporation to separate itself from unprofitable elements of the business to a reduced entity comprised of only valuable elements which most can agree unequivocally represents change was accomplished in a manner that also allowed for continuity. By this I refer to the continuation of GM automobile production in a manner that avoided both the consequences that liquidating GM would have had on the global economy as well as GM as a brand, employer, and entity. However, as GM was being reformed, the organization's history and production processes remained, as did those employees who were not laid off, as well as a subset of its dealer network and orders to suppliers. The occurrence of bankruptcy in particular the institutional pressures associated with it will be further examined as it relates to organizational behaviors and the routines at GM related to the implementation of GMS, some of which changed under institutional pressure and others

that remained the same—a testament to countervailing forces, all of which were subject to their embedded nature within the institutional field.

A tangible example of continuity *in* change is described in GM's briefing document that states, "We're asking the court to approve a number of steps to ensure uninterrupted operations so that: Customers can rely on their GM cars and trucks, service and warranty, as they always have; Employee pay and benefits will continue; Essential suppliers will be paid in the normal course; Dealers will continue to be paid for pen accounts and warranty and incentive programs will continue; Pay and benefits for employees and retirees will continue; however, the amount of non-qualified pension for some executive retirees may be affected" (Briefing Sheet GM document 2009).

Another significant topic covered in the briefing sheet was the manner in which the New GM would carryout the viability plan that was announced on April 27, 2009. The viability plan was presented in the following succinct manner: "The New GM is expected to launch around September 1st with two distinct advantages: It will be built from only GM's best brands and operations, and it will be supported by a stronger balance sheet; The New GM will put customers first, concentrate on four core brands, and continue investing in green, energy-saving technologies" (Briefing Sheet GM document 2009). To reiterate the significance I will restate the most profound characteristic of these changes; that is bankruptcy. A viability plan independent of a restructured GM separated from its pervious costly structure would not have worked. The change that was required entailed both a plan but also a corporate balance sheet severed from previous costly line items—a characteristic that bankruptcy enabled. Fritz Henderson's letter to GM employees issued on June 1, 2009 summarizes this change perfectly, he states, "This morning, we announced an agreement with U.S. Treasury and Canadian and

Ontario governments – which along with the recent agreements with the UAW and CAW unions, and sacrifices by our salaried employees and retirees– will allow us to form a leaner, more customer-focused, more cost-competitive company – a "New GM" built upon the strongest parts of our business, with far less debt, lower operating costs and the ability to generate sustained and winning bottom-line performance. To implement these agreements and launch the New GM, it was necessary to enter a court-supervised process, which we did earlier this morning with the full support of the U.S. and Canadian governments" (Employee Letter GM Document 2009).

TARP & Loan Conditions

The preceding sections have outlined large change as experienced by GM during bankruptcy. The last category of change that will be outlined here were the changes that were outlined as required for GM as conditions of the TARP[37] funding. These loan conditions will be examined in relation to what automotive experts outlined as necessary for modification to GM's business model. Furthermore, it offers support to my proposition that bankruptcy and loans enabled continuity *in* change. This proposition stems from my modified research question relating to how continuity and change occur within the organizational field. Furthermore, it is supported by developments in evolutionary change theory that point to the roles and functions fulfilled by routines in organizational behavior. New Institutional Theory, and the central role of the field offer a framework for which to examine the relationships among actors at multiple scales, their interactions and influences. As has hopefully been exemplified in this presentation of GM's adoption of GMS and bankruptcy process—both occurred in a highly interconnected and embedded context with actors functioning at every level, both the regional plant context with the acceptance of the Platinum Agreement which allowed for the use of GMS at LDT and

[37] TARP (Troubled Asset Relief Program) refers to the larger US government program which enabled bridge loan monies to various sectors including the auto industry, inclusive of General Motors and Chrysler.

arguments related to global and national economic impact if GM were to be liquidated, arguments which acted to persuade Congress to support GM's bridge loan.

As described, GM's bankruptcy occurred in conjunction with broader economic realities being faced by the United States; overall it was a time of massive financial turmoil, an undisputed economic crisis. The broader downturn as was occurring in the financial markets contributed to additional fiscal pressure for US automakers. Noteworthy, regarding the TARP funding were the explanations and rationale for providing such monies to the US automakers. As the GAO Report, "Summary of Government Efforts and Automakers' Restructuring to Date" (GAO Report (09-553) 2009) articulates:

> The economic reach of the auto industry in the United States is broad, affecting autoworkers, auto suppliers, stock and bondholders, dealers, and certain states. To help stabilize the U.S. auto industry and avoid disruptions that could pose systemic risk to the nation's economy, in December 2008 the Department of the Treasury established the Automotive Industry Financing Program (AIFP) under the Troubled Asset Relief Program (TARP). From December 2008 through March 2009, Treasury has allocated about $36 billion to this program, including loans to Chrysler Holding LLC (Chrysler) and General Motors (GM).

Colloquially, people summarized this complex situation stated above saying GM was "too big to fail." As the GAO Report explains, the U.S. auto industry was so pervasive in its network of employees, suppliers, stockholders, and dealers that its collapse threated the nation's economy as a whole. Under this argument and fear of the implications of an auto industry collapse, funds were made available to both GM and Chrysler so as to ensure continued operations simultaneous to bankruptcy and restructuring processes.

The first loans provided to GM were in December of 2008 and totaled 13.4 billion dollars; a condition of these loans included that GM draft restructuring plans that were to be submitted in February 2009. These plans were subsequently rejected based on the grounds that

they would not enable long-term viability. Consequently, GM was required to propose more aggressive restructuring efforts in order to receive any additional loans (GAO Report (09-553) 2009).

In conjunction with these activities there were other Government actions occurring, "At the same time, Treasury also established programs to ensure payments to suppliers of parts and components needed to manufacture cars and to guarantee warranties of cars that Chrysler and GM sold during the restructuring period. In addition to these programs, the President announced a new White House initiative to help communities and workers affected by the downturn in the industry" (GAO Report (09-553) 2009). The government was playing an active role in buffering the impacts of the economic downturn in the auto industry and the financial consequences of such turmoil. As the timeline provided earlier showed, there were programs in place for a variety of the field level actors—these included suppliers, consumers, and employees.

The viability plans that were submitted in February of 2009 were deemed wanting. By design they were intended to specify how GM would repay the government provided loans, "…meet fuel economy standards, become competitive, and achieve and sustain long-term financial viability" (GAO Report (09-553) 2009). The plans as submitted did not meet these requirements. Despite the insufficiency of the plans presented by GM, the company was given 60 days, and a set of required actions to be implemented. After the 60 days depending on how sufficiently GM implemented the required actions additional assistance could be provided.

Overall, the GOA report grounds GM's financial challenges in the following factors: the weak economy, competition from transplant manufacturing operations, and poor management decisions. This notion of management decisions contributing to bankruptcy was a theme present in my ethnographic data—in fact, poor management decisions was often the answer individuals

provided when I inquired regarding GM's current situation. The examples of poor management decisions included in the GOA report (GAO Report (09-553) 2009) included "…labor agreements that resulted in wages and retiree benefit costs higher than those of transplants and a heavy reliance on sales of light trucks and sport utility vehicles (SUV), which are more profitable than cars. Additionally, offering consumer incentives and discounts over the past few years stimulated demand but contributed to an erosion of the value."

In addition to the requirement that GM produce a more aggressive turn around plan the Treasury also required that there be leadership changes at GM. In brief, the terms covered three main categories: concessions from stakeholders, controls over management, and compensation for risk. Concessions from stakeholders included limits on executive compensation, agreements with debt holders, labor concession—foremost-reduced compensation to rates comparable to transplant facilities, retiree concessions—specifically UAW participation in VEBA[38] payments. Controls over management included: approval of transactions that exceed 100 million dollars, restrictions on expenses, restructuring plans, and reporting requirements. In relation to compensation for risk, GM provided warrants and notes that outlined how the loans would be repaid with interest.

In order for the government to adequately assess the turnaround plans presented by GM, they compiled a panel of auto industry experts to identify factors that required modification to enable viability. The expert panel cited the following as important and foundational to a turnaround: reduction in the number of models and brands, rationalizing dealerships, reducing production costs and capacity. The panel concluded, "the companies (GM/Chrysler) have excess production capacity and their cost structures do not facilitate the companies' profitable operation in a market in which sales volumes are significantly lower than they have been in past years.

[38] VEBA refers to the UAW Retiree Medical Benefits Trust.

Panelists told us that the companies' cost structures were established during a time when they dominated the U.S. market, and as foreign competition grew, their market shares decreased. Some of the panelists added that rather than adjust their cost structures[39], such as by reducing fixed costs, the companies pursued higher sales volumes to try to profitably operate under their existing cost structure" (GAO Report (09-553) 2009). Significant to any plan that would demonstrate viability were components that would identify significant reductions in fixed costs—bankruptcy enabled dramatic changes in fixed costs.

As part of the continued oversight that accompanied the government loans to General Motors, the GAO report entitled "Continued Stewardship Needed as Treasury Develops Strategies for Monitoring and Divesting Financial Interests in Chrysler and GM" summarizes the changes that GM made since December 2008 (GAO 10-151 2009). The report described that both companies (GM and Chrysler) reduced substantial amounts of their long-term debt, eliminated brands, improve their dealer networks and lowered production costs and capacities, achieved by reducing factories and number of employees. Furthermore, another GA0 report entitled "Treasury's Exit from GM and Chrysler Highlights Competing Goals, and Results of Support to Auto Communities Are Unclear" presents a review of the restructuring GM was able to accomplish based on the substantial federal assistance they received (GAO Report 11-471 2011). The report describes that the loans "…allowed GM and Chrysler to restructure their costs and improve their financial condition. Through federally-funded restructuring, GM and Chrysler reported lowering production costs and capacities by closing or idling factories, laying off employees, and reducing their debt and number of vehicle brands and models. These changes enabled both companies to report operating profits and reduce costs enough to be profitable at

[39] This speaks directly to plant operations; lean production ideally would reduce operating costs if production becomes lean.

much lower sales levels than ever before." Significant to this change was the ability of each company to be profitable at lower sales levels. This was a profound change given that prior to restructuring profitability was only achievable through record sales.

The report also describes that bankruptcy and the filing of voluntary petitions for reorganization under Chapter 11 of the US bankruptcy code was a necessary means to actualize the restructuring plans—in essence without bankruptcy the restructuring efforts would not have been sufficient. Through the bankruptcy process, the newly organized Chrysler and GM purchased substantially all of the operating assets of the old companies under a sale pursuant to Section 363 of the bankruptcy code. After the respective sales in June 2009 and July 2009, the new Chrysler and new GM began operating with substantially less debt and with streamlined operations. The bankruptcy courts signed orders approving old Chrysler's plan of liquidation on April 23, 2010, and old GM's amended bankruptcy plan on March 29, 2011, and the companies' assets and liabilities were transferred to liquidating trusts.

In summary, in response to pleas to Congress in December of 2008 by the CEOs of both GM and Chrysler—each company furnished the government with restructuring plans. In response, the government -- using insights gathered from an expert panel -- compiled an outline of required actions for further loans. These aggressive actions were enabled by the restructuring and bankruptcy process. Federal loans circumvented a messy liquidation process for both automakers. Stakeholder concessions enabled the accomplishment of business plans that allowed for profitability with more moderate, sustainable, and achievable levels of sales. As the report states, "Without federal assistance from Treasury, the companies may not have been able to finance their restructuring and may have had to liquidate" (GAO Report 11-471, 2011).

As company officials and auto industry analysts pointed out, the key result of

restructuring was that the companies reduced their fixed costs levels, allowing them to be profitable at much lower sales levels than before, thereby decreasing their "break even" levels. For example, in the third quarter of 2007, GM indicated that it needed to sell 3.9 million vehicles in the United States annually (assuming a 25 percent share of the total 15.5 million U.S. vehicle sales market) in order to break even. Now, after restructuring, GM indicates that it needs to sell roughly half as many vehicles in the United States—around 2 million annually—in order to cover its fixed costs (GAO Report 11-471, 2011). "GM officials told us that lowering GM's U.S. break-even point has been one of the most significant outcomes of restructuring because it allows the company to break even at or near the 'bottom of the cycle'" (GAO Report 11-471, 2011).

Institutional Analysis of the Pressures Impacting GM's Bankruptcy and Required Restructuring

Cause

GM's bankruptcy, required restructuring, and loan terms were established based on the opinions and suggestions of GM leadership, a panel of auto industry experts commissioned by Congress, as well as other federal level actors including President Obama. In addition to bankruptcy, the loans were significant to GM's restructuring. The bridge loans allocated through the TARP funding allowed GM to ensure uninterrupted production. Bankruptcy became the endorsed method that promised to return GM to profitability—with record profits in 2015, this promise appears to have been fulfilled. For this analysis it is significant to point out that cause as an institutional pressure entailed a belief that bankruptcy would enable a return to profitability for GM.

Constituents

As was summarized in relation to this factor and its impact on GMS, this institutional pressure entails the expectations of stakeholders—as the data supports a list of Americans who were not stakeholders in GM would be shorter, based on the size of GM as a direct employer coupled with their supplier and dealer network. Lastly, when the US government became the largest shareholder in the New GM that made each citizen a stakeholder. Other stakeholders in addition to direct and indirect employees include shareholders, customers, and anyone at risk of being impacted if GM ceased to exist as an organization with the United States—as economists were quick to point out this would have national and international ramifications on the economy.

Content

In relation to the manner in which the institutional pressures align with corporate goals—the pressures in support of bankruptcy and the content of corporate goals are entwined, bankruptcy and restructuring promised to enable corporate viability. Without a return to profitability, or even worse dissolution, GM would forever default on its goal to meet customer expectations and generate profits.

Context

Context as an institutional pressure, which entails interconnectedness in the field, is very unique as it relates to GM's bankruptcy, as the data suggests, GM as an organization was so significantly and importantly entwined with the US economy that when the then CEO Rick Wagoner solicited help from the federal government—the government was motivated to participate based on ensuring the US economy's stability. This level of connectedness within the organizational field fueled the pressure for action.

Control

The imposition of institutional pressure based on field forces occurring during bankruptcy is understood as serving to impose restructuring on GM in a manner never before achievable[40]. This is also exemplified in the concessions made by the union and the settlement of debt. Overall, powerful forces aligned and overcame countervailing forces in order to sever debt, form a new GM void of many financial burdens, and create a smaller more profitable company.

As this section outlines and the presentation of data detailed, institutional pressures aligned in support of bankruptcy, there were voices of opposition; however as we well know GM went through bankruptcy, the US Government allocated loans and the company returned to profitability. The factor cause entailed the belief that bankruptcy would enable economic viability; stakeholders were motivated to make sacrifices if it helped ensure the future of the employer; bankruptcy and restructuring aligned with corporate goals in the most basic sense of continuation of the company as a manufacturer of automobiles for consumer purchase; the interconnectedness of GM with the US economy helped ensure the governments involvement and the furnishing of loans; lastly, the scale and scope of GM in combination with the US government imposed unprecedented power and influence toward the accomplishment of an efficient and successful bankruptcy process that avoided dramatic instability and additional degradation in the US economy.

[40] This discussion of control does not suggest over determination—there were strong voices against bankruptcy that contributed to how controversial the decision to provide loans was at the time. Furthermore, it is significant to point out that Ford, did not require government loans, despite being an actor within the institutional field.

Routines as Mechanisms of Institutional Continuity and Change

Organizational Routines and the Global Manufacturing System (GMS)

Ethnographic data was presented on six specific lean elements of the GMS system. These included: people involvement, standard work, business plan deployment, error proofing, takt time, and andon. The local Lansing workforce formally accepted all of these lean elements as part of GMS when they agreed to the Platinum Agreement they agreed to GMS and all of its elements. People involvement, standard work, and business plan deployment were to be implemented along with the other GMS elements as part of GM's efforts to embrace lean manufacturing, a system which had been deemed superior to traditional manufacturing in its ability to yield efficiency and quality results. Autoworkers in Lansing also were persuaded to accept lean and GMS as it helped ensure continued auto making in the region. All three of the specific elements noted above, however, were met with challenges and only partial implementation at LDT. This partial implementation can be understood in relation to the persistence of old rules and governance mechanisms, and old logics.

As was presented in the data section entitled "The Legacy of Mass Production," historically within vehicle manufacturing in the US context there were very narrow divisions of labor. Individuals were hired and paid to do as they were told exactly as they were told do. The previous norm in manufacturing which swapped workers in and out of jobs in a manner similar to other equipment threatened to be turned upside down via the implementation of the GMS lean element of people involvement and its goal of empowered workers. Despite GMS training and many organizational assertions that the company was inverting the hierarchical pyramid, positioning the operator at the pinnacle as the "value adder," the previous norm regarding the role of the operator was serving as a countervailing force to the establishment of this lean

element. Overall, the routine of the operator's daily job role still centered on conducting his or her work narrowly, and the new tools for gathering operator insights and suggestions through continuous improvement initiatives and suggestions were in their early stages at LDT; hence there were pockets of understanding and limited groups participated, such as team leaders updating BPD boards without broader understanding and dialogue with their team members. Other countervailing forces, interrupting the changes initiated via the implementation of GMS, are seen in the lack of understanding and appreciation for the other two lean elements presented within the ethnographic theme entitled "The Legacy of Mass Production." Standard work and business plan deployment are two more lean elements that are related to and reinforcing of people involvement. Standard work, as has been described functions as the baseline for continuous improvement—in order to improve upon processes a standard must be set so that improvement or degradation can be compared to a baseline. Again, standard work as a new rule to govern how work was done encountered the countervailing forces of the previous manufacturing routines that were grounded in an individual owning a job and executing it as s/he deemed best. Similarly, business plan deployment (BPD), which entails the visual tracking of metrics and the cascading of targets from plant-wide to team level was intended to drive ownership of objectives and the level of empowerment of employees. In theory, BPD aligns the entire organization to reinforce the direct impact each employee can have on plant-wide objectives. As noted, the BPD boards track objectives in the following categories: safety; people; quality; delivery; cost and environment. Again, the use of BPD is an example of continuity *in* change. The routines and organizational behaviors surrounding the implementation of BPD as captured during my field work point to new artifacts (the physical boards and paperwork) on the shop floor and new practices (routines) such as the charting of metrics; however, the lack of

understanding regarding BPD by individual operators shows their lack of engagement. Furthermore, as will be described in relation to andon—despite the visual tracking of several metrics on the BPD board by the team leaders the category of "delivery," which entails numbers of vehicles produced, an objective that is directly impacted by downtime remained the most pervasive priority. This goal of delivery and the focus on avoiding downtime, is consistent with old logics that aimed to have the highest number of vehicles produced, irrespective of quality and repair—operators were to produce vehicles and the primary focus was keeping the line moving.

It is important to point out that all three of these lean elements were accepted as part of GMS; however, they seemed to have fallen flat during implementation. By "flat," I suggest that there was only shallow understanding and the practices were scripted in execution rather than being rooted in deep knowledge and understanding of the interconnectedness of the lean elements. Overall, these examples highlight continuity *in* change. The evolutionary process whereby the organization was acquiring new goals, language, and practices yet as evidenced they had not entirely replaced old logics. The persistence of old routines, in this case operators who relied on old rules and governance mechanisms to define their level of participation in improvement processes and the achievement of manufacturing metrics still dominated by the avoidance of downtime as was readily apparent in the plant. Overall, the routines and organizational behaviors regarding the role of the operator functioned as mechanisms of continuity. This is a succinct example of the concept continuity *in* change, primarily because it encompasses the processes whereby GMS introduced new concepts, terminology, practices, and artifacts within the plant yet old logics were still directing particular categories of employee behavior.

As Becker (2003) highlights in his description of the roles fulfilled by routines, "…they are patterns, repetitive and persistent, collective, non-deliberative and self-actuating, of processual nature, context-dependent, embedded, and specfic, and path dependent." These roles fulfilled by routines are demonstrated in the ethnographic data that show the perserverance and legacy of mass production as it interacted with the new meanings and logics of lean production. Overall, as it related to these specific lean elements there were exisiting routines (understood as institutional rules) that were coordinating employee behavior, providing stability, and serving to maintain continuity. This interplay of new lean elements and previous logics demonstrates contestation within the institutional field.

The other three lean elements, explicitly covered in the presentation of data were the lean elements included in the theme "Lean Elements in Use." This theme included data on the following three lean elments: error proofing, takt time, and andon. As was presented in the data, these three elements are tied more directly to plant infrastructure and technical systems and as such there is participation in the fulfillment of what these lean elements entail not based in explicit endorsement and active employee participation but rather through sheer participation in auto making at Lansing Delta Township. The institutional forces which contributed to selection of the Lansing work force and the construction of a new plant ushered in a plant built according to specifications that would support particular lean elements. The moving line and the speed of that line would be dictated by takt time (which is an equation that devides available time by customer demand). Error proofing as it is achieved through automation such as programmable torque guns achieve employee endorsement by default. To perform a job on the line using the equipment provided is to work according to the lean elements of takt time and error proofing. Andon, however is the exception, despite andon being a technologically based system, a cord

which is wired to the system and enables a line stop—this lean element was complicated in practice. The routine, or practice, of pulling the cord was something that was not always supported. As documented, people often got scolded or reprimanded for pulling the cord. Furthermore, the notion that the line must keep moving was a shared belief, hence the frequent reference to the cost per minute of downtime.

From the opening of LDT, there were new organizational behaviors and routines as they related to line speed and in-process control and verification (also know as error proofing). I argue that these new routines (behaviors) did not require active acceptance and endorsement by employees—instead they were achieved through infrastructure and technology which controlled and dictated their use. In relation to these two routines there is evidence of the manner in which new rules and practices were instituted via the technology. Andon however, is an example of a more dynamic system—as previously described andon allows individual operators to stop the line at their discretion. The primary purpose is give voice to the operator as a call for help to ensure defects are not passed on and to ensure building in station (completing all assembly at the designated location). Andon called from many changes to previous routines and organizational behaviors. Most directly, andon seems to contradict old logics, meanings, and relationships. The previous logic in manufactuing prioritized the number of vehicles produced each day above all other goals – to stop the line runs in opposition to this historic and engrained priority. Again, the andon also challenged old meanings related to who possesed expertise—mass production as a manufacturing system did not recognize and reward the expertise of operators. Lastly, andon was demanding a profound departure from old relations among actors—the hierarchy and control among managers and operators was being directly challenged. A line stop, something which historically would be avoided at almost all costs by mangement was being turned over to

operators as something they could initiate. This new ability to stop the line threatened to dramatically alter the relations among the actors by putting more power and control of production in the hands of operators. However, as was presented in the data, andon existed in infrastructure, but was not consistencly supported in use. Old governance systems dictated the priority of keeping the line moving remained in force. This is not to say andon is never used, however, it is a contested element on the floor and perfectly summarizes the idea of evolutionary change. Andon is another example continuity *in* change. There is a new artifact—the andon and its training for use during GMS training –yet, as was witnessed on the shop floor and described in interviews, countervailing forces and institutional pressures were severly limiting its acceptance and use and continuity with old logics persisted. Overall, both takt time and error proofing as lean elements appear to have been more readily incorporated into productions processes at LDT, this is in contrast to andon which encountered forms of resistance.

Organizational Routines and Autoworker Identities

The ethnographic theme entitled "Social Legitimacy of Auto Working" encompasses particular organizational behaviors and routines—as presented in the data chapter these routines included particular understandings surrounding Lansing's work ethic and notions of exceptionalism. Bankruptcy, despite controversy and opposition, gathered enough support that it was pursued as a means to reestablish GM as a profitable automaker. This ethnographic theme related to identify; however, it also sheds light on the experience of bankruptcy in several important respects. First, despite the potential for dramatic shifts in feelings of pride and identity as auto workers (i.e., influenced by GM's bankruptcy and broad public critiques of the automaker and its products on a national stage), major change in notions of pride related to auto work were not observed. Leading up to bankruptcy and post-bankruptcy, workers articulated

strong beliefs in their abilities, Lansing's historic role in auto history, and the idea that they would keep building vehicles as this community always has done. Overall, this ethnographic theme offers insight into the cognitive pillar of institutions and highlights the manner in which the engrained beliefs and values shared within this community persisted despite bankruptcy proceedings that demonstrated GM's weaknesses, identified required change, and financially overhauled the company. Overall, this theme is another good example of evidence of continuity *in* change, that is continuity with previously established identities despite unprecedented change including public shaming of the automaker and critiques presented in popular media.

Organizational Routines and Economic Incentives

The economic incentive of auto working as an ethnographic theme is another fascinating example of continuity *in* change in relation to GM's return to profitability via bankruptcy proceedings and associated concessions. This ethnographic theme relates to the wage system, layoffs, and the benefit system. Related to the wage system, during bankruptcy new rules were established. As the data demonstrated, GM had to establish an all in production cost that was similar to competitors, this was accomplished via broader use of tier two employees—at the time tier two employees had no clear or articulated path by which they transitioned to a traditional employee with traditional employee compensation. Furthermore, this expanded use of tier two employees introduced new relations within the plant; that is, incorporation of more employees at that pay scale—hence, more employees in the difficult position of doing the same work as other team members but being paid approximately half. However, despite these new rules and relations there was still a perceived incentive to becoming part of the auto industry. Historic meanings related to economic security and opportunity persisted. Furthermore, in comparison with other regional jobs requiring similar background and experience, the tier two wage was desirable.

The continuity regarding perceived desirability of the economic incentive of auto working despite changes in the wage system and the proliferation of the tier two employees is yet another example of continuity *in* change. Overall the cognitive and normative pillars of institutions were sustaining the regional norm of finding work in the auto industry as well as supporting a belief system that valued auto working as a means to individual economic prosperity. This persistence with respect to a value system and norms is remarkable given the broader insecurity that GM was facing and its bankruptcy proceedings.

Similarly, layoffs and the threat of layoffs were interpreted through a lens of past experience. Despite the fact that bankruptcy was uncharted territory for both GM as a company and for its Lansing employees, as the data presented shows, hourly autoworkers were interpreting layoff by reliance on past experiences. Despite the fact that layoffs during bankruptcy might entail prolonged unemployment and changes to the rules that impact unemployment and sub pay—workers readily described their previous experiences with layoff—something that was more or less normalized for plant workers as production facilities sometimes add and reduce shifts in relation to sales. Similarly, despite concessions as part of GM's overall restructuring effort, there was reliance on old meanings related to GM's worker benefits. The motivation for concessions and bankruptcy in the near term was to enable GM's viability in the long term—something which workers desired and believed would afford them economic prowess in the future. As the ethnographic data showed, and as has been explained here, the theme "Economic Incentive of Auto Working" highlights specific organizational behaviors and routines and offers insight into processes of continuity *in* change—bankruptcy was changing the rules and policies and yet particular norms, beliefs and values regarding the economic incentive of auto working persisted.

Organizational Routines and GM family

The ethnographic theme entitled "Lansing's GM Family" is another example of continuity *in* change. This theme includes the composition of the workforce and changes in the labor pool. Bankruptcy, as was documented in the data ushered in changes in the workforce and labor pool—specifically, bankruptcy which entailed the closing of plants and a reduction in headcount created a ripple effect in the movement of people. As was presented the hourly workforce population was changed based on the transfer of employees to LDT from outside of Lansing as well as from outside of the state. Furthermore, there also were changes within management as the GM leadership ranks were thinned through processes of early retirement and termination. So within both the hourly and salary ranks of LDT there was an influx of new actors. The new actors contributed to new relations between employees. Despite the plentiful social and familial ties that connected the original LDT plant population—and comprises the ethnographic theme of GM family— bankruptcy triggered the movement of people—an experience that changed the plant population. This theme helps to elucidate particular routines and organizational behaviors, in this instance the routines comprising what individuals may be hired at LDT and where they come from were impacted by the bankruptcy. This is not to say the notion of a GM family was lost, however, as will be explained it faces new threats and influences. In addition to new actors and new relations—this finding also highlights specific changes to the population boundaries—one characteristic of what Scott refers to as profound institutional change. In relation to Scott's institutional pillars, this example highlights changes in the regulative pillar—that is modification in the rules and policies regarding hiring which incorporated workers form outside the local region.

CHAPTER 7: DISCUSSION OF ETHNOGRAPHIC THEMES AND PROPOSITIONS RELATED TO FIELD PHENOMENA

Introduction

This chapter includes three primary topics of discussion. The first topic of discussion is a proposal regarding the impact and influence that GM's bankruptcy may have on the progress of GMS. In particular, I point out the manner in which bankruptcy introduced changes that, over the long term, may serve as potential threats to the progress of GMS in Lansing's LDT plant. The changes stemming from bankruptcy include plant closures and layoffs that contributed to new transplant employees coming to LDT. These transplant employees would not have the shared regional heritage as local auto makers that distinguishes the Lansing population, nor would they have the close-knit community and history shared between workers and managers. In addition, the bankruptcy demanded proliferation of tier two employees and temporary workers with less incentive to fulfill the lean manufacturing demand for engaged and participative employees. All of these events are examined for the manner in which they may disrupt the implementation of GMS. In particular, how do the changes at LDT which include outsiders in managerial positions lacking the shared history with workers and the Lansing legacy of auto making threaten the unique labor relations in Lansing shared between the union and management.

The second topic covers the manner in which I propose bankruptcy functioned as the literal "leaning" of the company—hence GMS, the lean production system, may in fact have been bolstered in some respects through the process of GM's bankruptcy. This suggestion is grounded in the fact that bankruptcy functioned to "right size" the organization, but also, bankruptcy served as a profound change and experience where the sacrifices and previously infeasible elimination of waste and cost was distributed in a manner that extended beyond plant

operations into management and salaried ranks. These cost cutting and waste eliminating activities that were part of the government supervised bankruptcy proceedings not only helped "right size" the organization so that even with reduced sales the company could achieve profits—it also functioned to drive the primary principles of lean (waste elimination) throughout the organization and into previously off-limits and protected areas. This discussion incorporates the concept of moral economy, borrowing from Thompson (1971), Turiel (2006) and Baba (2008). The manner in which the entire enterprise, inclusive of management, was being "squeezed" versus just the operators was a departure from previous experiences with lean implementation at GM. The sacrifice was comprehensive, and as lean manufacturing in theory would advocate for, it entailed waste elimination that crosscut the entire value stream. In addition, bankruptcy serves as a profound event for the corporation. In many ways bankruptcy served as a near death experience for workers and managers alike—and therefore one that in the LDT context translated into workers further dedicating themselves to a job well done—actions that they felt they could control in a time of heightened stress and uncertainty.

This chapter also offers discussion of my various ethnographic themes through reference to relevant literature and the manner in which my data extends and contributes to ongoing conversations in the social sciences related to auto working, economic nationalism, and worker identity. Overall, the discussion offered in this chapter will show how organizational routines as evidenced in my ethnographic data are inclusive of both continuity and change; how bankruptcy introduced changes to the plant population that run the risk of undermining LDT's pre-adaptation for a lean system like GMS; and how bankruptcy through the closure of plants, severance of employees, and elimination of brands aided GM in fulfilling a long term goal of becoming a lean enterprise.

These occurrences happening within the institutional field concurrently demonstrate the forces that comprise the institutional field—as such there is inherent contestation between the various actors. The dissertation with its focus on two profound field level phenomena, GMS and bankruptcy, and with attention to evidence of organizational routines is able demonstrate continuity *in* change at GM's LDT plant. GM has changed; however, its transformation has been through a process of evolution. Despite examples of new logics, meanings, actors, and rules there is plentiful evidence of the legacy and continuation of old logics that, in the face of a changing context, still exert power and influence in legitimating historically-grounded values and behaviors as well as maintaining particular regional identities.

Discussion of the Impact and Influence shared between GMS and Bankruptcy

How Does GM's Bankruptcy Threaten the Progress of GMS?

Thus far GM's pursuit of a lean production system has been examined and explained in relation to field level pressures as the latter are discussed by Fareed et. al (2015). Through ethnographic data analysis particular lean elements were highlighted and explained in relation to how their implementation showcases evolutionary change processes and illustrates continuity *in* change. Overall, explanations regarding evidence of continuity and change were grounded in a theoretical framework that suggested that organizational behaviors as embedded in routines can be understood as mechanisms of institutional continuity and change inclusive of rules both formal and informal that guide behavior, establish meaning, construct identities, and offer social legitimacy. In relation to the analysis of particular GMS elements there was ethnographic data to suggest both processes of continuity with old logics as well as some instances of change and incorporation of new rules, norms, and constructs.

There are two topics that related specifically to the intersection of GMS and bankruptcy within the institutional field. Both topics suggest potential threats to the implementation of GMS at LDT. First, as has been described—bankruptcy brought with it the requirement that GM bring their total production cost in line with their competitors. The manner in which this was to be achieved was through the elaborated use of tier two employees and in some instances temporary workers. Second, bankruptcy and its corresponding plant closures and layoffs (nationally) initiated a shift in the LDT plant population. Each topic will be discussed in turn to demonstrate the intersection of GMS and bankruptcy within the institutional field.

The concept of moral-economy (Baba 2008, Thompson 1971, and Turiel 2006) offers insight into lean manufacturing as experienced within Toyota. Foremost, what was being asked of workers was reciprocated in to their compensation and what Toyota offered in return. I propose that the elaborated use of tier two employees is a potential risk to GMS due to the perception of non-reciprocity. Womack et al. (1990:99) describe a lean plant explaining, "It transfers the maximum number of tasks and responsibilities to those workers actually adding value to the car on the line, and it has in place a system for detecting defects that quickly trace every problem, once discovered to its ultimate cause." This description is significant because it describes the manner in which a lean system pushes more and more tasks and responsibilities onto workers. As Baba (2008) outlines there was a unique arrangement between morality and economy as it developed within the Japanese context, as such, "…a moral source of competitiveness that continues to demand much from individuals, but also offers certain forms of protection to those individuals and confers upon them compensatory benefits that are not available in traditional American manufacturing systems" (2008:27)[41]. I offer two points of

[41] In particular this refers to the promise of life time employment for core employees at Toyota, up to retirement age at the company.

discussion as it relates to this topic. First, as was described in reference to the unique context of Lansing—it appears to have fostered a unique and collaborative union management relationship that offered fertile ground for the implementation of a lean system. It is a system that demands more of employees as participative agents of improvement and waste elimination; furthermore, in a manner similar to that described by Baba in relation to the particular historical context that contributed a "transformative effect upon Toyota's employment relations system" (2008:29) primarily that "…workers had disincentives to resist" based in "… high unemployment and Toyota's isolated rural location" (2008:29). Similarly, Lansing's workforce was motivated by global changes in the auto industry and fears of job loss—factors which contributed to their consent to the terms of the Platinum Agreement, which laid the foundation for implementation of GMS at LDT.

As presented, bankruptcy included changes to the regulative pillar of institutions that ushered in change to both policies and rules related to worker compensation and the use of tier two employees and temporary workers. I propose that these non-traditional employees however have been stripped of the "protections," which justify the demand for their elaborated and participative role. In particular, unanticipated consequences may stem from the experience of disparate pay. A similar argument is made by Helper (1995) In "Can Maquilas Be Lean? The Case of Wiring Harness Production in Mexico" in which she describes two trends she observers in the North American car industry. These include, "First many automakers and parts suppliers are introducing new forms of workplace organization emphasizing 'lean,' team-based decision-making and just-in-time inventory systems…Second, many auto companies are transferring parts-making operations to Mexico and other low-wage economies where unions are weak or non-existent" (260). Overall, Helper questions whether lean production can be achieved within

the realm of maquiladora factories. She grounds her answer to this question on interview data gathered in Mexico and Texas. Important in her analysis are the affects of low wages and high turnover on lean production and continuous improvement. Similarly, the proliferation of tier two employees with their lower wages may present a similar risk to that which Helper pointed out in the Mexican maquiladora context—in both examples the benefits may not be robust enough to justify the sacrifices and level of participation that lean systems demand.

This change to compensation is extended in reference to Dunk (2002) who explains industrial adjustment on the personal level (for male industrial workers in the Canadian paper industry) and highlights the power of neo-conservative and neo-liberal explanations on economic restructuring. He asserts that "These policies generally have involved the retraction of the social wage as embodied in such things as unemployment insurance, welfare, and public pensions and a tightening of labor legislation, effectively increasing workers' exposure to market forces while simultaneously restricting their ability to organize and resist these changes" (2002:878). The changing level of reciprocity between employee and employer introduces risk. Two such examples include the expected performance of employees may not be there as a result of the changes in what employees are offered (i.e. insufficient compensation); another risk relates to the divide in the workforce (i.e. no fairness) based on employees performing the same work for different levels of pay.

A second topic that deserves further attention as it relates to jeopardizing the implementation of GMS is the manner in which bankruptcy proceedings and its corresponding plant closures and layoffs initiated a shift in plant populations. As was described in the data section, this contributed to the transfer of employees from shuttered plants into LDT as well as new management. These transplanted employees both hourly and salary are without the

particular Lansing heritage. Unlike their Lansing counterparts who accepted the implementation of GMS as a means to ensure continued auto-producing in the region and for who even during GM's darkest time of bankruptcy had continued operations at the LDT facility—events which cognitively informed and reinforced their identity as auto workers and their belief in the value of auto working as a livelihood, transplant employees have distinct beliefs and values informed by dissimilar experiences, primarily the experience of plant closure. For transplant employees, work histories could have included the following series of events: implementation of lean manufacturing, GM bankruptcy, plant closure, and finally layoff and/or eventual relocation. I suggest that an influx of employees with distinct GM backgrounds from outside of Lansing can contribute to diluting the unique labor management relationships that have been previously documented in Lansing. Again, this insight and proposition could be further examined through research aimed at comparing and contrasting the production norms as well as beliefs and values held by native Lansing autoworkers compared to outsiders.

Gamst's work (1995) supports and extends this proposition. In particular, Gamst purports that work (i.e., compensated employment) both provides self-identification as well as social and economic power and temporal order through a daily routine. Gamst articulates the importance of work in North America by describing what the loss of a job (and by extension plant closures) can feel like—his explanation extends beyond economic implications to include social and personal ramifications as well. "The North American work ethic holds that one should work arduously and diligently and, consequently, one becomes sufficiently rewarded in society" (1995:24). This reiterates and extends ideas described by Weber and the Protestant Work Ethic (1958). With the loss of a job, the "societal reward" for hard work is removed and signals that the person or group did not work hard or tirelessly enough. The consequences are economic as well as personal and

emotional. For employees coming from shuttered plants to LDT, they would be bringing with them personal and emotional baggage related to these experiences. This "baggage" would contribute to their specific background and context and as field theory suggests would contribute to distinctions in institutional logics.

This proposition also relates to Brondo and Baba's (2010) observations that performance changes corresponded to employment patterns at the Lansing Grand River Assembly (LGRA) plant that were undermined by substantial changes to the composition of teams. Despite solid plans, training, and initial results, the plant's performance was impacted by the influence of incoming transplant employees from closed plants elsewhere moving onto production teams and then changing teams due to contractual rules which allowed employees to "bump" and shift teams based on seniority. Similarly, in the LDT context, bankruptcy initiated the movement of transplants that could threaten the unique heritage of the LDT workforce and its previously described collaborative labor management relations. This observation may be related to the findings of Warner and Low (1947) during their Yankee City study in which they documented the manner in which field level institutional pressures impacted and changed workplace dynamics. In particular, I highlight Warner and Low's (1947) weaving together the influences of the Great Depression in distancing the wealthy and the poor, the manner in which wealthy persons of influence (previously locally based and well regarded) became strangers who resided outside of the state, and how shifts in the perspective of town's people toward the powerful contributed to the unionization of the workforce—an event which was previously inconceivable.

It is important to point out that this dissertation research, the research by Brondo and Baba (2010), and the research by Warner and Low (1947) are distinct; yet, I argue the three cases are similar in that each includes institutional field analyzes. Brondo and Baba's (2010) context

did not include a Great Depression nor bankruptcy; their focus was more exclusively on GM and the Union. However, their analysis included comprehending the impact of national plant closures on the local LGRA population and becomes a case study of the connection between global and local processes, in this case, the unintended consequences and local ramification was change within the plant-based teams and performance.

Warner and Low's (1947) work addresses field level phenomena as well; in particular, they incorporate the specific context of the Great Depression and changes as they occurred within seven shoe manufacturing plants—their work incorporates events occurring within the local and national contexts and is able to argue that changes in patronage ushered in corresponding changes in power and relationships which impacted the process of unionization among this workforce. Similarly, in relation to changing leadership and changes to the workforce population, I propose that there are unintended consequences to LDT—specifically changes in labor management relationships. Overall, these three cases despite important distinctions all share a focus on the field. Furthermore, the three cases despite differences in the specific phenomena, document similar effects; that is severance of pre-existing relationships within a particular local context and as a result impact on the way in which manufacturing practice occurs within a particular embedded context.

GM Bankruptcy and the Literal "Leaning" of General Motors

The Toyota Production System is viewed as a production methodology with two basic principles; first the reduction of cost through waste elimination; and second, making full use of human capability (Liker 2004). I propose that GM's lean production system, GMS, embraced these concepts and endeavored to achieve them within the realm of plant operations. However, there was insufficient attention to the implementation of "leaning" the corporation as a whole.

That is the comprehensive business inclusive of management and support functions such as engineering, supply chain, design, and other non-manufacturing aspects of the corporation. I argue that GM implemented lean in a manner that concentrated almost exclusively on plant operations and mostly on hourly operators. This emphasis on the technical elements of lean production is not uncommon and as Liker et al. (1999) points out often the technical elements of lean production are more easily imported than the non-technical human relations elements. In his chapter "Bringing Japanese Management Systems to the United States: Transplantation or Transformation" Liker et al. (1999) describes the tendency for organizations to equate the Toyota Production System with Japanese management techniques. However TPS and Japanese management techniques are not synonymous. In order to correct this misguided assumption he offers "…three layers in the structure we call Japanese management systems: Layer 1: Shop floor production systems, Layer 2: Factory organization and management, and Layer 3: Corporate structure and systems" (Liker et al. 1999:7). The popularity of TPS contributed to the view that it was exclusively production-oriented; however, Japanese management goes far beyond production[42].

What is significant to point out is the manner in which bankruptcy and the changes it demanded of the enterprise could have helped GM move closer to some of the features that contribute to making Japanese management systems successful—these are broader than just lean manufacturing techniques. Following this industry trend of primary focus on shop floor techniques, GM did not pursue nor achieve cost reduction and waste elimination throughout the entire company and value stream during their implementation of GMS—it was most exclusive to production operations. Related to this argument, I propose that bankruptcy served to function as

[42] My argument is that the success of Japanese firms is grounded in more than their factory operations and yet Western firms often want to copy their factories and ignore their other practices.

stimulus that actually achieved the literal leaning of the automaker that contributed to its return to profitability. More recently, Holstein (2009) in his work *Why GM matters: Inside the race to transform an American Icon* describes the changes that were initiated by Rick Wagoner to profoundly alter the trajectory of the company, these changes include alterations in manufacturing process, cost, and overall product design. Holstein argues against critics that purport that GM was sitting idly in response to market changes. I suggest, that even if Holstein is correct in that Rick Wagoner was actively working to change the enterprise— it was bankruptcy and its restructuring which resulted in an altered company trajectory.

Despite analysis of individual lean elements which documented the manner in which the elements showed partial implementation on the shop floor, there was not evidence of a deeper understanding or conceptualization of the manner in which the company embraced lean principles in the jobs performed by management. Whereas operators were scrutinized and required to complete standard work according to cycle times there were not attempts to translate these principles into improvements in the conduct of the broader company's business and performance. I argue that bankruptcy and the literal leaning of the company functioned as a mechanism by which GM as an enterprise was forced to go lean. Overall, lean systems push the limits of what individuals are capable of performing—pushing the requirement to do more with less. Through bankruptcy GM went through an elaborate purge of waste and cost—severing debt, financial obligations and ending brands. The "new" GM which at the close of 2015 reached unprecedented profitability is now lean in two respects; it is both a lean entity as well as a company that uses lean manufacturing techniques.

I further propose that this process of the corporation and its salaried employees sustaining loss, as well as demands for improvements, and restructuring represent a significant event in the

history of GM's relationship to GMS and lean. Foremost, I suggest that this experience has the potential to serve as an example of moral economy and justice—that is corporate GM and its salaried employees took a turn at lean sacrifice. The government demand that Rick Wagoner resign was also a potential demonstration of the reciprocity and collaborative relationship shared between GM and its employees. Rather than production workers continually being squeezed via the implementation of lean the whole company was being squeezed under the supervision and oversight of the US government. Rick Wagoner's forced resignation in addition to knowledge of hourly headcount reduction is reminiscent of the resignation of two Toyota Presidents, one that resigned "…as a means of signaling and accepting management's responsibility for the failure of the firm to honor its previous commitment to its employees not to dismiss them in exchange for a wage reduction" and the second resignation "…to help dissociate the company from its dishonored wartime activities" (Baba 2008:25).

Lansing, Michigan's Unique Context

Whereas the previous section offered discussion of the institutional phenomena this section turns attention to a discussion of specific ethnographic themes. The ethnographic themes offer discussion of the manner in which organizations sustain and/or promote collective identity among workers during and after an upheaval (as occurred during GM's "right sizing") (Van Maanen and Barley 1984).

Economic Nationalism

According to Ochs and Capps (1996:19) narrative performs a variety of functions including categorization of life experience in a manner that brings organization and intelligibility to complicated life occurrences, constructing unity through past and present, as well as offering a means of association between an individual or collective group and society. All of these

functions of narrative are critical for accomplishing individual necessities such as the formation of identity, the establishment of relationships and group cohesion or membership (Ochs and Capps 1996: 19). Accordingly, the bumper sticker campaign and economic nationalism that I document carries significant messages and associated behaviors that attempted to regulate behavior while simultaneously simplifying complicated global processes and helping to solidify a collective group and regional identity.

The incomplete nature of narrative highlights the process of inclusion and exclusion in storytelling—a process that appears relevant when examining what details, events, and examples are included in individual's descriptions of American made. A second interesting aspect of narrative is the manner in which "Narratives situate narrators, protagonists, and listeners/readers at the nexus of morally organized past, present, and possible experiences" (Ochs and Capps 1996: 22). This is particularly true of stories that attempt to present the history of a collective group such as a union. Autoworkers at LDT describe their history with GM and the GM family along a trajectory that connects past to present with an emphasis on the unique accomplishments of their workforce through time and the way in which past events characterize and impose expectations on the future. Simplified notions of what makes a vehicle "American made," in this case the use of nameplates, suggests a normative system that is actively influencing autoworkers obligations, expectations, and cultural logics. It is possible to conceive of autoworkers possessing as Fairclough (2001) would describe them, particular "member resources" that factor into the composition of the narrative. Accordingly, buy-American messages are told with a particular point of view and with an intended audience.

Anti-foreign rhetoric as it is being spoken or posted by American autoworkers was occurring simultaneously to the company's bankruptcy in a town that has historically relied upon

jobs in the auto industry. The timing and geographic context are inseparable from the message and its local audience. Overall, despite knowledge of the global nature of the industry and the ability to articulate some of the factors that contributed to GM's bankruptcy there was significant power in narrow definitions of American made. I argue that these ideas were part of an institutionalized cultural framework. Through both explicit circulation of these ideas (e.g. bumper stickers) and implicit circulation of the ideas (e.g., owning and driving a GM or American nameplate) the workforce was promoting a concept that helped solidify group cohesion and defend their identity as hardworking, proud, and rich in heritage.

Bourdieu's (1982) concepts of "linguistic capital" and the market help clarify the process whereby the narratives of "What you drive drives America" and "Out of a job yet? Keep buying foreign" develop and proliferate. Lansing as a city has an extensive history of economic sustenance based on job opportunities in the auto-industry. Furthermore, there is an active and proud union membership and familial legacy of auto manufacturing. The "linguistic market" of Lansing in general and the LDT plant environment more specifically values pro-American rhetoric. Overall, opposition to foreign nameplates is a simultaneous support of one's lifestyle, economic opportunity, and notions of family.

Auto Worker Identity

Gamst (1995) addresses the personal, social, and temporal dimensions of work, and highlights the manner in which work is by default part of the "social environment" given individuals' interdependence. Gamst's text also highlights how work is purposeful—the purpose being determined by the cultural context which could include creating material, social relational, or ideational value. The ethnographic data presented highlights the manner in which auto work in the region contributed to establishing its own legitimacy, especially as the notion of work ethic

and exceptionalism contributed to broader regional identities and promotion of employment in the industry. In particular, the theme of economic incentives of auto working may relate to an observation that individuals continue to apply for open positions at LDT even if those positions only receive two tier wages. This theme also helps to explain the routine of workers continuing employment well past retirement eligibility. Finally, it frames concerns which were expressed by workers regarding their ability to sustain their lifestyles—in particular ownership of cabins in Northern Michigan, their water craft, and affordance of children's college tuition.

These anxieties relate directly to what Anthony's (1977) work describes, particularly the process whereby ideas regarding hard work became secularized and were no longer promoted only within religious ideology but instead found support within broader society. Accordingly, idleness was viewed as disgraceful and ideas of self-determination flourished on the grounds that hard work assured material success. Likewise, Lipset (1990) and Rodgers (1978) present the manner in which attitudes and beliefs regarding hard work became accepted and translated into a social duty and obligation to be productive. These dynamics and the relationship between the meaning of hard work and the significance of material success helped inform understandings of the deeply held legitimacy of auto working in the Lansing, MI context.

Further insight into what loss of employment as auto workers could be mean is gained in reference to Newman's (1999) work *Falling from Grace: The Experience of Downward Mobility in the American Middle Class* which explains the experience of loss from the context of individualistic American cultural cognitive norms. The experience is characterized by loss of pride and dignity—just as individuals tend to assume sole ownership of accomplishments the same is true of loss. As described by Newman, people also tend to hold themselves solely responsible for job loss and demotion –-a tendency that lead to isolation and depression during

times of downward mobility. The level of pride and identity experienced by autoworkers was directly at stake had GM been forced to liquidate. Employee's anxieties related to the loss of material possessions is central to notions of the "American dream" and aspirations for home ownership and consumer oriented practices (May 1988). Furthermore, Perin's (1977) work *Everything in its Place: Social Order and Land Use in America* argues that homeownership functions as a tangible demonstration of success and represents the realization of the American Dream.

Like other myths, the American dream possesses mythic power. "The Dream is neither a reassuring verity nor an empty bromide but rather a complex idea with manifold implications that can cut different ways" (Cullen 2003:6-7). The American Dream and ideas regarding success align to illustrate the complex landscape in which American workers toil and achieve. Davis (1986:viii) explores the history of the working class in the United States and attempts to understand why there has never been a mass American labor movement (barring particular events that occurred on a smaller scale in the 1930s and 1950s). In part he concludes, "the ballast of capital's hegemony in American history has been the repeated, autonomous mobilizations of the mass middle strata in defense of petty accumulation and entrepreneurial opportunity." Furthermore, Feldman and Betzold's text *End of the Line: Autoworkers and the American Dream* (1988) document the difficulty of factory work both in relation to its physical demands as well as its boring and repetitive nature. The text implies a drudgery of the work and yet a simultaneous appetite for the pay in this community. It should be noted that there exists nostalgia for the "American Dream" as it is assumed to have been experienced in the past—specifically the era in which industrial growth was occurring and the middle class in the United States was flourishing.

The modern political economy is characterized by declining job security and limited growth realities that make accomplishing the "American Dream" more tenuous.

Lansing's GM Family

Fine's text stresses the REO factory's family-feel which she attributes to shared values between workers and managers—and to the legacy of Ransom Old who prided himself on treating workers in an equitable manner. Again, this notion of "family" was heavily represented in my ethnographic data and was demonstrated in various routines such as the celebration of birthdays and anniversaries with family style dinners in the plant, the web of extended families who all found work with GM, and the practice whereby individuals in describing their background and history with GM would also reference the longer familial history, calling attention to the generational level (i.e. second, third, fourth) they had attained at GM. Fine's (1993) text further elaborates on the role of paternalism and masculinity at REO—and highlights the ways in which the company provided working class men satisfaction grounded in leisure, providing for their families, and access to consumerist objectives. This point highlights the interrelationship between the construct of Lansing's GM family with the other ethnographic themes such as the legitimacy of auto working and regionally and the institutional logics which supported and promoted the economic incentive of auto working.

Future Research Directions

Thus far, this chapter has discussed propositions related to the impact of bankruptcy on the implementation of GMS (in particular impact stemming from changes in the composition of the plant population through tier two employees as well as transplant employees). A future question that this research has inspired includes: What are the specific consequences of the elaborated use of two tier employees on the suite of lean elements most directly associated with

people involvement, empowerment, and continuous improvement? Insight would be gained through exploration of how tier two employees and/or employees hired post-bankruptcy relate to, understand, and participate in these specific lean elements. My assumption is that worker participation and involvement would directly relate to incentives provided by the employer. In other words, the research would look to document the level of employee participation in relation to those specific lean elements based on level of compensation.

Other questions relate to observations regarding the manner in which bankruptcy helped GM literally become a lean enterprise. Foremost, how has GM's bankruptcy and the specific consequences and toll taken on management and salaried employees served as an equalizer that could function as new institutional pressure to promote greater corporate alignment and cohesiveness? The responsibility to ensure competiveness could now be interpreted as a shared responsibility to an extent not previously experienced. Future research on this topic would serve to investigate whether bankruptcy functioned to promote collaboration between the corporation and its union workforce or even between corporate GM and plant staff and personnel. There are new questions regarding whether GM's profitability and subsequent profit sharing are driving the incorporation of lean practices and employee buy-in to lean as a means to reduce cost, improve quality, and enhance sales or whether GM's return to profitability is contributing to explanations that conclude that the literal leaning of the company and reduction in salaried headcount and waste were the changes which led to a return to profitability? A related question that also offers an opportunity for future research is: How did the "letting go" of a class of white-collar employees for the first time in GM's history during bankruptcy impact and influence the LDT plant, the management of the corporation, as well as the institutional field?

Conclusion

Like all research endeavors this dissertation included challenges. One such challenge included the initiation of research based on opportunity versus being one hundred percent prepared. I embraced the opportunity to initiate my research at LDT when I was given access to the facility. This of course impacted the project execution, as I was solidifying my research questions and methods as I was conducting fieldwork. This reality demanded a high level of flexibility and responsiveness— which was only made greater by GM's bankruptcy. Bankruptcy was uncharted territory for GM and as an anthropologist working within the organization as it occurred I was required to incorporate the event into my research. Whereas my initial focus was on GMS implementation, GM's bankruptcy event could not be ignored. My research questions grew to include questions about bankruptcy. As a result, I collected data on both GMS and bankruptcy. The single largest challenge I faced during this research was not the data collection but the data analysis. In particular, comprehending the intersection of GMS and bankruptcy within the institutional field.

Despite this challenge, by relying on new institutional theory I was able to unite my findings on GMS and findings on GM's bankruptcy into a comprehensive whole. A focus on field level pressures deepened understanding on what particular influences contributed to GM's original interest in lean manufacturing as well as GM's bankruptcy. Furthermore, a holistic and historical perspective—as demanded by new institutional theory—contributed to explanations of GM's establishment of new manufacturing plants in the city of Lansing, MI. Lastly, the interpretation of ethnographic data as illustrative of organizational routines contributed to understanding processes of institutional change. In essence, out of the struggle to link bankruptcy and GMS, a creative and original solution materialized—that is comprehension of both the

implementation of GMS and bankruptcy as field level phenomena which could be observed through the ethnographic data record to impact and influence organizational routines—the routines serving as mechanisms of continuity and change. New institutional theory as a theoretical lens allowed for the examination of GMS and bankruptcy as distinct but interrelated phenomena.

Overall, new institutional theory as a framework enabled the analysis of the impact of large-scale social and economic change on the local level (i.e. bankruptcy's impact on GMS at LDT). The desire to answer questions of how organizational behaviors and routines at LDT function as mechanisms that both reflect and enable continuity and change within the institutional field was fulfilled during analysis. Analysis entailed linking ethnographic themes to organizational routines and interpretations of continuity and change. This dissertation offered an example of mechanism based theorizing by highlighting routines as one significant carrier of institutions (cognitive, normative, and regulative). This research was able to offer insight on how embedded organizational routines at LDT (inclusive of local behaviors related to GMS) were impacted by bankruptcy. In other words, this dissertation utilized a framework that assists in understanding organizational change processes and offers insight into the processes by which rules, norms, and practices are both "instituted" and assume authority as well as how they are altered and changed through time and space.

This approach is significant to anthropological understanding of organizational routines as well as to the general processes of organizational continuity and change. This dissertation productively connected the concept of routines coming from evolutionary economics with that of the institutional field, stemming from new institutional theory by highlighting the idea of institutional rules, both formal and informal (i.e. rules can be manifested in routines). The

analysis of ethnographic themes as evidence of routines was enabled by this connection and offered examples of both continuity and change—a process which appears evolutionary in nature. As this dissertation documented, GM both changed and remained the same. Examples were presented of new logics, meanings, actors, and rules; however, there is also plentiful evidence of the legacy and continuation of old logics that, in the face of a changing context, still exert power and influence in legitimating historically grounded values and behaviors as well as maintaining particular regional identities.

Where the dissertation could have remained interpretive and theoretical my work is much more focused on organizational transformation and directed change processes. In fact, I argue the institutional framework offers what Hamada (2000) has called for, an anthropological theory of organizational change. Hamada states (2000:95):

> Organizational transformation is an urgent task. And the stakes are high. Today, large multinationals are weaving new structures and dynamics of production, capital, service, and marketing networks. Globalization of technology is changing everyone's life. Today's multinational firm is more like a changing web of multiple networks and identities that facilitate the most effective movements of materials, goods, services, energy, information, capital, technology, personnel, and other resources across national borders. Jobs, factories, and people are on the move; individuals at different locations coordinate their activities with others working 1,000 miles away. … My model of organizational transformation needs to embrace both the organization wide orientation (integration) and conflicting or complimentary sub-cultures (differentiation). In addition, it needs to acknowledge incomplete understanding, confusion, ambiguity, contention, and silence in organization (fragmentation).

An emphasis of on new institutional theory, which comprehends the cognitive, normative, and regulative pillars of institutions in combination with an evolutionary perspective oriented toward routines as mechanisms of institutional continuity and change offers a productive starting place as it can accommodate processes of integration, differentiation, and fragmentation within organizations. As this dissertation's analysis showed organizational routines change and/or

remain the same in the face of institutional pressures and countervailing forces. By linking ethnographic data to organizational routines processes of continuity and change can be observed. Furthermore, an emphasis on routines and organizational behaviors showcases the role of power and institutional pressures occurring within the institutional field. Ethnographic accounts such as the research conducted at LDT require sufficient attention is paid to "…meanings and practices in webs of agency and power which are relational, historically situated, shifting, and incomplete" (Hamada 2000: 79). New institutional theory, an emphasis on organizational routines, and the incorporation of institutional pressures occurring within the field creates a lens that allows meaning, practice, and power to be situated historically and understood as contested. GMS and GM's bankruptcy as field level phenomena demanded a theoretical approach as robust and dynamic as new institutional theory. Lastly, the integration of these theoretical constructs (normative, cognitive, regulative pillars of institutions; organizational behaviors and routines; and institutional pressures) suggests areas for application as it relates to directed organizational change efforts. For example, to what extent can narrowly focused workplace change efforts that are focused on organizational behaviors and routines stimulate broader institutional change processes and the institutional pressures occurring within the field? This research demonstrates the need for further examination of organizational routines and behaviors as mechanisms of continuity and change.

WORKS CITED

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Anthony, P. D. 1977. *The Ideology of Work.* London: Tavisto

Automotive News. 2014. Fat profits put 2-Tier pay on UAW Agenda. Electronic Document, http://www.autonews.com/article/20140217/OEM01/302179958/fat-profits-put-2-tier-pay-on-uaw-agenda.

Baba, Marietta L. 1999. "Dangerous Liaisons: Trust, Distrust, and Information Technology in American Work Organizations." *Human Organization*. 58(3):331-346.

Baba, Marietta L. 2009. "W. Lloyd Warner and the anthropology of institutions: An approach to the study of work in late capitalism." *Anthropology of Work Review* 30.2: 29–49.

Baba, Marietta L. 2008. "Moral Sources of Competitiveness: Revisiting Moral Economy from an Organizational Perspective." *The Applied Anthropologist: An Interdisciplinary Social Science Journal.* 28(1):3-39.

Babson, Steve 1995. *Lean Work: Empowerment and Exploitation in the Global Auto Industry.* Steve Babson, ed. Detroit, Mich.: Wayne State University Press.

Bachmann, Reinhard and Akbar Zaheer, Eds., 2006. *Handbook of Trust Research*. Edward Elgar, Northampton MA.

Barney, Jay 1991. "Firm Resources and Sustained Competitive Advantage." *Journal of Management,* 17:99-120.

Batteau, A. W. 2012. "The Changing Rhetoric of Corporate Culture" in *A Companion to Organizational Anthropology* (eds D. D. Caulkins and A. T. Jordan), John Wiley & Sons, Ltd, Chichester, UK.

Barley, S. R. 1986. "Technology as an occasion for structuring: Observations on CT scanners and the social order of radiology departments." *Administrative Science Quarterly*, 31: 78-108.

Becker, M. C. 2003. "Organizational routines. A review of the literature." *Industrial and Corporate Change*, 13(4): 643–677.

Berger, Peter L. and Thomas Luckmann. 1967. *The Social Construction of Reality; a Treatise in the Sociology of Knowledge*. Penguin, Harmondsworth (Original: Doubleday. Garden City, N. Y. 1966).

Bernard, Russell. 2011. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Fifth edition. Lanham, MD: Altamira Press.

Bernard, Russell H. and Clarence C. Gravlee (eds.) 2014. *Handbook of Methods in Cultural Anthropology*. Second edition. Lantham, MD: Rowman and Littlefield.

Block, Richard N., and Peter Berg. 2009. "Joint Responsibility Unionism: A Multi-Plant Model of Collective Bargaining Under Employment Security." *Industrial and Labor Relations Review*, 63(1): 60-81.

Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.

Bourdieu, Pierre. 1982. *Language and Symbolic Power*. Edited and with an introduction by John B. Thompson. Cambridge: Harvard University Press.

Bourdieu, Pierre. 1994. "Rethinking the State: On the Genesis and Structure of the Bureaucratic Field." *Sociological Theory*, 12-1 (March): 1-19 (reprinted in Practical Reasons, 1994/1998).

Bourdieu, Pierre. 1992. *The Rules of Art: Genesis and Structure of the Artistic Field*. Cambridge: Polity Press.

Bourdieu, Pierre. 1993. *The Field of Cultural Production.* Ed. Randall Johnson, Columbia Univeristy Press.

Briefing Sheet. 2009. *Driving the New GM*. GM Document.

Briody, Elizabeth Kathleen, Robert T. Trotter, and Tracy L. Meerwarth. 2010.*Transforming culture: creating and sustaining a better manufacturing organization*. New York: Palgrave Macmillan.

Brondo, Keri Vacanti and Marietta L. Baba. 2010. "First In, First Out: A Case Study of Lean Manufacturing's 'Success' in North America's Automobile Industry." *Human Organization,* Vol. 69, No 3.

CBS News. 2009. General Motors Timeline. Electronic document, http://www.cbsnews.com/news/general-motors-timeline/.

Clark, Andy. 1997. *Being There - Putting Brain, Body, and World Together Again*. MIT Press: Cambridge.

Cullen, Jim. 2003. *The American Dream: A Short History of an Idea that Shaped a Nation*. Oxford: Oxford University Press.

Cohen, Michael D.1991. "Individual learning and organizational routine: Emerging connections." *Organization Science,* 2:135-139.

Cusumano, M. 1985: *The Japanese Automobile Industry*. Cambridge, MA: Harvard University Press.

D'Andrade, Roy G. 1984. “Cultural meaning systems.” In R. A. Shweder & R. LeVine (Eds.), *Culture theory: Essays on mind, self, and emotion* (pp. 88-119). Cambridge, UK: Cambridge University Press.

Dandeneau, Steven P. 1996. *A Town Abandoned: Flint, Michigan Confronts Deindustrialization.* Albany, State University of New York Press.

Davis, Gerald F. and Christopher Marquis. 2005. “Prospects for Organization Theory in the Early Twenty-First Century: Institutional Fields and Mechanisms.” *Organization Science,* 16(4): 332- 343.

Davis, Mike. 1986. *Prisoners of the American Dream: Politics and Economy in the History of the US Working Class.* London: Verso.

DiMaggio, Paul J. and Walter W. Powell. 1983. “The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields.” *American Sociological Review*, 48(2):147-160.

Done, K. 1992. “A new car industry set to rise in the east: the German translation of the Japanese gospel of lean production.” *Financial Times.* September 24.

Dosi, Giovanni, Richard R. Nelson, and Sidney G. Winter. 2000. “Introduction: The Nature and Dynamics of Organisational Capabilities” (pp. 1-22 in *The Nature and Dynamics of Organisational Capabilities*, edited by G. Dosi, R. R. Nelson, and S. G. Winter. Oxford University Press: Oxford.

Dudley, Kathryn Marie. 1994. *The End of the Line: Lost Jobs, New Lives in Postindustrial America*. Chicago: University of Chicago Press.

Dunk, Thomas. 2002. “Remaking the Working Class: Experience, Class Consciousness, and the Industrial Adjustment Process.” *American Ethnologist*, 29 (4): 878-900.

Dyer, Jeffrey H. and Harbir Singh. 1998. “The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage.” *Academy of Managemet Review,* 23: 660-679.

Durkheim, Emile. 1895 (1982). *The rules of the sociological method*. Tr. by W.D. Halls. New York: The Free Press.

Fairclough, Norman. 1995. *Critical Discourse Analysis*. Boston: Addison Wesley.

Fairclough, Norman. 2001. *Language and Power* (2nd edition). London: Longman.

Fareed, Naleef, Gloria J. Bazzoli, Stephen S. Farnsworth Mick, David W. Harless. 2015. “The influence of institutional pressures on hospital electronic health record presence.” *Social Science & Medicine*, 133:28-35.

Feldman, Richard and Michael Betzold, ed. 1988. *End of the Line: Autoworkers and the American Dream*. New York, Weidenfeld and Nicolson.

Fine, Lisa M. 2003. "The 'Fall' of Reo in Lansing, Michigan, 1955-1975." In *Beyond the Ruins: The Meanings of Deindustrialization.* Jefferson Cowie and Joseph Heathcott, eds. Ithaca, New York, Cornell University Press: 44-63.

Fine, Lisa M. 1993. "Our Big Family Factory: Masculinity and Paternalism at the REO Motor Car Company of Lansing, Michigan." *Labor History.* 34(Spring/Summer):274-291.

Fine, Lisa M. 2004. *The Story of REO Joe: Work, Kin, and Community in Autotown*, U.S.A. Philadelphia, Temple University Press.

Frank, Dana. 2000. *Buy American: The Untold Story of Economic Nationalism.* Boston, Beacon Press.

Friedman, Jonathan. 1994. *Cultural Identity and Global Process.* London. Sage Publications.

Friedland, Roger and Alford, R. Robert. 1991. "Bringing society back in: Symbols, practices, and institutional contradictions." *The New Institutionalism in Organizational Analysis*, ed. Walter W. Powell and Paul J. DiMaggio, pp. 232–263. Chicago: University of Chicago Press.

Fukuyama, Francis. 1995. *Trust: The Social Virtues and the Creation of Prosperity*. New York: Free Press.

GM Heritage Center. 2004. Lansing Delta Township Starts Construction. Electronic Document, https://history.gmheritagecenter.com/wiki/index.php/2004:_Lansing_Delta_Township.

GM Training Presentation. 2008. GM Power Point Presentation.

GM Training Deck "History." 2008. LDT Power Point Presentation.

Employee Letter. 2009. Briefing Document. GM Document.

Gamst, F. 1995. "Considerations of Work." *Meanings of Work: Considerations for the Twenty-first Century*. Gamst Frederick, Editor. New York: State University of New York Press.

Government Accountability Office Report (09-553). 2009. Summary of Government Efforts and Automakers' Restructuring to Date. Electronic Document, http://www.gao.gov/new.items/d09553.pdf.

Government Accountability Office Report (10-151). 2009. Continued Stewardship Needed as Treasury Develops Strategies for Monitoring and Divesting Financial Interests in Chrysler and GM. Electronic Document, http://www.gao.gov/new.items/d10151.pdf.

Government Accountability Office Report (11-471). 2011. Treasury's Exit from GM and Chrysler Highlights Its Competing Goals, and Results of Support to Auto Communities Are Unclear. Electronic Document, http://gao.gov/assets/320/318151.pdf.

Gregory, Paul Roderick. 2011. "Obama Didn't Save Union Jobs He Saved Union Pay." *Forbes*. Electronic Document, http://www.forbes.com/2011/06/21/bailout-autoworkers-unions.html.

Green, Jeff and Keith Naughton. 2008. "Autoworkers Earning Less in U.S. Happy to Compete Again." *Bloomberg*. Electronic Document, http://www.bloomberg.com/news/articles/2012-10-18/mbdlhh0yhq0x.

Hamada, T. 2000. "Anthropological Praxis: Theory of Business Organization." *NAPA Bulletin*. 18: 79–103.

Hargreaves, Steve. 2009. "GM Plant Closings: 20,000 job cuts." *CNN Money.* Electronic Document, http://money.cnn.com/2009/06/01/news/companies/gm_facilities/.

Helper, Susan and Rebecca Henderson. 2014. "Management Practices, Relational Contracts, and the Decline of General Motors." *Journal of Economic Perspectives*. American Economic Association, 28(1):49-72.

Helper, Susan. 1995. "Can Maquilas Be Lean? The Case of Wiring Harness Production in Mexico." *Lean Work: Empowerment and Exploitation in the Global Auto Industry.* Steve Babson ed. Pp. 260-276. Detroit: Wayne State University Press.

Hirshleifer, David and Ivo Welch. 1998. "A Rational Economic Approach to the Psychology of Change: Amnesia, Inertia, and Impulsiveness." *Anderson Graduate School of Management.* UCLA.

Hodgson, Geoffrey M. 2001. *How Economics Forgot History: The Problem of Historical Specificity in Social Science*. Routledge: London.

Hoffman, A. W. 1997. *From Heresy Dogma: An Institutional History of Corporate Environmentalism*. San Francisco: New Lexington Press, USA.

Holstein, W.J. 2009. *Why GM matters: Inside the race to transform an American Icon.* New York: Walker.

Inkpen, Andrew C. 2008. "Knowledge Transfer and International Joint Ventures: The Case of Nummi and General Motors." *Strategic Management Journal*, 29(4):447-453.

Ingham County History. 2016. Ingham County Michigan Census Facts. Electronic document, http://places.mooseroots.com/l/312512/Ingham-County-MI.

Kapuria-Foreman, Vibha and Charles R. McCann Jr. 2012. "An Appreciation of Selig Perlman's A Theory of the Labor Movement" History of Political Economy. Vol 44 (3) 505-540.

Kearns, J. 1990. *Life After the Line.* Detroit, Wayne State University Press.

Keller, Maryann. 1989. *Rude Awakening*. New York: Harper Perennial.

Lacy. 2015. "GM to Invest $520M in Lansing." *Lansing State Journal*. Electronic document, https://www.newspapers.com/newspage/104941876/.

Levitt, Barbara and James March. 1988. "Organisational Learning," *Annual Review of Sociology,* 14:319-340.

VanHulle, Lindsay. 2014. "Lansing-produced GM documentary debuts." *Lansing State Journal*. Electronic document, http://www.lansingstatejournal.com/story/money/cars/2014/09/16/gm-lansing-documentary-premiere/15754545/.

Levitt, Barbara and James March. 1988. "Organisational Learning," *Annual Review of Sociology,* 14:319-340.

Liker, Jeffrey K. 2004. *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer*. New York: McGraw-Hill.

Jeffery K. Liker, W. Mark Fruin, & Paul S. Adler (Eds.). 1999. *Remade in America: Transplanting and Transforming Japanese Management Systems.* New York: Oxford University Press.

Liker, Jeffery K.W. Mark Fruin, and Paul S. Adler. 1999. "Bringing Japanese Management Systems to the United States: Transplanting or Transforming?" *Remade in America: Transplanting and Transforming Japanese Management Systems.* Jeffery K. Liker, W. Mark Fruin, & Paul S. Adler (Eds.), pp. 3-35. New York: Oxford University Press.

Lipset, S.M. 1990. "The Work Ethic-then and now." *Public Interest*, 61-69.

Menard, C. and Shirley, M.M. 2005. *Handbook of New Institutional Economics.* Dordrecht, The Netherlands: Springer Publisher, Kluwer Academic Publishers Group.

The Macomb Daily. 2008. "Rally to Back Big 3, American Products." Electronic Document, http://www.macombdaily.com/article/MD/20081231/NEWS/312319989.

Magee D. 2007. *How Toyota became #1*. New York: Penguin.

May, Elaine Tyler. 1988. *Families in the Cold War Era*. New York: Basic Books.

A message to UAW Members at GM. 2009. "UAW General Motors Modifications to 2007 Agreement and Addendum to VEBA Agreement." Electronic Document, http://online.wsj.com/public/resources/documents/gmuaw.pdf

Meyer, J. W., & Rowan, B. 1977. "Institutionalized organizations: formal structure as myth and ceremony." *American Journal of Sociology*, 83 (1977), 340-63.

Michigan Future Inc. 2013. "The New Path to Prosperity: Lessons for Michigan From Two Decades of Economic Change." Electronic Document, http://www.michiganfuture.org/michigan-future-reports/.

Nash, June C. 1989. *From Tank Town to High Tech: the Clash of Community and Industrial Cycles.* Albany: State University of New York Press.

Nelson, Richard R. and Sidney G. Winter. 1982. *An Evolutionary Theory of Economic Change*. Belknap Press/Harvard University Press: Cambridge.

Newman, Katherine S. 1985. "Turning Your Back on Tradition: Symbolic Analysis and Moral Critique in a Plant Shutdown." *Urban Anthropology and Studies of Cultural Systems and World Economic Development*. 14(1-3):109-150.

Newman, Katherine. 1999. *Falling from Grace: The Experience of Downward Mobility in the American Middle Class.* New York: The Free Press.

Ochs, Elinor and Lisa Capps. 1996. "Narrating the self." *Annual Review of Anthropology*, 25:19-43.

Pappas, Gregory. 1989. *The Magic City: Unemployment in a working-class community*. Ithaca, New York: Cornell University Press.

Parker, Mike, and Jane Slaughter. 1995. "Unions and Management by Stress." *Lean Work: Empowerment and Exploitation in the Global Auto Industry.* Steve Babson, eds. Pp. 41-53. Detroit, Mich.: Wayne State University Press.

Perin, Constance. 1977. *Everything in its Place: Social Order and Land Use in America*. Princeton, N.J.: Princeton University Press.

Price, John. 1995. "Lean Production at Suzuki and Toyota: A Historical Perspective." *Lean Work: Empowerment and Exploitation in the Global Auto Industry*. Edited by Steve Babson. Pages 81-107. Detroit, Michigan: Wayne State University Press, pp. 81-107.

Putnam, Robert. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.

Reed-Danahay, D. 2004. *Locating Bourdieu.* Bloomington: Indiana University Press.

"The Resurgence of the American Auto Industry." 2012. Electronic Document, https://www.whitehouse.gov/.../auto_report_06_01_11.pdf

Rodgers, D. T. 1978. *The work ethic in industrial America, 1850-1920.* Chicago: The University of Chicago Press.

Rosado, Alex. 2015. "GM Celebrates 2 Millionth Delta Township Plant Car." WLNS.com. Electronic Document, http://wlns.com/2015/08/14/gm-celebrates-2-millionth-delta-twp-plant-car/.

Ruark, Peter. 2012. "Michigan's Falling Unemployment Rate Masks Serious Concerns; State has Highest Poverty Rate in Midwest for Working Families." *Labor Day Report*. Electronic Document, www.milhs.org/wp.../LaborDayReport2012withAppendixAandB.pdf

LeCompte, M., & Schensul, J. 2010. *Designing & Conducting Ethnographic Research: An Introduction*. New York. AltaMira Press.

Scorsone, Eric; Christina Plerhoples and Traci Taylor. 2013. "Report of the Lansing Financial Health Team." *Staff Paper.* Electronic Document, https://www.cityofflint.com/wpcontent/uploads/Reports/LFHT_Final_Report_3_18_13.

Scott, R. W. 1995. *Institutions and Organizations*. Thousand Oaks, CA, SAGE.

Scott, R. W. (Ed.). 2000. *Institutional change and healthcare organizations: From professional dominance to managed care.* University of Chicago Press.

Scott, R.W. 2001. *Institutions and Organizations: Ideas and Interests,* 2nd ed. Los Angeles, CA: Sage Publications.

Scott, R. W. 2008. *Institutions and Organizations: Ideas and Interests*, 3rd Edition. Los Angeles, CA: Sage Publications.

Scott, R. W. 2013. *Institutions and Organizations: Ideas and Interests*, 4th Edition. Los Angeles, CA: Sage Publications.

Scott, R. W. and Gerald F. Davis. 2007. *Organizations and organizing: rational, natural, and open system perspectives*. Upper Saddle River, NJ: Pearson Prentice Hall.

Simon, Herbert A.1976, "From Substantive to Procedural Rationality." *Method and Appraisal in Economics*, pp. 129-161 edited by S. J. Latsis. Cambridge University Press: Cambridge.

Simon, Herbert A. *et al*. 1992. "Colloquium with H.A. Simon." *Economics, Bounded Rationality and the Cognitive Revolution*, pp. 8-38 edited by H. A. Simon, M. Egidi, R. Marris, and R. Viale. Edward Elgar: Aldershot.

Sugimori, Y, K. Kusunoki, F. Cho, & S. Uchikawa. 1977. "Toyota Production System and Kanban System Materialization of Just-in-Time and Respect-for-Human System." *International Journal of Production Research,* 15(6):553-564.

Thompson, E.P. 1971. "The Moral Economy of the English Crowd in the Eighteenth Century." *Past and Present,* 50: 76-136.

This American Life, National Public Radio. "NUMMI". Episode 403. March 26, 2010.

Electronic Document, http://www.thisamericanlife.org/radio-archives/episode/403/nummi.

Train, K.E., and Winston C. 2007. "Vehicle choice behavior and the declining market share of U.S. automakers." *International Economic Review*, 48 (4): 1469-1496.

Turiel, Edward. 2006. "Thought, Emotions, and Social Intelligence Processes in Moral Development." *Handbook of Moral Development*. Eds., Melanie Killen and Judith Smetana. Pages 7-35. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.

UAW Training Presentation. 2006. LDT Power Point Presentation.

Vallas, Steven Peter. 2006a. "Theorizing Teamwork Under Contemporary Capitalism." In *Research in the Sociology of Work,* vol. 16. Vicki Smith, ed. Pp. 3-24. Amsterdam, The Netherlands: Elsevier.

Vallas, Steven Peter. 2006b. "Empowerment Redux: Structure, Agency, and the Remaking of Managerial Authority." *American Journal of Sociology,* 111(6):1677-1717.

Van Maanen, John, and Stephen R. Barley. 1984. "Occupational Communities; Culture and Control in Organizations." *Research in Organizational Behavior 6*. B. M. Staw and L. L. Cummings, eds. Greenwich, CT: JAI Press.

Warner, W. Lloyd, and J. O. Low. 1947. "The social system of the modern factory. The strike: A social analysis." *Yankee City Series 4*. New Haven, CT: Yale Univ. Press.

Wasser, Michael Simon Price. 2010. *One Team, One Goal: A Qualitative Analysis of Labor-Management Partnership at the General Motors Lansing Delta Township Assembly Plant.* Electronic Document, https://etda.libraries.psu.edu/paper/10779/6144.

Weber, Max. 1958. *The Protestant Work Ethic and the Spirit of Capitalism*. Translated by Talcott Parsons. New York: Charles Scribner's Sons, Publisher. First published 1930.

Weick, Karl E. 1990. "The Vulnerable System: An Analysis of the Tenerife Air Disaster." *Journal of Management,* 16, pp. 571-593.

Weiss, S.E. 1997. "Explaining outcomes of negotiation: toward a grounded model for negotiations between organizations." *Research on Negotiations in Organizations Vol 6*. Lewicki R.J. Bies R.J. Sheppard B.H. eds. JAI Press: Greenwich CT; 247-333.

Winter, Sidney G. 1964. "Economic 'Natural Selection' and the Theory of the Firm," *Yale Economic Essays.* Vol. 4, pp. 225-272.

Winter, Sidney G. 1975. "Optimization and Evolution in the Theory of the Firm." *Adaptive Economic Models*, pp. 73-118, eds., R. Day and T. Groves. Academic Press: New York.

Womack, James P, Daniel T. Jones and Daniel and Roos. 1990. *The Machine that Changed the World.* New York: Rawson Associates, Publisher.

Zaloom, Caitlin. 2006. *Out of the Pits: Traders and Technology from Chicago to London.* Chicago: The University of Chicago Press.