The Farm Family in the Factory: 21st Century Manufacturing Goes Retro

Revised: May 24, 2005

Keri Brondo
Department of Anthropology
Michigan State University
354 Baker Hall
East Lansing, MI 48824
(517) 432-8745
brondoke@msu.edu

Marietta L. Baba
Professor of Anthropology
Dean of Social Science
Michigan State University
203-D Berkey Hall
East Lansing, MI 48824
(517) 355-6675
mbaba@msu.edu

Key words: (Work, Family, General Motors, Loyalty, Farming)

This manuscript is a draft submitted for review to Human Organization. Please do not reproduce, circulate, or quote without permission from the authors.
The Farm Family in the Factory: 21st Century Manufacturing Goes Retro

This paper reports on the work-family interface at General Motors’ (GM) first Global Manufacturing Systems’ automotive facility in North America, located in Lansing, Michigan. The paper argues that for over 100 years, rural and farming families in the mid-Michigan region have been appropriating GM factories in order to sustain their rural way of life and so remain part of their own moral community. Mutual loyalty to the company, and of the company, are conceptualized from the families’ perspective as a requirement for sustainable communities in this region, motivated by an intergenerational desire to keep GM in Michigan. Employee loyalty also benefits the company by ensuring high productivity and quality.
Authors

Keri Brondo is a PhD Candidate in the Department of Anthropology at Michigan State University and Research Fellow in the College of Social Science.

Marietta L. Baba is a Professor of Anthropology and Dean of the College of Social Science at Michigan State University, with research interests in processes of technological innovation within organizational contexts, and interactions among technological and socio-cultural systems.
Acknowledgements

The authors would like to thank Mike Reinerth, Victoria Gaudard, Dan Wedley, and Patricia Lefevre of GM’s Lansing Grand River Assembly (LGR) plant for invaluable guidance and support throughout every phase of this project. We also are grateful to the people of LGR for granting access to operations and training for the purposes of observation and interviews, and for spending time talking with us and explaining work processes. Thanks are due to the School of Labor and Industrial Relations at Michigan State University (MSU), and especially Professor Richard Block for initially inviting us to join the LGR research project and providing consultation as well as financial support, and to the College of Social Science at MSU for its continuing support of our efforts. We thank Janell Townsend, Sengun Yeniyurt, and Daniel Vacanti for their help with data analysis. We also owe a debt of gratitude to Professor Lisa Fine in the Department of History at MSU for her guidance in interpreting the history of the LGR plant, and to James Walkinshaw and the late Helen Early of the Oldsmobile History Center for their gracious investment of time, and for allowing transcription of oral history tapes. Finally, many thanks to the people of the Lansing Grand River Assembly plant – your continuing story is compelling and important, and we hope that our modest efforts to share some of it with our colleagues will bring greater understanding of, and appreciation for, the meaning created by your lives and your work.
The Farm Family in the Factory: 21st Century Manufacturing Goes Retro

Keri Brondo and Marietta L. Baba

Introduction

This paper is about the evolution of the work-family interface. Drawing on ethnographic research in a Midwest automotive manufacturing facility, we report on a reconfiguration of socio-economic spheres, one that in some ways resembles preindustrial rural life, where work and family were closely intertwined, but with a unique 21st century twist.

In preindustrial or non-market societies work and family were integrated to such an extent that understanding economic and productive systems was impossible without knowledge of a culture’s social relations. Patterns of work were deeply embedded in kinship structures and there was a mutual interdependence among family members for their labor. Work was communal and cooperative, and work training and preparation took place within the family (Applebaum 1984a). With the rise of industrialization, economic activity became differentiated from the general social arena, with work occurring in places distanced from family life. Formal organizations replaced kinship as the dominant principle organizing society (Stover 1999). Technological advances took work out of the hands of people, making jobs routinized and monotonous. With all these changes, people began to feel alienated from their jobs, and from work in general (Applebaum 1984b). Work and family seemed all the more different from one another, so much so that they began to be viewed as separate and perhaps conflicting spheres. ‘Family time’ came to be separated from ‘work time’, and workers began to cherish their family time precisely because it was time away from the demands of work.

Although there is a significant degree of scholarship on the dynamics of family business (with a scholarly journal devoted exclusively to the topic: Family Business Review), the bulk of social science research on the work-family interface in market and industrial societies has treated the
two as separate spheres, focusing on the extent to which the workplace interferes with or can accommodate familial needs (e.g., Bokemeir, et. al. 1996; Friedman and Greenhaus 2000; Kossek 2005, 1999a, 1999b, 1998; Williams 1999). Yet despite the salience of this particular construction of the work-family interface, anthropologists have continued to ask questions about how or if these institutions are really separate. For instance, feminist anthropologists have documented the ways in which women are involved in ‘bringing the family to work’, showing that women link work and family in a way that draws them together despite their other differences (e.g., racial-ethnic, age) to serve as a form of resistance to management (Lamphere 1985; Sachs 1984). More recent research, such as that on families in the Silicon Valley, further reveals that there is much more interpenetration of work and family life than studies of industrial and market societies had previously suggested (English-Lueck 2002; Darrah 2003).

Despite the atomization of families produced by advanced capitalism, where family members are all located in different places performing seemingly unrelated activities, recent anthropological studies demonstrate that social and economic pathways are indeed colliding with one another, in chaotic, untidy, and disordered ways. In the post-industrialized world, workers supposedly go to work to be away from family. Yet family and work constantly crosscut each other: office work goes home with families, children sit on their parents’ laps while they email colleagues, parents spend ‘family time’ in daycare environments eating cupcakes at ‘parties’, breastfed babies are brought to their mother’s office to nurse, or office bathrooms house pumps for women to send home milk (English-Lueck 2000). This is not the integration of work and family that characterized pre-industrial societies, but rather an entanglement. As the Silicon Valley studies demonstrate, the present nature of work is that work and family are colliding at a quickening pace, driven by pressures from work and individual choices to keep within shared systems of meaning in America culture (Darrah, et. al. unpublished manuscript).
We are interested in what the future work-family interface will look like. Will it remain an individually negotiated entanglement as the Silicon Valley studies suggest? We raise this question in light of our own research which has revealed a different configuration of the social and economic spheres in a Midwestern locale: one in which work and family are closely intertwined in a manner reminiscent of pre-industrial societies, yet in the context of a global manufacturing system. In our study of a General Motors (GM) assembly plant in Lansing, Michigan, we are seeing families using the factory to satisfy their own desire to continue to live in what could be characterized as a ‘pre-industrial rural lifestyle’. Some people might believe that people go to work to be away from family, but this is not the case in the factory we studied. Here people go to work to be with family, both within and outside of the plant. Family members work together within the plant, and their factory work enables them to live and work together outside of the plant on family farms and in other rural settings. Further, they appear to rely upon structural work standards or globally standardized management systems of the 21st century, principles that echo those found in the family farms of the pre-industrial era. What this suggests is that some types of families and work environments may be co-evolving.

This paper is the first in a series of reports on new ways in which work and families intersect within and around General Motors’ first Global Manufacturing Systems plant in North America -- the Lansing Grand River Assembly plant. We discuss our participation on a multi-disciplinary research team whose objective was to understand why General Motors decided to locate its two newest and most modernized assembly facilities in Lansing, Michigan rather than in the “usual suspect” locations (i.e., southern states in the US or foreign countries with lower labor costs). The scope of this paper is to report on the first phase of an extended ethnographic study, serving as an overview of our early findings, and an introduction to the research questions and emerging hypotheses that we will be testing as we enter the next phase of our research project.
An Anthropological Lens on Factory Location

In 2001, General Motors opened the first of two US plants to function under the corporation’s Global Manufacturing System (GMS) in Lansing, Michigan – the Lansing Grand River Assembly plant (also referred to here as LGR). Designed to eventually enable standardization and global benchmarking across all of its production facilities, GMS already was operating in seven international locations. The heart of the GMS concept is lean production, and a partnership between management and production workers to enable cost savings and quality improvements throughout the plant. The GMS system focuses on the elimination of waste in all of its forms by everybody in the plant, including production employees, and the reduction of idiosyncratic practices of particular plants. GMS provides a set of both high and low technology tools that permit employees to participate in taking waste out of the system. Under GMS, team members are guided by five core principles: standardization, continuous improvement, built-in-quality, people involvement, and short lead time. During the week-long mandatory training for new plant employees, workers are taught that these five principles are the ‘culture of LGR’. GMS is presented to GM employees in the graphical metaphor of a molecule; it is a dynamic system in which all parts are integrated: if you take one part away, it will become something else. Therefore, for GMS to be effective, employees must embrace every aspect of it. Salary and hourly personnel, who are trained together, are all told that the success of the GMS approach relies on everyone’s full participation. Moreover, the significance of production workers, who are organized in teams that are led by hourly team leaders, is reinforced, as salaried personnel are told that their sole purpose in the plant is to provide support for the production workers. Thus, the plant’s organizational concept is presented to employees as an inverted triangle, where hourly workers are at the top (they produce value), supported by management at the bottom (they are ‘overhead’). All problems and decisions - from the location of a parts bin to whether or not to scrap a car for a paint mutilation - are root-cause analyzed and solved by employees.
In 2002, we joined researchers from Michigan State University’s School of Labor and Industrial Relations (SLIR) on a project aimed to develop an empirical description of the relationship between the labor relations/people systems of the plant and lean manufacturing system within the first of these two North American GMS plants (i.e., LGR). LGR, which produces all of GM’s Cadillac nameplates, began production in 2001. The plant’s products have had notable success in the marketplace, emerging as a leader in luxury nameplate quality production. The plant’s quality was reaffirmed in 2004 when the J.D. Power and Associates Initial Quality Study named LGR the highest-ranking assembly plant in North and South America for initial quality (JD Powers and Associates 2004). LGR also ranked third in the world in the annual study. The plant’s initial quality is continuously improving, having seen a 16 percent increase since 2003 (ibid). The plant’s early success suggests that, in hindsight, GM made a ‘good’ policy decision in locating its first GMS plant in the so-called ‘rustbelt’. Our research team was interested in the reasons behind GM’s decision to locate the plant in Lansing.

Virtually all members of the research team believed that GM’s decision to invest in Lansing did not rest on the community’s commitment to provide financial support and tax relief for the plant, since these benefits probably could have been matched or bettered by countless communities around the country and the world. Our SLIR colleagues pointed toward Lansing’s unique ‘labor relations/people system’ as the deciding factor for GM investment:

…the key factor underlying this decision (to locate the GMS plant in Lansing) was the unique labor relations/people system that had developed in Lansing over the previous two decades involving GM-Lansing and United Auto Workers Local 652…no other established GM location has been able to fully duplicate the Lansing labor relations/people system, its culture, and its balanced Union-Management Partnership. It is the linkage between this labor-relations/people system and the lean manufacturing system to be used at the LGRA that was essential to GM’s choice (Block et. al., 2002). (emphasis added).

The ‘labor relations/people system’ referred to above is distinctive in several respects. First, while the GM-UAW Local 652 contract follows typical collective bargaining agreements in the United States with respect to wages, benefits, seniority, grievance procedures, and management rights (i.e.,
decisions regarding what to produce and how to produce it), it is unique in the sense that the plant’s production system is described in the contract, including the team-based work system and duties of all unionized, hourly personnel on the shop floor, as well as the non-union, salaried personnel who work in the plant (i.e., area managers and group leaders; Block 2004). The inclusion of both hourly workers and salaried personnel duties in the contract reflects a more ‘balanced’ (and egalitarian) approach to the specification of work roles. Second, both management and union had to agree on the GMS philosophy as part of the contractual process, particularly the elimination of waste and job role flexibility. The latter was especially important, as traditional contracts stipulate job roles in greater detail (meaning that work processes are more rigid), while the Local 652 agreement broadens job roles to permit flexible work assignments in a team-based work environment. Thirdly, Local 652 is an ‘organic’ labor relations system, meaning that it was initiated and developed by representatives of GM Lansing and the Lansing UAW Local 652, with minimal involvement from parties at the corporate offices or international union (i.e., it is home grown, not top-down). According to labor relations’ theory, such an ‘organic’ system is persistent because the participating parties create the relationships, buy into them, and continually adjust them to stay current with on-going developments (Perlman 1928, reprinted 1966). An important result of such an organic system is a higher level of trust between management and workers, with daily interactions that are characterized by informal cooperation and friendly give-and-take, rather than insistence on win-lose strategies and formal grievances. These differences are believed to result in high productivity (compared with other GM plants).

Hypothesizing that such an ‘organic’ system grew out of the GM/UAW Local 652 relationship that had developed in Lansing over the last 25 years, the goal of the SLIR study was to document the particulars of this organic system and gather ‘lessons learned.’ Yet, as anthropologists, who are interested in how locally distinctive phenomena are shaped over time by contextual factors that create cultural patterns, we couldn’t help but ask: What larger historical, socio-cultural,
economic, political or other factors account for this organic system? Our challenge on this project was to formulate research questions that placed the LGR phenomenon in its local and historical context, and to explore possible connections between the plant’s ‘people systems’ and its cultural surround. We were interested in going deeper than the 25-year-old union caucus to provide the contextual details that explained why the organic system emerged in this particular locale.

What is unique about LGR’s labor relations is, in part, a function of the historical development of this particular manufacturing facility, within a specific geographic region – the Lansing area, located in mid-Michigan. Prior to the establishment of the new plant in Lansing, GM had a number of offices and plants in the Lansing area. These establishments date back to 1897, when Oldsmobile started its operations. Oldsmobile was one of the five domestic automobile divisions within GM, in addition to Chevrolet, Pontiac, Buick, and Cadillac. Since Oldsmobile’s inception, over four generations of workers have been employed in Lansing’s automotive industry. Moreover, although it is true that Local 652 is unique in that its caucus has maintained a continuous leadership slate for over 25 years\(^{vi}\), and that this certainly creates enough stability to facilitate a vision for the future of Lansing’s autoworkers, historical research suggests that LGR’s ‘unique people systems’ may not be so unique to Local 652 after all. Historical research on Oldsmobile, Reo Motors (the other company Ransom E. Olds started after being forced out of Oldsmobile), and Spartan Motors (a non-unionized plant founded by a former engineer at Reo Motors), suggests that generally harmonious labor-management relations much like that of LGR appear to have existed in other Lansing area automotive plants, including non-GM and non-unionized plants (see Early and Walkenshaw 1997, Fine 2004, 2003, 1993). What Fine (2004, 2003, 1993) notes for Reo Motors’ employees -- a “family feeling,” management fostering bonds across ranks, and workers feeling that management “cared about its employees” - are also themes in Early and Walkenshaw’s (1997) historical account of Lansing’s Oldsmobile factories.\(^{vii}\) This historical knowledge suggested to us
that perhaps LGR’s uniqueness actually has more to do with the Lansing area than with a particular plant or union.

Indeed, the Lansing area UAW locals as a whole stand in stark contrast to the militant unionism of the Flint area UAW locals, situated about 50 miles northeast of Lansing. Flint was the birthplace of the UAW, where sit-down strikes in the 1930s helped to give birth to the modern organized labor movement of 20th century America. Antagonistic relations between labor and management in the Flint area continued through the 1990s, and some have attributed the economically devastating shut down of all of Flint’s ‘Buick City’ operations to these difficult relationships. Yet, Flint is not the only town known for antagonistic labor-management relations; there also are tensions within other plants located up and down the I-75 corridor from Saginaw, Michigan to Toledo, Ohio. Significantly, Lansing is not located on this corridor, but is isolated in the state’s farm belt interior (see Figure A).

It was this comparison between Lansing and other plants on the I-75 corridor that prompted us to wonder whether or not there might be some historical, community-based factors that influenced Lansing’s labor-management relations in the GM plants. Factory-community relationships were the subject of a seminal paper published by Warner and Low in 1946, as part of their Yankee City series of studies. In *The Factory and the Community*, the authors describe a lengthy and bitter strike that took place in a set of shoemaking factories during the depths of the 1930s’ depression. This strike was a surprise to many observers, since the workers in the plants had never mounted such an action in the many decades of the factories’ history. Warner and Low (1946) were able to trace the roots of the strike to changes in the technology, work process, and social relations within the factory, and they also linked these micro-level changes to larger technological, economic, and social transformations unfolding at the mid-level of the surrounding community, and macro-level of the nation. Through this study, Warner and Low showed that behavior inside a plant cannot be understood fully without
also knowing the connections between the plant and its historical, social, economic, political, and technological contexts.

Taking a cue from Warner and Low, we began to think about the Lansing community. Since both of us had relocated to Lansing from elsewhere (Brondo from New York, Baba from Detroit), it provided an opportunity for us to sum up what we had learned about Lansing from others and from our own experiences as newcomers. One thing that we noted was that Lansing (and East Lansing) is isolated from I-75 (the state’s major industrial corridor), and is surrounded by farmland. It is in the middle of the state and there are no other significant cities nearby. People in Detroit tend to think of Lansing as “far away” even though it is only 90 miles off. It is difficult to get people from Detroit to visit without lengthy advance preparations. According to residents, life is “laid back” in mid-Michigan, and many residents prefer it that way. Also, it tends to be a “sticky” place; e.g., people who come to the area often stay longer than they intended originally. If you ask why, residents will tell you that the people of the Lansing/East Lansing area are warm and friendly, and that the area is peaceful and outdoorsy. This is probably not a description that one would receive for some of the industrial sites along the I-75 corridor (i.e., Bay City, Saginaw, Detroit, Toledo).

Could it be that there is a distinctive regional culture around the Lansing area that permeated the automotive facilities as a function of ‘sticky’ community members who go to work in former Oldsmobile plants? Possibly, if there were such a culture, might it be related to the farming communities that surround Lansing? We were familiar with research by Van Willigen and Stoeffle (1986) of a shoyu (soy sauce) plant built by Kikkoman Shoyu in Walworth, Wisconsin. The management preferred to hire ex-farmers (versus ex-factory workers) as employees, although they did not specifically recruit farmers. According to Van Willigen and Stoeffle (1986:143-44):

The Technical Instructor in the koji area indicated that it was easier to transfer the concept “clean” to the farmers. Farmers could apply concepts learned through handling dairy products to koji making. A major concern in koji is proper growth of the right microorganisms and absence of micro-organic contaminates. This requires very elaborate cleaning procedures…The farmers understood the reasons for care in cleaning…farmers also were
preferred because they had weakly conceived occupational role boundaries and a wide range of experiences in using tools. The farmers were generalists…it is easier to keep a flexible work force on the job than an inflexible one. In addition, the farmers were thought to have few preconceptions of factory organization, therefore they could more easily accept the Kikkoman way of doing things.

Later on in their paper, the authors note that the Japanese managers often described the workers as ‘kindly or friendly’, ‘physically strong’, ‘quick learners’ and ‘hard workers’. Some Japanese felt the American farmers were especially skilled in dealing with machinery, and were ‘more careful with machinery than Japanese’ (1986:148-49).

We also heard anecdotal evidence from colleagues that other industries purposefully chose to locate plants in rural farming communities. Locating factories in rural areas is not unusual. In fact, a study conducted by Georgia Tech for the U.S. Department of Commerce's Economic Development Administration reported on the increasing trend to move manufacturing away from central cities and into rural areas. The locational advantages offered by these regions include “low land and tax costs, low rates of union activity, the availability of an educated work force, a favorable business climate, and the work ethic of potential employees” (Georgia Tech Alumni 1993). The report continued, noting:

Four of the seven factors the study found to be most closely associated with factory location relate to labor force and not location, per se. The growing importance of a well-qualified labor force may be shifting industrial development from the South to the Midwest, which spends more on education and retains its farm-based work ethic (Georgia Tech Alumni 1993) (emphasis added).

Corporations are therefore considering more than merely economic incentives when they decide on where to invest. The quality of the labor force, which some businesses are linking to the type of labor (i.e, farm), is a compelling motivational factor. Was the hiring of farm-based labor a strategic maneuver of General Motors?

When we began this research, we suspected that we might find a historical link tying contemporary labor relations to an ‘Oldsmobile culture’, and that this culture might be derived from
Lansing’s surrounding area farms. We suspected that early farm workers/autoworkers brought unique systems of behavior and practices to Lansing’s factories, which were reproduced over the years and transferred to newcomers. Although we thought early autoworkers came off farms, we had not anticipated finding that many contemporary autoworkers were still living in farming communities. Yet this is what we found. Our preliminary investigations suggest that a significant number of LGR’s labor force grew up or still live in small rural communities of northwest and mid-Michigan. By rural, we are referring to communities in counties that have over fifty percent of their land under farming. The towns that featured most prominently in our sample were primarily white, sparsely populated, agricultural based and/or dairy farming communities. This led us to wonder what type of characteristics rural and farming people bring to the factory. We were especially interested in a possible link between LGR and farm families of mid-Michigan, as we also discovered that General Motors actively recruited family members to work in their factories on a worldwide basis.

In particular, farming families of American history were quite different in their work and activity patterns when compared with families surrounding industrial facilities. In the farm family, everyone worked together at the same general location, as a team, capable of helping each other and even doing one another’s work if necessary. Physical labor is very difficult on a farm, and illness is not unknown, meaning that teamwork is required and expected. Industrial era families do not work in this way as a matter of course. Parents often do different kinds of work in different locations, whereas farm families often are extended families with multiple generations living together or close by (King, et. al 2003). The extended pattern helps to contribute to the teamwork needed to keep the farm going. Industrial families do not have these patterns; they are more atomistic with respect to generational locations (Climo 1992). The nature of extended family farm work therefore produces close generational social ties within farm families (King et al. 2003; Chan and Elder 2001). Moreover, because farm family operations rely so heavily on maintaining a cohesive family structure, individuals are more vulnerable to conflict when it does occur, and therefore must develop
ways to mitigate that conflict (Christensen, et. al 1997; Swisher, et. al. 1998). These differences between farming and industrial families are especially intriguing, as we learned that GM’s LGR plant had adopted standardized work systems requiring self-directed teams led by hourly workers. We wondered whether work practices within farm families might condition their members for team-based work roles within GM’s new LGR facility. To explore these questions, we designed a multi-method ethnographic research project aimed at addressing the following questions:

1. Are there factors external to GM Lansing, yet grounded in the geographical area around this corporate division (e.g., community culture), that have played a role in shaping the distinctive labor relations/people systems found at LGR today?

2. Do farm family behavior, activity, and/or geographical patterns contribute to the culture of LGR? If so, in what ways?

3. How can any such local cultural factors be replicated as GM endeavors to extend its Global Manufacturing System to other parts of North America?

Data and Methods

Multiple methods of data gathering were used, including: transcription of archival sources, one-on-one and group interviews, participant observation, and direct observation.

We began our research with an extensive study of Lansing’s Oldsmobile history, believing that in order to understand the current manufacturing facility, we needed to understand its predecessor organizations. Lansing was the birthplace of Oldsmobile (part of the Olds empire) in 1897, and many contemporary autoworkers can trace their lineages to early Oldsmobile production workers. Because we were becoming interested in the work-family interface, we thought it was essential to learn what types of information family members were sharing with one another about manufacturing over the last century. We spent approximately three months in 2003 conducting archival research at the Oldsmobile History Center, where we reviewed historical documents, organizational charts, photos, videos, internal plant publications, and the indexes for 150 Oldsmobile retiree audio taped oral history interviews. From the oral history indexes, we listened to and transcribed sections of all
the audio taped interviews that treated the topics of labor relations and family. We also interviewed
the founders and employees of the Oldsmobile History Center.

At the start of 2004, we entered the plant for interviews with a cross-section of LGR’s 1875
hourly and 212 salaried employees. We were advised that the individuals in our sample would be
selected for us: we could submit our sample parameters to LGR’s Human Resources (HR)
department where one union representative and one salaried representative would select participants
for our study. We asked that our sample be diversified to include representation by gender, race-
ethnicity, age, plant seniority, and position. HR also requested a copy of our interview schedule,
which we shared. All of the interviews were tape-recorded and followed an open-ended interview
protocol. All of the interviews were scheduled during the day shift work hours and were limited to
one hour.\textsuperscript{x}

Our sample included 30 LGR workers, ages 24-57. Ten interviewees were salaried
personnel, ranging from plant manager to first level supervisor, and twenty were hourly employees,
including production workers and skilled tradesmen. The sample was not ethnically diverse,
reflecting the “whiteness” of the workforce.\textsuperscript{xi} We had access to the demographic data for the entire
plant population and were able to compare our sample to that data (see Table 1). The comparison
shows that although we requested a sample that included individuals of varying background, job
position, and stage in their career, the contacts we were given were weighted towards middle-aged,
white salaried employees. Our sample was fairly representative of the geographic dispersion of LGR
employees (see Figure B for the geographic dispersion of LGR’s production workers). Interestingly,
over half of the LGR workforce (54\% of salaried and 54\% of hourly workers) live in counties where
farming contributes to more than 50\% of the county’s economic base. Figure C shows that our
sample was slightly skewed to include a heavier representation of workers who are residents of rural
and/or farming communities.\textsuperscript{xii} Seventy-one percent of the hourly and 67\% of the salaried employees
in our sample live in counties where 35% or more of its land is being farmed, as compared to the
statistics for the entire LGR population (54% of the hourly and 54% of the salaried workers).

The comparison of plant-wide demographic data with our sample suggests that our sample
may have been skewed to project a certain ‘voice’ into the interviews. The sample included a
relatively high representation of farm-raised, middle-aged, white workers with high seniority.
Recognizing this potential bias early on, we again requested a diversified sample and began to hear
different voices towards the end of our interviewing. However, we acknowledge that the sample
could have been skewed to inject a particular voice into the research process. Therefore, our paper
presents that voice, and endeavors to listen to its message.

Participant observation and direct observation also were used in this stage of the study.
Within the plant, we observed employee interaction during and in-between interviews, on a private
plant tour, in an “All People’s Meeting,” and during employee training. One of the most informative
opportunities we had in the plant was to attend and participate in GMS training with a group of new
LGR employees. During this 32 hour course with 21 newly transferred employees, one of us
participated in all class activities, from tossing a ball with other class participants during team-build
exercises to building Lego cars and airplanes during practical problem solving exercises, to taking
the final exam. This week-long course enabled a rare opportunity to observe interactions between
people already participating in the ‘LGR culture’ (i.e., the trainers) and those transferring in from
other plants that operated in vastly different ways. Outside the plant, we visited the local farms of
two production workers who volunteered to provide us with tours and interviews in their homes.

Data analysis involved a variety of methods, including content analysis, spatial analysis
(maps), and visual analysis (photographs). The types of data we analyzed included archival
documents gathered from the Oldsmobile History Center, newspaper articles on Lansing-GM
facilities, former Mayor Hollister’s and the Blue Ribbon Committee’s campaign archives, interview transcriptions, GMS training handouts, and field notes taken during opportunities for
participant observation (e.g., during meetings, classes, tours). LGR management also provided us with additional documents on the plant’s organizational structure and with demographic data on all 2,087 employees. One of the ways we used this data was to plot employee zip codes on regional maps, thus giving us a sense of where the LGR workforce lives. All of the data was entered into Atlas-ti and coded inductively and deductively.

Findings

**Farming or Rural Work Practices and Plant Productivity**

As noted earlier, LGR is a plant that is recognized for its high productivity and quality. Since the plant opened in 2001, it has steadily increased productivity from 19.9 jobs per hour on one shift, to 25/hour, to 30/hour with two shifts, to the most recent increase in June 2004 to 38 vehicles an hour, all the while remaining a leader in quality products. In order to increase productivity (i.e., improve the ratio of output to input), workers were required to put in mandatory overtime.

… Before we had the second shift on, we were forced to work 11, 12 hours a day. I mean we were working 3 and 4 Saturdays in a row. Because the new plant was coming in, I believe it was for a year that they could work you unlimited overtime and it didn’t matter, and they pretty much did. And I understand why. I mean they couldn’t feasibly bring on a second shift until the volume of car sales went up. So in turn, the day shift was taking over, and we worked a lot of hours. I mean I was working 60 hours a week. But things have mellowed out now… (Carol, a 45-year-old production worker)

The degree to which ‘things have mellowed’ is debatable. In October 2004, the workforce was once again putting in 10-hour workdays, plus mandatory Saturdays, as it was adjusting to the addition of the Cadillac CTS V-series. The hours were so heavy that when we wanted to visit Mike, a farm-factory worker, in his home, we had to schedule our visit at 7:30 pm on a Saturday night, after he had completed a full day plus overtime at the factory and then spent the remaining daylight hours working in his fields. But like Carol, Mike understood the need for mandatory overtime, and he works it with little complaint, saying to us: “It’s not too bad. I have tomorrow off.”
Given the long hours, one might expect LGR production workers to shirk on the job and lower their quality standards, but this is not the case. LGR has maintained high levels of quality, ranking the number one assembly factory in North and South America (JD Powers and Associates 2004). Why are LGR workers willing to undertake such a heavy load, and still be concerned about putting out good quality cars? Why weren’t the people we interviewed complaining more about being overworked? As Table 2 shows, only ten hourly employees mentioned overtime and/or a heavy workload in their interviews. We never asked people directly about overtime, but we did ask all employees to tell us what they liked and disliked most about their job, which opened the window to discussions of this topic. We coded remarks about long hours as ‘positive’ (e.g., “I make a ton of money here because of all the overtime”), ‘neutral’ (i.e., a flat statement about overtime, with no negative or positive qualification to follow), and ‘negative’ (e.g., “I don’t like all the overtime”). What we noted was that even the ‘negative’ statements were equalized by ensuing expressions of understanding, such as Carol’s comment above. Four women spoke of being physically exhausted, which is not surprising given that women continue to do more work in the house even in families where both spouses work full-time outside of the home (Hochschild 1989). Despite minor complaints of exhaustion, these women still countered their “complaints” with statements of understanding that LGR needs to enforce overtime if they are to remain competitive and meet the sales demands. Others in our sample spoke positively about overtime, because it enabled them to earn an exceptional income. As this 45-year-old production worker with a high school education said,

I’m blessed to have a job like this. How I live and what General Motors affords me compared to like you - you have to work and go through all that school… and then when you consider the benefits…I think I made $92,000 last year [not including the cost of benefits]. And of course that’s a lot of overtime, but not every Saturday, and a couple of Sundays, and 10 hours a day, but I enjoy the work, and 10 hours goes fast, and it’s not like I’m so dead tired and burned out by the time I get done. I enjoy doing the work…
Our sample – perhaps because management and union leaders picked it - showed us that there exists a segment of LGR’s workforce that is willing to work above and beyond what one might consider normal work expectations, and do so with little complaint. Why were the workers we were observing behaving in this way? We believe that the explanation relates to the fact that the majority of workers are emerging from a geographical region that is marked by a particular pattern of work practices – those associated historically with farming and a rural lifestyle. To test whether or not we might be on track with this hypothesis, we ran a Pearson chi-square test on the null hypothesis that ‘there is no difference between rural and urban raised individuals’ comments about overtime’. Out of our total sample of 20 hourly workers, we tested the subset of people (N=10) who spontaneously commented on overtime (we asked no question on this subject). The result of the chi-square test was a chi-square value of 3.750 with 1 degree of freedom, significant at the .053 level. This means that urban-raised individuals tend to respond to overtime differently than rural-raised individuals, with the former tending to have more negative responses than the latter. However, because of the small sample size and skewed nature of the sample, we are encouraged to explore this hypothesis further in Phase II of our research.\textsuperscript{xiv}

As previously noted, our sample contained a high representation of LGR employees who live in communities where farming contributes to 35% or more of the local economy. We might assume that management and union leaders, in selecting our interviewees for us, purposefully selected those they deemed ‘good workers’, workers who would make the company ‘look good.’ The fact that the bulk of workers that we talked to were living primarily in rural/farming communities seems to support our hypothesis that ‘good workers’ grow up in small rural and/or farming communities. However, our sample was not overly misrepresentative of the total LGR workforce.

Our findings show that the 1875 people who comprise LGR’s hourly workforce are driving an average of 16.5 miles to work each day (see Figure D). 16.5 miles may not seem a far stretch, but the difference between the City of Lansing and the communities that lie just 15-20 miles in any
direction is like night and day. Lansing is a medium-sized factory town, but it is surrounded entirely by farmland. At this distance from the plant, there is nothing but farms and tiny hamlets. These communities share particular values, behaviors, and a work ethic, all associated with life among farm families. On a farm, as in the LGR factory, the family is a hard working team, one that takes pride in producing quality work. The LGR workers that we talked to pointed to their upbringing in rural and/or farming communities when they discussed the quality of their work.

… we just grew up with knowing that we tried to do good work at home [and] we tried to do good work at school. That’s just the way I was brought up. And it was kind of funny [because] when we got here and heard the vision of LGR…it was really a common goal [of] ‘let’s all come here in the morning, be on time, let’s do the best job we can, and let’s leave on time, and hopefully what we’ve accomplished is good for the business.’ And that’s kind of what the philosophy of GMS is: try to do the best you can with as little waste, and hopefully at the end of the day we end up with more cars than we would have, and more quality cars. And it’s the same thing that you see in the communities around here. A lot of folks, they like quality schools, they like a quality car, they like a quality home, quality way of life… (Frank, a 45-year-old machine repairman and 4th generation GM worker)

I think that we [people from rural communities] are harder workers [and] that we know we have to work to make a living. And we try to make things better, and we’re just basically harder workers. Because you have so much work to do at home, when you get home. So you’re more motivated maybe. More physical labor… (Cathy, a 45-year-old production worker in the body shop)

We postulate that the types of values that LGR workers learned in their home communities are giving LGR a competitive edge because their employees recognize that in order to succeed they must a) show up to work, b) work hard while there, and c) make a quality product. The pattern of work practices, relationships, and concepts associated with farming or rural/small town life that our interviewees describe is characterized by obedience, discipline, flexibility, patience, dedication to hard work and long hours, and a strong business sense, as reflected in these excerpts from our LGR interviews:

…You know, they [farm kids] had responsibilities and stuff. In Detroit they’re probably just walking the street at night and you know what I mean, getting in trouble. But you wonder, if you’re responsible when you’re a kid, you’re gonna be responsible to be to work. And if I didn’t have all this stuff done, I couldn’t play basketball or be a cheerleader. And you had to
keep up with your studies. I mean there were rules set in the house. And it paid off… (Jean, 49 production worker, who grew up on a farm)

On a farm, if you don’t take it as your own business – you have to fix the problems of today - you can’t pass the buck, so to say. It’s your pocketbook. You don’t say I’ll let second shift do it…(Tom, small farmer/production worker)

People from smaller communities are more often – most are raised in two parent households because small towns tend to be that way. I think that gives us a step up …we just have a different outlook on life. People that come from fast towns and big towns tend to be fast, quick, ‘I want to get it today.’ ‘I want to be the boss,’ ‘I want to be this.’ Us from the smaller towns, basically we do our jobs and we’re more patient, more disciplined on how to get there. I want to say we’re more disciplined in our culture. It’s because the way we were raised, I had a lot of morals instilled in me growing up. I learned really quick in life that there’s rules and you have to follow rules, and there are always repercussions if you don’t. I come from a disciplined household (Ted, a 49-year-old UAW committeeman).

Those guys would typically work nights, farming during the day, and work nights at GM. They were true farmers because that’s all they knew was work. I mean to go do a farming operation, which was a dusk-till-dawn thing, and then go in and yeah, work, work, work, work, work. (Daniel, a 51-year-old production worker)

The work ethic, you know, there’s something about bailing hay or picking up stones or plowing the field that - when you plow, you got a certain time you can do it. When you bail hay, you got to do it. You got to do it while the hay’s there. When it’s time to harvest, you have to get up there and do it. If you don’t harvest your crops when the time comes, you’re gonna run out when the fields’ dry. And I think that discipline is what creates the work ethic that’s here. (Jim, a 57-year-old Electrician)

In addition to discipline, patience, and devotion to work, small town, rural families are characterized by a commitment to ‘do what is right’ for the family. We hypothesize that watching family members work hard during the early years of socialization has instilled an especially strong work ethic in LGR’s workforce. In our interview with Ted, the UAW committeeman quoted above, he made the link between the work ethic that characterizes LGR and early socialization.

[LGR culture derives from]…philosophies - maybe from their parents. You know, maybe they were raised that way. Let’s face it, if you listen to certain psychologists, they’ll tell you by the time you’re five or six years old, certain things have been instilled into you… So some people just have that philosophy of doing the right thing, and some people don’t. You can bring somebody into this culture, and if they don’t buy into it, they ain’t gonna be worth a damn in it anyway. The old thing you can’t change the leopard spots, I find to be very true…
This comment suggests that LGR has been so successful because the majority of its workforce was socialized in an environment that encourages distinct work qualities and values. This is true even for the younger generation of workers, like Katy, a 23-year-old group leader, who seems to have internalized her parents’ work ethic.

…I grew up on a farm, very traditional work ethic. People take pride in what they do. They want to work hard. They want to help… I had life great, I think I’m one of the most blessed people I’ve ever met, but it’s just my dad was on the farm, my mom was in the house, you worked all the time. Not that you worked all the time, but my mom was always in the garden or in the house, and my dad was one of the most honest people you’ve ever met. And beyond myself, I would not want to let them down.

Katy’s comments suggest that the level of internalization is so high that she believes not replicating her parents’ work behavior would be a disappointment to her family. We believe LGR is benefiting from this distinct socialization process.

People we talked to who grew up with this particular work ethic, but are now raising their children in a different environment, having moved off the farm and into the city to be closer to work, are concerned about the values their children exhibit as a result of being socialized in the city.

My son is 10. We live in the city. I grew up on a farm. I don’t understand where he can say he’s bored. This kid is spoiled – when I was growing up, I didn’t have half of what my son has. And he constantly tells me that he’s bored or he’s tired, because he’s playing his Game Boy for an hour and a half. And I told him; I said, ‘Buddy, you don’t even know what work is!’ And so I try and give him a little more responsibility; make him do the dishes, and then I make him take the trash out, or do this and that… When I grew up on a farm, I was constantly busy. I could go out and ride my horse. I could go out and brush him. I could go outside and play with the tractors; drive them around the yard. I always had something to do, and I think that could be why I am the way I am now. I got to stay busy. If I don’t stay busy, the day seems to drag by and I feel like I ain’t got anything accomplished. (Jay, 29-year-old production worker)

According to Susan, a 50-year-old production worker who grew up on a muck farm, there is a significant difference in the work ethic of plant employees who grew up on farms versus those who grew up in the city.

Let me tell you! If you’re raised on a farm, you don’t get to just start at 8:00 in the morning and leave at 4:00. That does not happen. There is no time limit. I mean, walk into GM [and
you will hear] the [city] people that are complaining about working eight, nine hours – I could take you out into the plant right now and show you that compared to the kid who’s dad never made him work and all of a sudden he got him into General Motors. They don’t show up for work all the time… they don’t value the fact that maybe I shouldn’t drink tonight and I should go to work tomorrow. Yeah, I believe that farmers, you know…

Comparisons to the city were commonplace in our interviews. These comparative comments illustrate a belief that farmers and people who grew up in rural small communities are more disciplined in their work habits.

*Generational Policing Reproduces Work Practices*

What we have shown thus far is that there appears to be a link between farming, small town and/or rural communities and a particular pattern of work practices. What makes the Lansing experience all the more intriguing is that this particular pattern is reinforced by extended family members who also work (or worked) in this particular place within the automotive industry. As the baby the picture (Figure E), now a 45-year-old skilled tradesman at LGR says, there is indeed a link between families, communities, and factory success:

…[I think] a lot of folks that work other places, they don’t have that link - if you really look back at all the things you have in life, where does it come from? It really comes from one point: *everything* that my great grandfather could hand down, my granddad could hand down, and my dad could hand down - it really comes from one point, and that’s this place... And you’ll see, I think if you talk to a lot of folks here, you’re gonna find that they treat this – especially LGR – like their own business… I mean even in the 80s when GM was getting slammed for a lot of bad quality, I think here in Lansing there were a lot of folks who really tried to do the right thing. I worked on the line for a while before I came on the apprenticeship here, so I had a chance to work with the folks that were putting cars together, and I really saw – you heard the thing of ‘let’s make sure we’re putting the right one out at the end of the line’ - even though we do it better now, I think it [quality] has always been kind of rooted here in Lansing…

In thinking about the cause behind those roots to quality, Tom links it to the presence of kin in the factory.

…. But I just think the folks here, when you look, we’ve always had kind of a sense of family. You know, when I came in I wanted to make my dad proud of me. You know? I didn’t want to mess up. And I think you have a lot of that going on. We used to have a lot of fathers and sons, a lot of mothers and daughters that worked here. So you kind of came in, at
least most folks come in with the fact that they want to do the right thing. They want to keep their family name good. And we have a lot of folks from the Fowler, Pewamo, Westphalia area,\textsuperscript{xv} who are, some fourth generations there that have come through the plants and they just have good work ethic, very good work ethics…

Contemporary LGR workers represent families with over four generations of experience in the automotive industry.\textsuperscript{xvi} The combination of a strong work ethic that is characteristic of small town / farming families, and the presence of actual kin in the factory has had the effect of family members policing their relatives’ behavior within the workplace, thus ensuring a degree of loyalty to the factory. Reflecting on his career with Oldsmobile, the comments of this retired production worker turned union leader reveal how the presence of kin in the workplace helped curb absenteeism.

My family is three generations, my son now works there, my father did before me…sons and daughters followed their mothers and fathers into the plant, uncles and aunts…and I think it gives us more of an ownership…My whole life came out of General Motors, came out of Oldsmobile indirectly…I think that if your father went to work every day, you more or less did too, and if you didn’t he jumped on you maybe more than your boss ever did.

This type of family policing did not disappear with the end of the Oldsmobile line in 2004. In fact, our interviews showed that workers have continued to police one another throughout the 1900s and into the 21\textsuperscript{st} century. Ric, a machine repairman for LGR, who self-identities as “fourth generation Oldsmobile” described how he and his father used to work together at the same plant, and that although the two men worked in different areas of the plant, his father would visit him between shifts to check up on him.

We’d change shifts and he would come down and see me, [and ask] are you working the weekend? And I can remember [that] I always thought you had to work the weekend, because he always did. I worked 64 days straight and the production boss came up to me and said, ‘are you going to work the weekend?’ And I said, ‘yeah, I’ll work.’ And he said, ‘you know you get every third Saturday and every Sunday off.’ And I said, ‘man, my dad never said that!’ And he said, ‘you want the day off?’ And I said, ‘yeah, if you wouldn’t mind, I would like it off.’ And I remember getting home and my dad saying, ‘what are you doing? You don’t take a day off!’
As Ric, now 45 years old, recounted this story, we were transported back to 1977 when he was 18-years old and disappointing his father. Ric spoke at length about the reasons why he wanted a day off to go ice fishing (he was young; he wanted a day with friends; etc.). That Ric felt compelled 27 years later to apologize to his father through our interview with him, and explain why he wanted to take a clearly well-deserved day off signaled to us the force that generational policing still has in the lives of Lansing’s auto workers. Disappointing one’s kin is far worse than disappointing one’s boss. Unlike in most American families, where work and family spheres are separate, in Lansing’s automobile industry, the two spheres overlap, and sometimes one’s boss is also one’s father. Kathy, a 50-year-old production worker told us that if her son worked for LGR and ‘acted up’, he ‘wouldn’t have to worry about management!’ She, like others, said that if her children choose to come to work for GM, they ‘better not embarrass her’. Kathy recalled an incident of a parent disciplining an employee at the last Lansing-GM plant she worked in:

…This guy was caught smoking pot on his break…his dad was a supervisor, and another supervisor called his dad, and he [his dad] was the one that walked the kid out. And I thought that was cool. I thought that was really cool, ‘cause how embarrassing for him. I’m a supervisor and my own son is doing that. I never seen him again after that. I think he was moved out of that plant. And I think he was moved out by his dad…

What Lansing has that is unique is a labor force that spans four generations, all working together within the same plants. The workforce represents multiple generations of rural and farm families who are loyal to the company because it has sustained their families for over a century. The roots of this loyalty may stem from the long history of families working for the same company, and one that promotes a strong work culture in which management elicits employee compliance not through the use of economic power, but rather through normative control. According to Kunda (1992:12), normative control is:

the attempt to elicit and direct the required efforts of members by controlling the underlying experiences, thoughts, and feelings that guide their actions. Under normative control, members act in the best interest of the company not because they are physically coerced, nor purely from an instrumental concern with economic rewards and sanctions. It is not just their
behaviors and activities that are specified, evaluated, and rewarded or punished. Rather, they are driven by internal commitment, strong identification with company goals, intrinsic satisfaction from work.

The company loyalty that we are seeing may stem from a hundred year history of normative control. LGR workers may be experiencing a strong internationalization of company norms, carrying management around inside their breast to the extent that management’s role becomes largely unnecessary. This strong internalization of company norms and values could be what is behind why, when a family member crosses a line and threatens to sour the family’s (both real and fictive) reputation, family members will go so far as to police one another.

**A New Perspective on the Work-Family Interface: Standing Loyalty on Its Head**

It is not an entirely novel idea that factories hire people from rural communities because doing so ensures a hard-working labor force. Factories’ seeking out farmers because farm work practices prepare employees for industrial work practices is demonstrable in the literature (e.g., Van Willigen and Stoeffle 1986). This practice arguably (albeit perhaps just serendipitously) could be going on in GM’s facilities worldwide. Nor is it a new phenomenon to note that the company benefits when its workers internalize management norms (Kunda 1992). We could have left our research team with these confirmatory results, but we decided to press on because we thought that we had seen something more. What we believe is happening in Lansing is not just the factory exploiting the farm families through normative control, but also something like the reverse phenomenon: rural and farming families appropriating the factory to sustain their rural way of life, thereby remaining a part of their own moral communities – ‘moral’ in the sense that community members share beliefs about the ‘right way to live’, defined in their terms.

Since its peak in 1935, the number of farms in the United States has dramatically declined, decreasing by two-thirds between 1935 and 1974, from 6.8 million to 2.3 million (Hoppe 2001). Although the commercialization of agriculture and the 1980s farm crisis xvii has made it increasingly
difficult for families to sustain themselves on farming alone, the reduction in American farms has occurred at a much slower rate. Figure F shows how the number of small farms has consistently declined from the 1950s, while large-scale commercial farming has grown. Further, the graph shows a leveling out of the number of farms in recent years. While many of today’s American farms are large-scale producers, family and recreational farming still persists. This is because rather than abandon farming or rural communities for the city, many people sought off-farm industrial work, which has enabled them to continue living on their farms (Hoppe 2001).

Why, if farms are no longer economically viable and people are forced to supplement their farm earnings with other income, are people simply not abandoning them? This is because farming involves more than an economic activity. It is a family lifestyle based on particular beliefs about living and working on a farm (Colman and Capener 1986; Keating 1994; Taylor, et. al. 1998). Farming families gain not only economic value from their labor, but also certain ethical and ‘moral’ values, and these values are reproduced in succeeding generations. The LGR workers we spoke with attributed their work practices and values to their socialization in farming and small rural communities, and they reported a desire to remain in these communities because they want their succeeding generations to grow up in a similar environment.

A lot of them, like myself, like the country life. I don’t like being in the city where I got the house next door ten feet away. I just don’t like that. And a lot of us were born and raised out there and we just don’t want to give it up. The commute is well worth it to me to have my country life and work in the city…most of the labor force is from outside the city…A lot of people like small communities because of the education programs, the sports programs…they want their kids in a small school so they can keep track of them… (Jim, a 47-year-old production worker who live 29.5 miles west of LGR).

A number of people in our sample told us that they did not want to give up their rural lifestyle, and some commuted over three hours a day just so they could continue to live in the communities in which they were raised. Even those who currently are living in the city, like Katy, the 23-year old group leader quoted earlier, plan to return:
...[I'll stay here] for about, I don’t know, five years or so. [But] I’d like to raise my family there, or in an environment similar... And I think it’s important just because I think that’s where I get a lot of my work ethic and a lot of my values... I take pride in what they’ve taught me...it’s really hard to raise a kid with a good work ethic now, because everything is so convenient, and it’s really hard to show them how to get out there and to do stuff. And like I paid for my own college. I paid for my own car. All that stuff. And I take a lot of pride in that. And now it’s like kids are handed everything. So they get out there and they have to provide for themselves, and they still expect to have everything. And they don’t realize the concept of money, and the concept of work ethic, or showing up for a job, or any of that...

All of the people we spoke with who grew up or currently live in small communities, want to remain there; the income families earn at the factory enables them to sustain and expand their rural lives and/or farming operations, and even to fight developers who are rapidly buying up farmland. We learned in our interviews that the more family members one has working in the factory, the better one’s chance of keeping an active farm going. For instance, during a visit to a production worker’s farm, we learned that his family had worked in Lansing’s automotive plants for over three generations, using the income to sustain and extend their active farming operations. Figure G illustrates this man’s family tree, showing the ten men in his family whose factory labor has helped maintain their 644-acre farm. Jim, a 51-year old production worker with twenty years seniority reflected on this topic:

...Well my family farmed. And a lot of those uncles still run farms, dairy farms over there and then work nights – and that [the factory sustaining the farm] is a model. There was people coming in that worked farms that came in for the job security or for the regular paycheck which helped supplement the farm business, and maybe [they] made money in the farm business by taking the cash from the job and investing it in the land and tractors...And I saw that happen, and that is a true model. That did happen, and does happen...

While production workers like Jim may be the exception rather than the rule (and we do not have sufficient data at this stage in our research project to determine how widespread such active family farming might be), this brief glimpse inside one extended family’s farm reveals the potential density and complexity of work-family interactions in the Michigan countryside.
We postulate that the desire of some LGR employees to remain a part of their geographically-based community, together with the need for external economic resources to sustain a rural way of life, motivates such workers to ‘hold the plant down’ with an exceptional work effort that has direct implications for productivity and quality in the plant. We conceptualize the relationship between the rural families and the industrial plant as one of loyalty, but not traditional corporate loyalty which has been presented in the literature as a top-down management strategy (i.e., as discussed below). The loyalty construct we propose is different and more complex. In speaking about LGR’s ‘culture’ and the plant’s success, this 42-year-old Body Shop shift leader who lives in a small farming community articulates his conception of loyalty, and the motivations behind it.

…I think [one of the things that factors into the plant’s success and feeds into the plant culture] is the small town type environment. I think we have a lot of people that commute in here and I think [that] people within the small towns are more trusting…I think that’s a small town type attitude…the town I’m from, for instance, a very high percentage [of the population] works in the automotive industry. Very, very high. [The town population is] probably 1500 to 2000 people and a lot of them work in the automotive [industry] and I think that’s an issue too. Because I myself feel a lot of pressure living in that environment, knowing – I guess you have a loyalty – you know all your neighbors and family members rely on the business that is sustained over the years. Versus if I move to California and work at a plant for two years knowing that I’m leaving. The commitment, the loyalty, I think, is not there. It [moving for work] is more personal interest versus I know I’m living there forever and I’m surrounded by people that work in that industry and I’m going to do my best to make this thing work.

This statement reveals the nature of the loyalty construct that we are proposing. Continuing social bonds, both within intergenerational families (as discussed previously) and in small communities such as the one Ted describes, place pressure on their members to engage in practices that will ensure that neighbors and families can sustain themselves. In this case, loyalty to the community and/or family motivates members to hard work at LGR. Loyalty thus has a community or family origin and a localized, situated or ‘rooted’ nature, since it depends upon actual and presumed continuity of social relationships. As Ted explains, people who re-locate to other places, based on self-interest, may not have strong ties to neighbors (or extended family
members) as a factor motivating their work effort. We postulate that bonds of loyalty within the community are transferred to the plant through a strong work effort, one that enables the plant to be sustained so that the community can be sustained. LGR and General Motors benefit from this transference of family and community loyalty, which translates into high productivity and high quality products. The transference of loyalty is not simply normative control (although it may appear to be such or achieve the same results); it is a mechanism through which the community exchanges its resources for those of the plant in a form of local-global symbiosis, where both parties gain something that neither could gain alone, resulting in economic competitiveness for the region. This interface of local and global stands apart from other anthropological inquires, which typically focus on the ethics or impacts of the global economy on local communities. Instead we are asking: under what circumstances might local people gain from new global economic models such that they are advantageous for all parties? We suggest that both local and global interests can gain from globalized economic models when communities possess the following three characteristics: 1) resources that a global power values (like the flexible work practices of Mid-Michigan’s communities and families, which are required by GMS’s globally standardized work system); 2) the ability to effectively bargain and trade these resources as a true partner (which has been enabled by the uniquely ‘organic’ labor relations/people system); and, 3) are able to allocate the benefits of that relationship in an egalitarian manner (as exemplified both in the fact that workers use the economic gain from the plants to sustain themselves as rooted neighbors and families in Mid-Michigan’s communities, which otherwise would be impoverished, and by the fact that GMS embodies certain egalitarian principles; see also Baba and Hill forthcoming). Of course, the company may not provide its share of the resources forever, but the fact that GM has continued to invest in Lansing continuously and without a break for the last 100 years, committing a second GMS plant to the area that opened in 2005, while
disinvesting in Flint and elsewhere, suggests a relative degree of company loyalty to Lansing’s autoworkers.

The multidimensional loyalty construct that emerges from the first phase of our research is not yet fully developed, as our data set is not sufficiently robust at this stage to permit formal modeling. It does seem clear, however, that the type of loyalty described above differs from related constructs described in the literature. Early industrial and labor relations studies viewed union-management relations as involving a conflict of loyalties, based on the notion that that workers cannot be both pro-union and pro-company (Whtye 1965). Beginning in the 1950s, a ‘dual loyalty’ literature emerged, demonstrating that even in companies where there is a great deal of conflict between union and management leaders, pro-union/pro-management workers tend to outweigh workers loyal to one ‘side’ (Whtye 1961; Dean 1954). More recently, conceptualizations of loyalty in the management and human relations literature tend to attribute worker loyalty to successful management. Examples of managerial strategies to foster loyalty include reinforcing social identities associated with corporate membership (Alvesson 2000), adopting work/family programs to increase employee commitment and performance (Osterman 1995), and employing the discourse of culture as a form of normative control (Kunda 1992). Labor historians have documented worker loyalty in a number of companies with welfare capitalism plans (Cohen 1990, Jacoby 1997, Tone 1997, and Fine 2004). Louise Lamphere’s (1985) work has also shown that aspects of work culture can be ‘co-opted’ by management in order to build a loyal workforce. Lamphere’s comparisons of women’s work culture in apparel and electronics plants found that while aspects of women’s work culture at times serve to link women together as strategies of resistance, they also can be co-opted by management under the guise of ‘participative management’ (Lamphere 1985).

All of these constructions of loyalty are from a top-down perspective: loyalty emerges initially through the creation of a management strategy, although labor historians and some anthropologists take their analyses further than the management theorists, analyzing worker
interactions with, negotiations of, and/or resistance to, these management strategies. Our conceptualization stands corporate loyalty on its head: loyalty also may emerge from below — from the generations of rural and farming families who comprise the LGR workforce. Loyalty springs from a geographically situated, ‘moral’ community of these employees, and from there it is transferred to LGR/GMS via a system of team-based work practices that share certain features with farm work (e.g., flexibility, discipline, dedication to hard physical labor and long hours; one goal of future research will be to further explore the similarities between GMS teamwork and farm-based work practices). The workforce, in turn, obtains ‘loyalty’ from General Motors in the best way they know — with outstanding, globally competitive work that yields return on investment, a concept invented at GM by Alfred Sloan. In this scenario, the employees receive more than wages; they retain a way of life.

Conclusion

With the presence of American farm families in this 21st century GMS plant, General Motors seems to have reached back a century into America’s past and is relying upon social forms and practices that we may have imagined were no longer relevant in a new century. However, this study reminds us that older, localized forms of social organization continue to co-exist with new ones, and remain available to be re-incorporated into our evolving global culture. What we are seeing in Lansing’s automotive industry is an evolution of the work-family interface, where socio-economic spheres have been reconfigured in a way that resembles pre-industrial life, where work and family were closely intertwined, yet within a 21st century global manufacturing environment. We believe that it is the family form that sustains the bonds of loyalty that are so central to the phenomenon described here. It is the family that grounds the inter-generational links within the rural landscape, and the family that transmits these bonds to the plant. The rural family appears to be a localized form in mid-Michigan, one that has resisted atomization against all odds. Even as younger members leave the state for employment elsewhere, a core remains to root the kinship structure to the ground.
Manufacturing still has to occur some place, and this is one of the places where it happens, near to the rural family core.

Global companies, by definition, attempt to create models that can be replicated in any pocket of the world. GMS is GM’s model, and it has been successfully implemented in seven global facilities. In this paper, we have attempted to explain some of the reasons why GMS has been successful in mid-Michigan. As we have discussed, manufacturing work practices are influenced by the cultures of the workforce, which are embedded in specific places where workers live. One of the advantages GM gained by locating GMS in mid-Michigan was immersion within the rural culture that has the capacity to produce an ‘organic’ labor relations system, one that is both ‘home grown’ and has the capacity to retain stable leadership for a quarter century. LGR’s unique labor relations system alone is not the root cause of the plant’s success, but is itself an outgrowth of historical economic and social processes that are rooted in the mid-Michigan region. The flexible work practices that characterize this region are economically competitive because they are pre-adapted to GMS’ lean manufacturing.

One question facing General Motors now is: Will the global model that has taken root at LGR work in other unionized contexts within the United States? GM’s second GMS plant was built next to the first one (in Delta County, Michigan), so GM is being cautious. Yet, the company is transferring workers from all over the country into these plants, in accordance with the GM-UAW contract. The impact upon productivity and quality of significantly diluting the proportion of mid-Michigan employees is unknown, but will be one of the research foci in the next phase of our investigation, which is already underway.
References Cited

Alvesson, Mats


Applebaum, Herbert (ed.).


Baba, Marietta L. and Carole E. Hill


Block, R. N., M. Moore, P. Berg, T. Curry, J. Delaney, and M. Baba


Bokemeir, Janet L., Jeanne M. Lorentzen, and Lori A. Wibert


Chan and Elder


Christensen, Pia; Jenny Hockey, and Allison James
1997 ‘You have neither neighbours nor privacy’: Ambiguities in the experiences of emotional well being of women in farming families. The Sociological Review. 45(4): 621-44.

Climo, Jacob


Cohen, Lizabeth


Colman, Gould P and Harold R. Capener


Darrah, Charles.


Dean, Lois R


Early, Helen Jones and James R. Walkinshaw

1997 Setting the Pace: Oldsmobile’s First 100 Years.

English-Lueck, J.A.

2002 Cultures@SiliconValley. Stanford, CA: Stanford University Press.

Falk, William W., Michael D. Schulman, and Ann r. Tickamyer, eds.

Fine, Lisa M


Friedman, Stewart D. and Jeffrey H. Greenhaus


Georgia Tech Alumni

1993  Manufacturing in the Exurbs. URL:


Hochschild, Arlie with Anne Machung

1989  The second shift : working parents and the revolution at home.  New York: Viking

Hoppe, Robert A. (editor)


Jacoby, Sandford M

JD Power and Associates


Keating, Norah C.


King, Valarie, Merril Silverstein, and Glen H. Edler Jr


Kossek, E. E.


Kunda, Gideon


Lamphere, Louise


Manning, Jason


Osterman, Paul


Perlman, Selig


Sachs, Karen


Swisher, Raymond R., Glen H. Elder Jr., and Fredrick O. Lorenz


Taylor, Janet Edgar, Joan E. Norris, and Wayne H. Howard


Tone, Andrea


Van Willigen, J. and R. Stoeffle


Warner, W. L. and J. L. Low


Whyte, William Foote


Williams, J.

**Figure Captions**

Figure A  Map of Michigan’s Major Corridors
Figure B  Geographic Spread of LGR’s Production Workers / Michigan’s Counties
Figure C  Geographic Spread by County Type
Figure D  Distance (in Miles) From Residence to LGR for Hourly Workforce
Figure E  Four Generations Oldsmobile.
Figure F  Number of Farms and Acres per Farm, 1980-1997
Figure G  Factory Family with Acres Under Farming

**Table Headings**

Table 1  Demographic Comparisons by Percent of Population
Table 2  Production Workers Comments About Overtime by Type and Geography
Figure A. Map of Michigan’s Major Corridors
Figure B. Geographic Spread of LGR’s Production Workers / Michigan’s Counties
Figure C. Geographic Spread by County Type

Farming vs. Industrial-based Economies

- Over 50% land farmed
- 35-50% land farmed
- Factory location
- Other non-farm based counties

Percent of Population

Sample Salary
LGR Salary
Sample Hourly
LGR Hourly
Figure D. Distance (in Miles) From Residence to LGR for Hourly Workforce
Figure E. Four Generations Oldsmobile.

Photo courtesy of Thomas Regan
Figure F. Number of Farms and Acres per Farm, 1980-1997

Source: Reproduced from Hoppe 2001
The number of acres currently being farmed is indicated under each individual farm owner within the family. The three 10-acre plots are being farmed by ego’s parents.
Table 1. Demographic Comparisons by Percent of Population

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Ethnic Minorities</th>
<th>Age 19-29</th>
<th>Age 30-39</th>
<th>Age 40-49</th>
<th>Age 50+</th>
<th>Under 10 years @ GM</th>
<th>Over 20 years @ GM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Salaried Employees</td>
<td>40%</td>
<td>0%</td>
<td>(2 of 8)</td>
<td>25%</td>
<td>(2 of 8)</td>
<td>50%</td>
<td>33%</td>
<td>22%</td>
</tr>
<tr>
<td>Plant Salaried Population</td>
<td>25%</td>
<td>13%</td>
<td>18%</td>
<td>33%</td>
<td>34%</td>
<td>15%</td>
<td>46%</td>
<td>34%</td>
</tr>
<tr>
<td>Sample Hourly Employees</td>
<td>25%</td>
<td>(2 of 20)</td>
<td>(1 of 20)</td>
<td>5%</td>
<td>(11 of 20)</td>
<td>55%</td>
<td>(7 of 20)</td>
<td>(4 of 20)</td>
</tr>
<tr>
<td>Plant Hourly Population</td>
<td>20%</td>
<td>20%</td>
<td>10%</td>
<td>54%</td>
<td>39%</td>
<td>29%</td>
<td>43%</td>
<td>49%</td>
</tr>
</tbody>
</table>
Table 2. Production Workers Making Comments About Overtime by Type and Geography

<table>
<thead>
<tr>
<th>(n=20)</th>
<th>Positive (e.g., “overtimes means we earn more money”)</th>
<th>Neutral (i.e., mentioned overtime without elaborating)</th>
<th>Negative (e.g., “we are overworked and exhausted”)</th>
<th>Complaints about the plant’s “leaness”</th>
<th>No mention of overtime during interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees who attended high school in rural mid-Michigan</td>
<td>2</td>
<td>0</td>
<td>1 (a woman)</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Employees who attended high school in non-agricultural based Michigan counties or outside of Michigan</td>
<td>0</td>
<td>0</td>
<td>3 (all women)</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Seven plants were operating in countries across Europe, Asia, and Latin America.

Reduction of seven types of waste are the responsibility of everyone in the plant: corrections-errors, overproduction, material movement, motion, waiting, inventory, processing (do what is necessary, but no more).

There are many automated features in the plant that support lean practices, thus reducing waste. For example, there are technology-aided “andons” (analogous to the red handle in Japanese plants) that an employee can pull to shut down the line when something goes wrong. An automated kanban system brings parts to the appropriate place on the line via self-guided robotic vehicles. The ergonomic assembly line rises and falls in height to allow workers to install parts without having to stoop or reach, thus avoiding fatigue, strain and injury.

Damage to a paint job. During an interview, a member of LGR’s quality council estimated that 75% of paint mutilations are caused by employee clothing and mishandling.

The J.D. Power and Associates study measures the number of problems consumers experience during the first 90 days of vehicle ownership.

UAW locals hold elections every few years, and typically individuals rotate out of various leadership positions within the UAW leadership. Local 652 is unusual in that the entire caucus runs on the same slate each election, such that all leadership is voted in on the same ticket.

Ranson E. Olds had practiced welfare capitalism, a popular management approach of the 1920s and 1930s, which evoked the ideology that each of his companies was a “big factory family.” Welfare capitalism was characterized by an array of services and benefits delivered by management to workers with the goal of evoking loyalty and preempting unionization (Fine 2003:275).

We recognize that there are other significant economic factors that determine plant location, which have to do with collective bargaining agreements. For instance, the UAW agreements with GM (and Ford and Daimler-Chrysler) require the companies to make per employee-hour contributions to a Supplemental Unemployment Benefits (SUB) fund. Employees who are on layoff because of volume conditions may draw on the SUB fund so that, combined with their unemployment insurance benefits, they receive 95% of take-home pay while on volume-related layoff. In addition, the collective agreements protect UAW-represented employees from layoff due to technological change through employment guarantees. For a discussion of these provisions see, Richard N. Block and Dale Belman, "Automotive and Other Manufacturing Industries in Michigan: Output, Employment, Earnings, and Collective Bargaining, 1980-2001,” in Michigan at the Millennium, Charles L. Ballard, Paul N. Courant, Douglas C. Drake, Ronald C. Fisher, and Elisabeth R. Gerber, eds., East Lansing, MI: MSU Press, 2003, pp. 145-68. Moreover, during our interviews, we were told of GM’s extended area hiring programs, which provide up to a $64,000 relocation stipend to workers who move to other plants. It is therefore likely that the construction of a new plant in a town where there are unemployed UAW members is less expensive than moving workers or hiring and training a new workforce.

From 1897 to 2004, when GM closed its last engine plant and phased out the Oldsmobile line, Oldsmobile employed over four generations of Lansing’s surrounding area families. Oldsmobile was purchased by GM in 1908 and became one of its North American car divisions, up until the mid-1980s when Roger Smith reorganized the company and did away with the separate divisions. Until then, Oldsmobile had been a complete, self-contained car-making system, with its own design, engineering, marketing, metal fabrication, car bodies, paint, and assembly operations. This all-in-one corporation-within-a-corporation helped to promote a sense of ownership and pride amongst the employees (Early and Walkinshaw 1997). Lansing Grand River was built on the site of the original Oldsmobile assembly plant complex.
All but two interview participants voluntarily provided contact information so that our team could conduct a follow-up interview in their homes during phase two of the research project.

The communities in which Lansing’s autoworkers have historically come from are primarily white rural small towns. The “whiteness” of the workforce perpetuated over the years because GM hiring preferences were to hire based upon employee recommendations. Employees typically recommended their family members. Despite mandated affirmative action hiring, this “whiteness” will prevail until it works its way out through retirements, and GM continues to hold “open” hiring in the communities in which their plants are built.

In addition to the research at LGR, we also explored the role community mobilization played in GM’s decision to build its newest facility in Lansing. Former Mayor David Hollister facilitated this portion of the research, participating in a two-hour interview and sharing a box of documents tracing the emergence of the city’s Blue Ribbon Committee, a committee of business owners, government officials, and community members formed to organize an aggressive “Keep GM” campaign. In 1999, with the knowledge that Lansing’s current plants were scheduled to close within the next few years, this group formed to lobby GM corporate management to consider Lansing for its next facility. The city’s campaign was complete with an incredible proposal to fit a proposed GMS complex planned for 200 acres into an 82-acre Brownfield site, as well as the more common inducements of tax incentives, highway expansion, and $13 million of new infrastructure.

Four men also complained about the lean manufacturing approach as overworking the workforce. Three of the four men who complained about the plant running too lean and overworking the hourly workforce were socialized outside of rural mid-Michigan (in other states or in Michigan’s cities). The one complaint of leanness we received from a rural-raised individual was from a union representative. He warned that management must adhere to all the philosophies of GMS if it is to continue to run smoothly.

Rural areas of mid-Michigan, located about 20-25 miles northwest of Lansing.

In the early 1970s, lowered trade barriers and increases in sales of American grain to the Soviet Union resulted in a sharp increase in agricultural exports, and thus a rise in farm incomes and commodity prices. At the same time, land values increased substantially. Yet low interest rates and the assumption that commodity prices and land values would continue to rise persuaded farmers to go deeply into debt. By the early 1980s, American agricultural exports had declined by over 20%, commodity prices dropped by 21%, and interest rates rose. Many farmers went bankrupt, leading to a wave of farm foreclosures across the Midwest (Harl 1990, Manning 2004). For more information on the 1980s farm crisis see: Harl, Neil E. 1990. Farm Debt Crisis of the 1980’s. Blackwell Publishing.