
Challenging tradition: unlocking new paths to regional industrial upgrading

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Abstract. Globalization is expected to benefit developing country manufacturers through exposure to quality-demanding markets and global buyers. Yet, its contribution to the process of local upgrading depends on the ability of these manufacturers to have access to and learn from global transactions. Growing awareness of the exclusion of smaller sized manufacturers from buyer-driven upgrading arrangements has led development scholars to document alternative strategies for global market insertion that are locally coordinated. But what happens when these alternative upgrading paths are themselves hindered by development-inhibiting relational dynamics at the local level? What options exist for unlocking entrenched social roles and practices in order to promote regional upgrading and with it the repositioning of an established manufacturing district? This paper explores this policy challenge within the context of a historic apparel-making district in West Central Mexico. It looks at the innovative steps taken by development practitioners to promote relational deepening between established manufacturing elites and their traditional subcontractors and, in turn, to encourage joint upgrading as a regional strategy for new market access.

Scholars of developing regions have long believed that in order to survive difficult economic times local manufacturers—particularly those that are smaller sized and resource constrained—should work closely together. This conclusion draws on the observed practices of ‘clusters’ of small and medium-sized manufacturers in Western Europe and North America over the past three decades (Piore and Sabel, 1984; Pyke et al, 1990). Still, despite this supportive policy environment and a general consensus about the multiple gains from intraregional cooperation, what development practitioners and planners often forget when extending the classic ‘industrial districts’ model to less industrialized regions is that local economic actors *do not* always arrive at this same conclusion themselves, nor necessarily in unison.

Recent studies of interfirm cooperation in Latin America, for example, often start with the basic assumption that knowledge sharing is simply a logical response by individuals to increased market openness and global economic integration (Rabellotti, 1995; 1999; Schmitz, 1995; Woodruff, 1998). Yet, this explanation ignores the fact that not all firms within studied regions engage in the same manner, nor to the same degree of enthusiasm, despite their sharing very similar macroeconomic realities and/or fates. Furthermore, as local economies come into contact with larger, often global economic pressures and forces, firm owners—rather than acting to strengthen their collective voice—have been known instead to react defensively, seeking greater distance from their local compatriots (Nadvi, 1999; Nadvi and Schmitz, 1994; Schmitz, 1999; Tewari, 1999). At the precise moment when cooperation may indeed be crucial for long-term economic adjustment, it can also become a greater challenge to facilitate and sustain.

What then leads firms to deepen their local relational ties in response to intensified global economic pressures? What are the main challenges to facilitating and sustaining collective forms of upgrading? And, how can institutional actors intervene to support more dynamic forms of social interaction and engagement between firms?

This paper begins to answer these questions by focusing on the recent experiences of small and medium-sized apparel makers in Guadalajara, Mexico. Starting in the mid-1990s, apparel makers from this historic industrial city began to replace traditional, hierarchically structured subcontracting arrangements, which had been controlled by a small group of industrial elites, with more equitable forms of joint upgrading that promoted equalization of skills and responsibilities across the local supply chain. These alliances have enabled firms to integrate forward and backwards into highly valued activities such as design, marketing, and quality control, as well as to pool their resources through innovative technology-sharing arrangements. Alliance members have also codeveloped unique export strategies in order to sell products outside of their traditional, domestic markets.

The decision by Guadalupe firms to forge joint upgrading alliances is often framed in terms of economic decision making and, more specifically, as a logical response to international trade integration, exemplified by Mexico's participation in the General Agreement on Tariffs and Trade (GATT) in 1986 and the North American Free Trade Agreement (NAFTA) in 1994 (Rabellotti, 1995; 1999; Woodruff, 1998). Without a doubt, import competition and expanding North American export opportunities have had a real and transformative effect on firm behavior in the region. Still, the predictive power of the liberalization-inspired-cooperation hypothesis breaks down as we factor in other important features of this case—while a growing number of sophisticated apparel-makers from the region have chosen to engage with their less skilled counterparts, many still have not. Yet, rather than reducing the significance of this case, this variation reveals its deeper relevance for discussions about *how* to facilitate and sustain collective action in the face of global economic pressures. Ultimately, we are presented with an opportunity to look more closely at the mediating factors that influence *how* specific individuals and groups actually *arrive at* the core relationships they use to deal with emerging global economic challenges and threats.

In this paper I argue that Guadalajara's joint upgrading alliances are the visible result of a complex, and, at times, slow-moving process of relational deepening. To study alliance formation through this framework ultimately requires breaking down their development into manageable and identifiable steps. I start this process by first examining the challenges to relational deepening that are historically rooted and place based. The principle challenge for Guadalupe firms is knowing how and when to let go of older, established ways of classifying and categorizing groups of manufacturers and types of relationships—that is, discovering new ways to overcome *functional* and *cognitive lock-in* (Grabher, 1993; Hassink, 2005). Given entrenched social roles, it is not surprising that many apparel makers in Guadalajara—though conscious of the need for relational deepening, as well as of the potential 'costs' of not cooperating in a highly globalized economy—often fall back on old habits and routines. Individual initiative, therefore, is not enough to *unlock* more inclusionary paths of regional upgrading. In the second half of this paper, I step back from the firm level to look at a larger set of institutional supports that has given rise to new relational forms and, with it, new strategies for *cluster repositioning* (Schmitz, 2004). In particular, I focus on AGREM (Agrupamiento Empresarial), a state-funded business training program that is designed to shift dominant relational practices in ways that keep skilled and well-connected manufacturing elites active and invested in this historic manufacturing region.

This research draws on two years of fieldwork. Between 1999 and 2002, semistructured interviews were conducted with Guadalupe business owners, training providers, government officials, and industry association representatives. Interview selection was mostly done through a snowball process, in which interviewees were asked to list or

recommend other individuals willing to be interviewed. This allowed for better tracing of interfirm and interorganizational relationships, as well as formal and informal exchanges between firm owners and skilled workers, professionals, and service providers in the region. Fifty business owners were selected at random from the Jalisco Apparel Industry Association's member registry and from a list of participants in the AGREM program. These interviewees represented a range of establishments, with close to one third classified as smaller-sized traditional subcontractors and the rest as brandname manufacturers. In addition to conducting follow-up interviews with business owners and key institutional actors, frequent attendance at AGREM training sessions allowed me to document changing relational norms and patterns, as well as observe interfirm dynamics between interviewed firms and other program trainees. A review of historical accounts of the region's apparel-making industry helped to provide additional support for interview findings, as did attendance at industry trade shows and state economic development meetings. In total, 180 interviews and observations were analyzed.

Globalization, upgrading, and the challenge of relational lock-in

Upgrading is a process of innovation designed to 'increase value added' through the creation of better and more efficient products and services (Giuliani et al, 2005; Schmitz, 2004). The upgrading potential of a firm is not contingent on its internal organizational capabilities alone, but is influenced by the interfirm production and marketing relationships that connect firms to one another (Humphrey and Schmitz, 2000). Depending on how they are structured, these interfirm relationships can be instrumental in facilitating a variety of upgrading forms, from *process* and *product* innovation based on improvements in input and output quality, to *functional* upgrading, which involves greater use of 'higher value' skill, such as design, logistics, and marketing (Giuliani et al, 2005; Humphrey and Schmitz, 2000; Schmitz, 2004).

Economic geographers and political economists are especially interested in the localized nature of these relationships and, specifically, their contribution to regional upgrading opportunities in established 'industrial districts'. Early studies pointed to the regional advantages that exist when firms in a district create lasting, relational ties or 'untraded interdependencies' that go well beyond the confines of arm's-length contractual arrangements (Piore and Sabel, 1986; Storper, 1995). In recent years, scholars have begun to differentiate between intraregional relational dynamics that are characterized as *development enhancing* and those that are *development inhibiting*. While still acknowledging the potential gains from interfirm cooperation and networking, these studies also recognize the possibility that established 'social roles' can create regional 'rigidities' that limit or constrain opportunities for innovation and upgrading (Wolfe and Gertler, 2002).

In contrast to idealized interfirm relationships that are built entirely on socially inclusive forms of 'trust', a growing number of studies also point to subtle, yet divisive hierarchies that can 'lock in' development-inhibiting power dynamics (Grabher, 1993; Hassink, 2005; Herrigel, 1993; Narula, 2002; Sabel, 1992). Under this lens, institutionalized social roles and routines can often make it harder for groups (and subgroups) of local firms to adopt new, improved technologies or introduce modified production processes (Amin, 2000; Christopherson, 2002; Gertler, 2004; Glasmeier, 2000; Glasmeier and Fuellhart, 1996; Malmberg and Maskell, 2002).

Grabher's study of industrial decline in the Ruhr in West Germany helps to illustrate the 'inertia' of existing social roles and routines that structure established production and marketing relations at the local level (1993; Hassink 2005). According to Grabher, the steel-making complex in the Ruhr suffered greatly from an overspecialization within

and across firms (ie ‘functional lock-in’), which, while initially reducing transaction costs, eventually weakened the ability of steel-making firms to conduct research and development and seek out new customers and markets. Furthermore, “functional lock-in” reinforced “cognitive lock-in”, insofar as existing production relations “resulted in mutual orientations involving a common language regarding technical matters, contracting rules and knowledge on which the parties could draw in communicating with each other” (Grabher, 1993, page 262). In turn, these mutual orientations made it extremely difficult for firms to individually or collectively reinterpret and adapt to new economic challenges.

The development-inhibiting effects of established social roles and routines can become even more pronounced during periods of large-scale economic and technological transformation (Narula, 2002) and especially with the intensification of global trade (Wolfe and Gertler, 2002). One example is Andalusia, Spain, where existing social customs—which strongly discouraged knowledge sharing outside of the immediate family—not only played a role in limiting new technology adoption by the region’s marble mining and fabrication firms, but also reinforced a ‘resistance to change’ that, with the growth of European imports, eventually threatened the survival of regional producers (Barzelay, 1991). In Pittsburgh’s historic steel-making district, traditional norms of ‘entrepreneurial independence’ quickly gave way to ‘cut-throat’ competition as the US steel industry entered a period of national decline (Sabel, 1992). Sabel also observed similar competitive outcomes in New York’s plastics-making and apparel-making industries in the mid-1980s as a rise in foreign imports increasingly ‘pitted’ neighboring firms against one another. As these examples suggest, entrenched social practices and norms can act to filter global economic pressures and, in turn, influence how firms respond and adapt to these larger macroforces. Furthermore, existing social norms that encourage ‘rugged’ individualism, or that bolster kin-based production hierarchies in an earlier period, have the potential to evolve into regional sources of social conflict and interfirm distrust.

Interestingly though, in these examples, it is the relatively *uniform* nature of the globalization threat—itself a function of the relative independence of firms—that actually provides development practitioners with a unifying event or shared experience around which to design new forms of business assistance. As Barzelay (1991) notes, most marble cutters in Andalusia relied on similar, outdated technologies and, therefore, experienced competitive pressures in almost identical ways. This, in turn, gave development practitioners a powerful organizing tool for pushing the region’s 150 firms to work together. Similar homogeneity was observed in the US Northeast in the late 1980s, enabling practitioners to adopt related methods for promoting cooperation among smaller sized metal-working firms (Sabel, 1992).

But what if these global pressures are not experienced uniformly within a region? And, related to this, what if existing social roles and customs reinforce intraregional differences in firm-level responses? This possibility is evidenced in recent case studies of New York City’s apparel-making industry. In the wake of large-scale economic changes—starting with the intensification of global apparel production in the 1980s—apparel makers in Manhattan’s core manufacturing districts managed to upgrade their production systems by developing close working relationships with a new generation of fashion designers (Rantisi, 2002), logistics experts (Collins, 2003), and labor-market intermediaries (Conway and Loker, 1999). In contrast, those at the ‘bottom’ of the production hierarchy, including hundreds of small-scale immigrant-owned assembly operations in the city’s peripheral manufacturing districts, either had limited access to or were not in a position to fully utilize these same support

services (Hum, 2003). Ultimately, this has reinforced regional inequality by limiting opportunities for entrepreneurial learning and worker advancement.

Developing nations and lagging regional economies in advanced industrialized nations also risk social fragmentation, especially given their dependence on external, buyer-driven upgrading supports (Schmitz, 1999; 2004). Under the tutelage of global buyers, producers in these regions have learned to enhance their core manufacturing competencies (Gereffi, 1999; Piore and Ruiz-Duran, 1998) and also meet demanding international production standards (Nadvi, 2004; Schmitz, 2004). Still, in many cases, these transnational learning arrangements benefit *only* a few large-sized firms in the region and typically exclude small and medium-sized producers, mostly due to their inability to complete high-volume production orders (Giuliani et al, 2005; Halder, 2004; Harris-Pascal et al, 1998). Furthermore, global buyers, in exchange for this structured guidance, often require manufacturers from these regions to sever all ties to local subcontractors and input providers, thus threatening nested sourcing arrangements that would allow smaller, resource-constrained firms to also engage with and learn from these global transactions (Dussel Peters et al, 2002; Giuliani et al, 2005; Schmitz, 2004). Clearly, this has implications for long-term regional adjustment and resilience, especially for historic manufacturing regions that are dominated by small firms, yet remain heavily dependent on the region's larger-sized lead manufacturers.

Growing awareness of the exclusionary nature of buyer-driven upgrading arrangements has resulted in a new generation of studies that explores the possibility for coordinated local *and* global upgrading strategies (Giuliani et al, 2005; Schmitz, 2004). Whereas initial upgrading studies largely focused on the governance strategies of global buyers, these studies examine the steps taken by local policy coalitions to help producers in established manufacturing districts to insert themselves into and move up the global value chain. Local industry associations, for example, have played a key role in helping small and medium-sized firms to address regional technology and skills gaps (Schmitz, 2004). Similarly, business assistance programs have facilitated coordinated production networks, thereby enabling smaller producers to work together in order to overcome initial scale disadvantages (Halder, 2004). Finally, inspection agencies have helped smaller producers to keep pace with rapidly changing international production standards, thereby opening new global market opportunities (Nadvi, 2004). These coalitions can also help smaller-sized manufacturers overcome global power imbalances by targeting specialty export markets and smaller-sized, less controlling foreign retailers (Bazan and Navas-Aleman, 2004; Giuliani et al, 2005).

These studies are especially useful in demonstrating the mediating role that policy coalitions can play in helping established manufacturers gain a foothold in quality-demanding global markets. Less clear, however, is their role in addressing the root causes of 'functional lock-in' and 'cognitive lock-in' (Grabner, 1993; Hassink, 2005) and, specifically, the influence of existing social roles and routines on the strategies firms initially adopt to cope with and harness emerging competitive pressures. In some instances, local policy coalitions have actually reinforced established social roles and hierarchies—and, with them, exclusionary upgrading paths—by continuing to favor and cater to the needs of regional industrial elites (Hum, 2003; Schmitz, 2004). Furthermore, when local policy coalitions do seek to influence relational dynamics, it is often by incentivizing local cooperation among small and medium-sized firms that previously display 'weak' or nonexistent, rather than 'strong' and established, social ties (Halder, 2004)—in fact, this strategy is central to many 'clustering' experiments in Latin American which give financial and technical support to micro and small enterprises that form new business cooperatives (Rueda Peiro, 1997).

It is difficult to envision how these same types of interventions might be adapted to also cope with the polarizing effects of more entrenched social roles and routines. Yet, addressing this policy challenge can be crucial for sustained regional development and cluster repositioning (Schmitz, 2004), especially when buyer-driven options remain limited in scope or, during periods of economic volatility, can become unreliable strategies for sustained upgrading, even for regional industrial elites (Dussel Peters et al, 2002). How might policy coalitions address the functional and cognitive barriers that limit locally coordinated upgrading alternatives? How might these efforts be designed to keep well-connected and highly skilled manufacturing elites invested in their regional economies, especially when they face their own pressing economic challenges and constraints? And, finally, to what extent might local policy actions of this type institutionalize more inclusionary paths of global market insertion? I turn next to the Guadalajara case to explore these questions.

The historical origins of institutionalized practices

Apparel making is a large employer in the state of Jalisco, Mexico. In 2003, there were over 1300 apparel manufacturers, which employed close to 21000 workers in the region. Jalisco ranks sixth nationally (out of thirty-one states) in the value of total apparel production, and seventh and eighth for total manufacturing establishments and apparel-related employment, respectively.⁽¹⁾ Close to 60% of Jalisco's apparel-making establishments are located in the state's capital city, Guadalajara. These urban-based establishments account for roughly 85% of the state's annual apparel production. The majority of Guadalajara's apparel-making operations are micro and small sized, employing fewer than 50 workers—the city has few large-scale operations. In contrast to Mexico's other leading apparel centers—which includes large export cities, like Torreón and Tehuacan—firms in Guadalajara have, until recently, focused primarily on domestic market sales.

Traditionally, apparel production in Guadalajara has been organized through *vertical production networks* in which experienced brandname manufacturers direct and manage the activities of large groups of subcontractors under their control. Under these traditional arrangements, brandname producers not only determined what products were produced and to what specification, but also maintained tight control over value-adding, skill-intensive activities, such as product design, fabric selection and testing, cutting and finishing, marketing and sales, and quality control. In contrast, subcontracting operations in the city focused on basic assembly tasks and the day-to-day management of small-sized production workshops. To quote the owner of a subcontracting establishment, “my brandname client told me that I would only assemble goods for him. There was no exchange related to product design or quality improvements.”

Economic historians attribute this hierarchical structure to changing demographics in the region. High levels of rural-to-urban migration by wealthy landowners in the first half of the 20th century resulted in considerable land speculation and increased urban land prices (Walton, 1978). This made it more difficult for apparel makers to acquire contiguous parcels of land. Scale and scope was instead achieved through close coordination of geographically dispersed workshops owned by several members of an extended family (Arias, 1985; Hanson, 1992; Lailson, 1985).

In the second half of the 20th century, this decentralized system of production was locked in by prominent industrialists arriving from Mexico City. Rising labor

⁽¹⁾Data were compiled from Instituto Nacional de Estadística Geografía e Informática 2003 dataset.

costs and saturated consumer markets in the nation's capital resulted in a search for satellite production sites. Guadalajara was an obvious choice given its large population, relatively low urban wages, and existing supplier base in textiles and machine tools (Hanson, 1992). Industrialists from Mexico City used their 'intermediation' skills to organize formal subcontracting networks in Guadalajara (Hanson, 1992; 1996). They also established production hierarchies which ultimately limited upgrading opportunities to all but a select group of industry elites. Those within these tight-knit social circles were able to "establish a reputation of credit-worthiness" with textile manufacturers from the region, and used this financing to support investments in new technology (Hanson, 1992, page 29). These networks were also used to circulate information about individuals and their family and helped many business owners to secure orders and contracts with retailers and wholesalers throughout Mexico. In the 1960s these same networks helped new generations of style-conscious youth to develop their skills in design and fashion marketing (Lailson, 1985). This, in turn, enabled Guadalajara to establish itself as a key fashion center in Mexico (CANIVEJ, 1994; Hanson, 1992).

For those outside of these networks and with limited financial and social capital, industry access was gained through subcontracting (Hanson, 1992). Still, while clearly dependent on lead manufacturers, subcontractors were given some room to grow and expand into direct sales. The central difference in the upgrading strategies employed by well-connected lead manufacturers, on the one hand, and subcontractors, on the other, was ultimately one of timing and breathing room. The financial and social safety net provided by key individuals from socially connected groups meant that lead firms could allocate time and resources to process innovations and plant upgrades. As they worked to develop their skills, they were able to draw on the rich and diverse experiences of other lead firms from within their core social and ethnic networks, thus providing them with an informal system of supervised training. In contrast, for most Guadalupean subcontractors the process of learning was more choppy and stretched out over several seasons. In the end, most could only afford to dedicate a small share of their total resources and time to developing and marketing their own products and brands.

Until recently, lead manufacturers from the region actively encouraged the reproduction of this bifurcated system of production. By maintaining it, they were able to expand their own operations and support riskier, value-adding activities despite Guadalajara's relatively tight urban land markets. Large-scale changes in the national and global economic environment, however, made it very difficult to support this hierarchical form of interfirm coordination moving into the 21st century. The initial threat came from rising apparel imports, whose total value increased from US\$266 million in 1989 to over US\$4.5 billion in 1997 (Mendoza et al, 2002). By the mid-1990s, existing manufacturers faced an additional set of competitive pressures brought on by an increase in Guadalajara's apparel-making establishments. In most cases, this growth reflected new investments by individuals that saw Mexico's entry into NAFTA as an opportunity to gain access to prominent retail and merchandizing chains in the United States. For existing manufacturers, the problem was not the arrival of new apparel makers hoping to use Guadalajara as an export base. Rather, it was the fact that many of the industry's newcomers did not achieve their stated export goals and, instead, turned to the domestic market and local distribution channels throughout the 1990s to secure production orders and sales.

To respond to these pressures, established industry elites recognized the need for quality upgrades to existing production systems and therefore took steps to alter the nature of their transactions with their core subcontractors. During stable

economic times, lead manufacturers sought out and rewarded loyal and dedicated subcontractors. Performance here was assessed by a subcontractor's ability to maintain production quotas, a willingness to follow orders, and an acceptance of established task divisions. In this changing economic environment, however, deference, dependency, and stability quickly gave way to new requirements for self-assuredness, reciprocal exchange, and quick response.

Established forms of hierarchical coordination, however, not only made it extremely difficult for subcontractors to accept these new responsibilities, but also meant that lead firms lacked the training experience and patience to help mentor and 'pull up' their captive assemblers. Some firms tried to start the process by simply telling their existing subcontractors they were unhappy with a final product, required faster turnaround on orders, or wanted more input on design and marketing. They soon discovered, however, that statements of this kind did not always translate into quality improvements and process upgrades.

As challenges to relational deepening began to surface, many lead firms became aware of alternative, improved sourcing options. Some extended their production networks to include new generations of entrepreneurs from Guadalajara—that is, those unconstrained by earlier production routines. Recently 'out-of-work' maquiladoras or export-assembly plants from neighboring states of Aguascalientes and Guanajuato—many forced to cut back production in response to the US recession in 2001—were also on the scene vying for key positions in domestic-oriented apparel supply chains. Impressed by the quality standards of these firms, lead manufacturers from Guadalajara—particularly those designing seasonal fashions for young professionals—started to incorporate more of these former exporters into their primary sourcing networks.

Under a simple economic framework, the threat of displacement by 'outside' firms would be considered a source of healthy competition as it would provide an added incentive for established subcontractors in Guadalajara to 'wake up' and address their clients' needs. Such optimism in market signals, however, ignores a set of conflicting scenarios and challenges facing established apparel makers in Guadalajara. Existing subcontractors needed to know how and when to take responsibility for their own process and product flaws and improvements. At the same time, they needed to be prepared to engage with and ask for constructive advice and guidance from their clients. Finally, when turning to their former 'bosses' for help, they also needed to set clear limits so that their own instincts about a problem issue were given full consideration and respect, and not suppressed. Lead manufacturers, for their part, had to accept their own limitations, including their inability to fully articulate their needs or offer quality training and guidance. Combined, these required changes not only complicated and distorted the most basic of economic stimuli, but also made it harder for both sets of firms to know how and where to begin the process of relational change. As this suggests, established social roles reinforced areas of production specialization (ie functional lock-in) across subcontracting networks, at the same time that they contributed to language and technical barriers (ie cognitive lock-in) that limited the development of new forms of communication and cooperation.

Agrupamiento empresarial

These functional and cognitive barriers to joint upgrading did not go unnoticed by key institutional actors from the city. State planners from Jalisco's Secretariat of Economic Development began a series of discussions in the mid-1990s with officials from the state's Apparel Industry Association. The timing of this discussion is significant, as it reflected a historic change in political power at the state level resulting in greater political participation by traditional manufacturers (Lowe, 2006).

While employment was actually on the rise in the region's apparel industry in the period immediately following Mexico's entry into NAFTA, both organizations recognized the growing vulnerability of established manufacturers and the potentially devastating socioeconomic effects—in terms of urban job and income loss—that would result from the dismantling of regional subcontracting arrangements. In 1997, these two organizations turned to ITESO—a Jesuit university with experience working with marginalized economic groups in the state—for help in administering a joint upgrading program.

The result of this institutional partnership is a six-month business upgrading program called Agrupamiento Empresarial (AGREM). Modeled on an earlier federal initiative, Programa Agrupamiento Industriales (PAI), AGREM is structured around four interrelated phases: (i) program recruitment; (ii) classroom training; (iii) reciprocal factory visits; and (iv) small project planning. The program—intended to bring together diverse groups of manufacturers—is designed to break down existing functional and cognitive barriers to knowledge, technology, and skills sharing that have long characterized Guadalajara's hierarchical production systems. As we will see, this goal is achieved through the creation of shared *conversational space* (Lester and Piore, 2004) that enables firms of differing backgrounds to learn to work together to respond to an ever-changing economic environment. In 1998, the owners of 12 brandname and subcontracting firms enrolled in the industry's first AGREM session. The remaining sections of the paper document their experiences with the program, as well as those of firm owners participating in subsequent sessions that were completed in 2002. I turn next to the central challenge practitioners faced in first getting the conversation started.

The conversation starter

AGREM's link to the earlier PAI program offered a number of implementation advantages, including an existing methodology with proven regional results in shoemaking. During the 1970s and 1980s, over 200 shoemakers from Guadalajara had completed PAI, resulting in the formation of a number of successful business alliances and industry-wide supports, including a regional credit union (Orta, 1999). In addition, several former employees of the federal agency (Nacional Financiero) that had managed PAI in the 1980s still lived in Guadalajara and expressed a willingness to share their expertise in program design and development. Some of these former employees had already been hired by the region's Shoe Industry Association to develop a revised version of PAI in the mid-1990s that would help firms cope with new competitive challenges (Lowe, 2003). State officials and their institutional partners closely watched this parallel development in shoes and drew on parts of the revised PAI model when designing upgrading assistance for the local apparel industry.

Still, despite the methodological link, AGREM promoters initially faced what Semlinger (1995) describes as a "severe starting problem". One limiting factor was a lack of apparel industry experience with the original 1980s version of the program. Related to this were changes in state and federal program funding rules which required AGREM administrators to collect user fees from participating firms—the state and Apparel Industry Association financed two thirds of the program. The fact that there was no visible success in the region's apparel industry on which to build made it especially hard for program promoters to secure an initial commitment from already cash-strapped local businesses.

Given these factors, program administrators had to be more creative when it came to program promotion, especially compared with those working with local shoemakers. In shoes, public promotional events were sufficient for recruiting a diverse group of local manufacturers in the late 1990s. In contrast, attendance levels at similar

promotional events in apparel were extremely low. At first, the state and the Apparel Industry Association responded by allocating more resources to advertising these meetings. Low attendance at follow-up sessions, including ‘no-shows’ by earlier attendees claiming to be ready to sign on to the program, forced program promoters to consider alternative promotional strategies.

In contrast to the original PAI program which recruited initial trainees from the ranks of the Shoe Industry Association, this start-up challenge could not be easily fixed by simply ‘packing’ initial training sessions with Apparel Industry Association board members. In the mid-1980s a financial scandal involving member dues essentially bankrupted the organization and forced officials from Mexico’s National Apparel Industry Association to take formal and punitive action against the Guadalajara-based delegation. In the early 1990s, significant changes were made to the association’s governance structure, resulting in new leadership. By supporting the diffusion of the PAI program, these new leaders hoped to demonstrate their commitment to assisting a broader spectrum of member firms, especially smaller sized and resource-challenged manufacturers. However, as part of their ongoing effort to try to improve the reputation of the organization and their desire to demonstrate that association-sponsored activities were not designed to profit only the organization’s elite, most governing board members opted initially to play a less direct role in program promotion and implementation. Interestingly, direct involvement by state planners created a related set of ‘start-up’ challenges. While some firms were initially receptive to government assistance and supported the secretariat’s decision to increase funding for business upgrading programs, others reacted defensively and were suspicious of the ‘true motives’ of newly elected officials and their support staff.

Two strategies, when combined, did help the Secretariat and the Apparel Industry Association to eventually secure enough local interest in the program to schedule a formal contract signing event for the first apparel AGREM. First, program promoters found it useful to replace open promotional sessions with individual conversations. Second, representatives from ITESO University—not those from the association or the secretariat—usually made first contact with apparel makers and coordinated individual meetings. ITESO’s long-time association with well-coordinated, grassroots development and outreach projects helped to put many small business owners at ease. Through their work with rural campesinos, indigenous groups, and the urban poor, ITESO faculty and extension workers had also learned how to deal with individuals who were not only suspicious of and unsure about institutional ‘outsiders’ but also responded through ‘quiet’ acts of disengagement. For these same reasons, affiliates of ITESO continued to act as the primary coordinators of AGREM training and, thus, became its *conversational guides*. State planners and association staff focused instead on background activities, such as securing federal funds, organizing ceremonial events, and forging linkages to other service providers, such as small business financing programs and export assistance centers.

The two-sided sales pitch

As a way to make the program equally attractive to firms with different skill sets and upgrading needs, program coordinators found it useful to initially feature different aspects of AGREM. In the case of highly skilled, brandname manufacturers, for example, program coordinators emphasized the AGREM’s second phase, its *diplomado* or classroom training component. For many brandname manufacturers and industry elites, close interaction with their less experienced counterparts was considered a small, conditional ‘fee’ for gaining access to a group of highly regarded local business consultants, financial experts, and export advisors (ie the ‘classroom’ instructors).

Initially, few put much weight on the program's alliance formation goals, which is not surprising given existing technical and language barriers to production network restructuring. Instead, they valued the opportunity to attend a series of lectures and seminars given by local experts on a range of subjects from business administration and accounting to marketing and product design. For skilled firms already accustomed to hiring upgrading specialists and consultants, the classroom training phase essentially allowed them to review (over a short period of time and at lower cost) a wide range of production and marketing techniques and, as a result, gave them greater options for developing individual upgrading strategies. At the same time, this setup allowed them to converse with and systematically compare the services of multiple local consultants and specialists.

In contrast, bare-bones subcontractors initially showed greater interest in partnering with more sophisticated manufacturers and industry elites and in overcoming sources of functional and cognitive lock-in. They expressed less interest in attending regularly scheduled classroom training sessions. Program promoters, therefore, emphasized business alliance goals during initial conversations with these firms. At subsequent meetings, they would introduce this group to the classroom training component, promoting its contribution to business alliance formation. Classroom training was marketed to subcontractors as a mechanism for consultants to help firms overcome initial obstacles to alliance formation by identifying gaps in technical skills within the group and related cognitive and functional barriers to common language development.

By initially tailoring the program's sales pitch to different groups, promoters acknowledged some risk that trainees would feel misled. Furthermore, there was some concern this would result in intragroup tension at the start of the program. To reduce these risks, coordinators invited potential trainees to participate in group building activities *before* they officially committed to the training program. In two apparel AGREM sessions, coordinators—after meeting with firms individually for several months—organized a weekend retreat at ITESO University's main campus. These events were used to establish an initial conversation between business owners and to ease them into the joint upgrading process. Scheduled activities included miniseminars, group discussions, and question-and-answer periods about the AGREM. Evaluations and individual testimonials from earlier PAI sessions were also presented in order to evidence the program's contribution to shifting entrenched social and functional roles. Speeches were made by key officials from the university, the Apparel Industry Association, and the state government and were used to illustrate the historic significance of the program and its contribution to regional economic development.

Transitioning to group discussion

After contract signing events, AGREM coordinators moved quickly to address the next challenge: maintaining group interest in the program despite initial differences in starting skills, industry status, and perceived upgrading opportunities. To cope with this challenge, classroom training sessions were once again instrumental. During this second phase, business owners were able to observe each other in action, identify personality traits, and, more importantly, establish social ties that would prove useful for business alliance formation. Firm owners of all types were encouraged to speak up in front of the group and, with guidance from program coordinators, talk through intragroup conflicts. They were also encouraged to collectively assess the qualifications of local consultants, business specialists, and potential university interns as a way to develop a list of specialists to draw on for future on-site analysis and assistance. As a group, trainees were also asked to develop rules of engagement—what we might refer to as mutual reorientations for cognitive unlocking—including determining what

constituted design or idea ‘stealing’, ‘client poaching’, and nonconstructive forms of criticism. In all of these examples, the classroom was considered a neutral, safe zone or *social laboratory* for identifying and discussing problem areas, thus lowering the chances of later intragroup misunderstanding.

In addition to the strategic use of classroom time, coordinators developed three other interconnected strategies for uniting diverse groups of actors. Two strategies were not phase specific, but were used throughout the classroom training, factory visits, and small project planning phases of the AGREM to help develop and deepen group identity and build intergroup trust. The first involved identifying one or two shared constraints or regional bottlenecks that all firm owners faced, regardless of size, market orientation, skill level, or years of formal schooling or hands-on training. By focusing on place-specific constraints, coordinators not only were able to get trainees to see value in local forms of collective action, but also could push more skilled trainees to embrace knowledge and resource sharing as an important source of regional competitive advantage and a means for differentiating themselves from less cooperative manufacturers.

In the case of the first AGREM, for example, coordinators concentrated on the tight local labor market that resulted from Guadalajara’s rapid expansion of multinational electronics assembly plants in the late 1990s. For most brandname firms, competition with resource-rich electronics multinationals for skilled and semiskilled workers undermined existing relationships with local clients, especially those hoping to increase their volume of sales. If they failed to meet these new production goals, brandname firms ultimately risked being displaced by nonlocal suppliers. Bare-bones manufacturers experienced similar worker retention problems which limited their ability to test out what they were learning in the classroom. This shared challenge eventually became a central discussion point around which to organize specialized classroom sessions and reciprocal factory visits. During the reciprocal visit phase—in which AGREM participants toured each other’s facilities in order to observe and evaluate existing production and management systems—business owners would make recommendations for how to improve working conditions at specific sites, with the goal of helping the owner to reduce worker turnover. This issue also formed the basis for small group projects by enabling firms to respond to tight labor market conditions by experimenting with employee-sharing arrangements.

By supervising small group projects (the fourth phase), AGREM coordinators also helped participating firms to work through potential group conflicts and ‘sticking points’ before moving on to establish formal business alliances. As one example, AGREM trainees collectively displayed their wares at a secretariat-sponsored trade show, ‘Made in Jalisco’. For two months, program participants worked in small teams to determine whether or not the project was viable, and, if so, to determine, as a group, how much money to individually contribute to the project. During this exercise, AGREM participants came to realize it was easier to coordinate production alliances involving firms that produced similar lines of clothing, such as western-inspired jeans and shirts, party frocks, and accessories for children or women’s evening fashions. This experience, in turn, helped AGREM firms begin to map complementary design, production, and marketing capabilities and eventually move towards formalizing specialized business alliances, such as Inter Jeans and Inter Kid, mentioned below.

The third strategy used to deepen interfirm relationships was less tangible and involved institutionalized storytelling and narrative development. These stories provided a cognitive tool for demonstrating the benefits of joint upgrading and collective action. One story involved a large-scale, brandname manufacturer of denim jeans. By working

closely with his AGREM counterparts, this firm owner was able to quickly rebound from the closure of his main manufacturing facilitating (caused by earlier financial problems and an unresolved conflict with a previous business partner) and transition to lower volume, design-sensitive niche markets. A second story involved a smaller-sized subcontractor that initially marketed her wares to low-end, informal retail markets in Guadalajara. As a result of AGREM training, the firm owner was able to observe ‘modern’ production techniques and practices. By using this new knowledge, she restructured her shop floor (by using ‘cell’ assembly, rather than traditional line production) and, as a result, more than triple her hourly production rate. Eventually, she was able to phase in production cells dedicated to serving higher end consumer markets and quality-conscious retailers.

These popular narratives—one reinforcing the reciprocal gains of joint upgrading for an established industry elite, and the other emphasizing the learning opportunities available to an initially less experienced bare-bones manufacturer—remained a powerful instrument for strengthening group identity. These stories not only provided participating firms with added security that their ‘investment’ in training would produce individual and collective returns, but provided a useful benchmark with which to relate and compare their own upgrading experiences. Program coordinators helped to develop and give support to such narratives and often referred to them during moments of group crisis or conflict. They would also use these stories, in conjunction with written testimonials, to start the conversation with the next generation of prospective AGREM trainees.

Despite the relative success of these strategies, program administrators did admit to facing the classic problem of ‘free-riding’. Free-riding here involved cases where business owners were in violation of basic ‘conversational’ rules. At the extreme were cases where trainees actively ‘stole’ design ideas or ‘poached’ clients from other AGREM participants, in essence profiting from personal information shared during an earlier group discussion. More typical examples included ‘passive’ acts where a trainee would fail to show up for a scheduled training sessions or factory visit or failed to complete his or her assigned group task—in other words, where the trainee would fail to join the group discussion.

For program administrators, instances of free-riding were initially viewed as expressions or acts of individual frustration, rather than signs of deeper character flaw. Only in rare cases, such as blatant design or client stealing, were firm owners asked to leave the training program. In order to identify the proximate cause of this frustration, program administrators would schedule individual meetings with firms that were not ‘pulling their weight’. During these conversations, coordinators would try to find out if less committed firms were actually unhappy with the group process, or were struggling with unrelated issues such as financial difficulties, labor-management disputes, or a personal problem. When appropriate, program coordinators would encourage these firms to once again engage in group discussion by asking others for support and guidance.

The relational turn

AGREM training has helped Guadalajaran apparel makers to ‘unlock’ dominant relational patterns and, in the process, develop the technical, communication, and coordination skills needed to overcome functional and cognitive barriers to alliance formation. The visible results of this program are a set of business alliances that have enabled AGREM firms to work together on process and product improvements and shared use of design and marketing skills. In turn, these alliances have enabled Guadalajaran apparel makers to navigate quality-demanding markets in Mexico and the United States and, in the process, contribute to cluster repositioning.

An evaluation conducted by ITESO University in 2002 reveals the formation of at least thirty different kinds of multibusiness alliances by firms that completed the AGREM. While additional field research is needed to measure the full impact of alliance formation on regional competitiveness, it is important to note that the AGREM has already contributed to industry resilience in several important ways. For starters, the program has helped to keep skilled manufacturers invested in the community and has greatly expanded upgrading opportunities for bare-bones subcontractors. Secondly, according to ITESO's evaluation results, AGREM firms had already expanded their workforce by more than 10% over the course of the program and anticipated additional job growth. The program has also resulted in considerable investments in employee training and upskilling, especially in high-value areas like design, marketing, and quality control. Finally, as evidenced below, AGREM firms have helped to expand regional upgrading opportunities by opening these business alliances to non-AGREM firms.

The contribution of the program to industry resilience is especially important when we consider that other historic manufacturing centers in Mexico have collapsed in the wake of NAFTA and with the dramatic growth in Asian-made imports. Guadalajara remains a vibrant apparel-making center in Mexico and yet is structurally quite distinct from most other prominent apparel manufacturing centers—many of these, including Torreón and Tehuacan, are creations of NAFTA in the sense that they were initially formed to take advantage of this regional trade agreement and, as a result, are populated by large-sized establishments and remain US buyer dominated (Bair and Gereffi, 2001; Giuliani et al, 2005). Given this difference, Guadalajara's upgrading path may offer policy inspiration to other historic manufacturing districts that are struggling to cope with the pressures of global integration. With this possibility in mind, it is useful to present a few examples of AGREM-facilitated alliances to demonstrate the program's relational impact (for more details see Lowe, 2003).

In one case, five AGREM trainees worked together to develop a collective screening service for identifying and establishing contact with reputable buyers and suppliers from Mexico and the United States. The group manages Inter Jeans, a forty-firm, member-based organization that compiles and circulates information about local and foreign buying firms and agents. It also organizes and hosts quarterly trade shows targeting 'select' buyers from the United States. Small and medium-sized garment manufacturers in Guadalajara remain wary of foreign buyers and, as a result, have tended to avoid transnational sourcing arrangements. This avoidance is due in part to widely circulated tales of 'unjust' contract stipulations, unpaid invoices, and buyer 'bullying tactics'. Inter Jeans's collective screening and client matching services have helped to improve the reputation of foreign buyers within the region. These services have also helped local manufacturers to identify and target foreign buyers interested in fashion-oriented, low-volume production and especially those seeking to work with manufacturers that have already developed a sensibility for 'Latino' design and style preferences. Similar screening services have been developed by Inter Kid, a market-assistance organization managed by a subset of AGREM trainees that manufacture children's clothing.

In a related example, a group of local jeans manufacturers, many with AGREM training, used their joint upgrading skills to access ethnic niche markets in the United States, stressing their 'ethnic edge' or 'advantage' to retailers targeting fast-growing Mexican and Central American consumer markets in Southern California and Texas. By drawing on their collective skills, they were able to provide full package client services to small volume retailers and boutiques—establishments that traditionally depend on market intermediaries for product design and development, quality control, and logistics management. As with most other Guadalajaran apparel makers, members

of this group had little experience with direct exports. By tapping ethnic networks, therefore, they were able to ease into export markets and, in the process, avoid many of the negotiating challenges associated with mainstream sourcing contracts.

In a third example, AGREM trainees were able to draw on their local support network in order to purchase specialized design equipment and technology. The owners of Industrial Viejo—a small-sized but highly experienced maker of popular designer jeans—financed their investment in a state-of-the-art pattern-making printer and computer network system by first offering design-making and printing services to other AGREM participants. The machinery was imported from Europe in 2001 and cost the firm more than US\$15 000. Through these exchanges, the firm's owners were able to get group feedback on how much to charge for these services, develop a local reputation for honesty, including legal guarantees that design ideas would not be 'stolen' or 'copied', and test out and devise new ways to market such services to regional firms. In 2002 Industrial Viejo had over a dozen small-sized clients from the region—approximately half of which received AGREM training. These firms relied on these printing services in order to make changes and improvements to original design concepts and production patterns.

Taken together, these examples help to demonstrate the contribution of the AGREM to relational deepening. Not only have participating firms learned to better communicate with one another and, in so doing, been able to forge more inclusionary upgrading alliances, but also by working together they have become a powerful force in regional upgrading. As we see in each of these cases, AGREM firms have extended alliance boundaries to include non-AGREM firms. This allows AGREM participants to draw on their collective experience and skills in group management and conflict resolution—not just design and marketing—to facilitate and inspire new rounds of relational change. Interestingly, these new alliances are also being forged at an important historic juncture in global apparel making, given the end of the thirty-year international multifiber agreement and, with it, Mexico's quota guarantees to US and European export markets. While it is too soon to document the impacts of this global shift on regional industrial competitiveness, it is important to recognize this as a major event that will test the strength of these alliances in years to come and, with it, the region's strategy for unlocking hierarchical social roles and practices.

Lessons for cluster repositioning

As the Guadalajara case illustrates, local policy coalitions can intervene in ways that influence the upgrading strategies used by regional manufacturers to cope with global competitive pressures. Research on the relationship between globalization and upgrading initially focused on captive learning arrangements that were governed by prominent global buyers (Bair and Gereffi, 2001; Gereffi, 1999; Piore and Ruiz-Duran, 1998). This study builds on a new generation of upgrading scholarship that seeks to document the role that local institutional actors can play in mediating the relationship between local firms and global markets and, in so doing, expand upgrading opportunities to a wider set of regional manufacturers, particularly those that are smaller sized or resource constrained (Giuliani et al, 2005; Halder, 2004; Schmitz, 2004; Tewari, 2001).

More specifically, this study documents a case of what Schmitz calls *clustering repositioning*—that is, a building of new “capabilities aimed at reaching new markets or searching old markets in new ways” (2004, page 15). Policies aimed at cluster repositioning are especially relevant for historic manufacturing districts that might be shut out of mainstream global markets or seek greater independence in global markets (Bazan and Navas-Aleman, 2004). The Guadalajara case demonstrates how this might be done by deepening relational ties between established regional industrial

elites and their traditional subcontractors. As such, it presents insights into policy actions designed to overcome local sources of functional and cognitive ‘lock-in’ that can inhibit opportunities for cluster repositioning through more inclusionary paths of regional upgrading and adjustment.

As we have seen in this study, lead apparel makers from Guadalajara not only face growing competition from nationally made and imported clothing but must also cope with a multitude of macroeconomic pressures and shifts, including the recent phase out of US and EU textile quotas. In the 1990s a subset of Guadalajara’s firms initially responded to these challenges by distancing themselves from their local subcontracting base. By using the AGREM to forge a new conversational space, development practitioners have helped to solve the city’s *disinvestment problem*. They have kept firms at the table by initially subsidizing the costs of high-quality consulting and professional services, thereby securing immediate interest from industry elites; by providing bare-bones subcontractors with the base knowledge and communication skills needed to give something back to those families and individuals that have historically coordinated and managed local production networks and supply chains; and, finally, by providing firm owners with the conversational space and guidance needed to identify and resolve sources of conflict and miscommunication.

For other regions seeking to facilitate similar forms of relational deepening, the transferable lesson is not simply to replicate Guadalajara’s AGREM program—state officials themselves recognize the limitations of this one-size-fits-all approach and actually continue to modify the program’s methodology as additional industries and municipalities in the state of Jalisco sign on for training. Rather, what is key is the ability of regional practitioners to assess the influence of traditional behavioral patterns on proposed production arrangements and alliances and, when necessary, be prepared to address the underlying social causes of upgrading problems. While changing macroeconomic conditions might lend themselves to relational deepening, it is problematic to assume these as the central, driving force behind cluster reconfiguration and repositioning. Traditional social roles and routines not only influence how these pressures are interpreted locally, but more importantly, determine which relationships initially come to be viewed as valuable and worth pursuing. Still, as with the larger economic forces, traditional practices and routines are often subject to change. Ultimately, this creates opportunities for local policy coalitions to steer the process of relational deepening in ways that result in more socially inclusive developmental outcomes.

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