LESSONS FROM INDUSTRIAL DISTRICTS FOR HISTORICALLY FORDIST REGIONS

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This chapter is not so much about industrial districts per se as it is about lessons the model might offer to regions that are decidedly not industrial districts. Much of the literature on industrial districts has used them to show that there is more than one way to organize a regional political economy, that it is thus problematic to speak of a "one best way," and therefore to fight Chandlerians and their ilk. But what does this mean for regions that are already on a particular path? In this chapter, I use a case study of the metalworking sector in the American Upper Midwest to show that changes in the organization of those industries have made analyses of industrial districts relevant even to some of those historically Fordist manufacturing regions that have long represented, at least rhetorically, the antithesis of the industrial district. The chapter's role in this handbook is to underscore in yet another way that studies of industrial districts are not merely curiosities, and that insights drawn from their study should thus be of interest to readers across a broad array of academic and policy fields.

I. The decentralization of American manufacturing

The very development that first thrust industrial districts into the international limelight – the fragmentation of once-predictable mass markets – thrust them into that limelight precisely because it so fundamentally rocked the Fordist order. The 1970s inaugurated an era of dramatic corporate restructuring the effects of which are still felt today. Large firms that sell products on the final market in end-user industries like automobiles transportation equipment, industrial, farm and construction machinery, and electrical appliances had years of relative stability in core technologies (steel and mechanical engineering) shaken by the entry of new competitors in the developing world, and by the incorporation into their production processes of technologies developed in other sectors, such as new materials and electronics.

In the United States, the effects are almost hard to overstate. "Downsizing" became a part of the national lexicon and American manufacturing – then a much larger portion of that economy than it is today – shed millions of jobs. Those who survived did so in many cases by retrenching to their so-called core competencies in design, marketing and assembly, and by subcontracting ("outsourcing") other activities to a series of smaller, often non-union, supplier firms located in rural and semi-rural areas. (Luria, 2000). Indeed, it is not atypical for a manufacturer today to purchase between 60 and 80 percent of the "value-added" from supplier firms.

In so doing, they were seeking in many cases to draw lessons from the flexible manufacturing practices and technologies that had allowed the economies “in vogue” in the wake of the crises of the 1970s – especially Japan, but also Germany and industrial districts in Central and Northeastern Italy – to continuously maintain strong manufacturing sectors premised on innovation and quality production (Appelbaum, et al. 2000; DiMaggio 2001; Kenney and Florida 1993). That is, they had often radically reconfigured their internal operations, incorporating team production and other means
of fomenting worker participation; and they were developing teams of specialized suppliers upon whom they relied not simply for parts but also for aid in design.

However, patterns of restructuring have also been deeply marked by particularities of the American historical-institutional context. These have affected relations both internal and external to American manufactures. Internally, manufacturers hoping to compete in the higher-value-added markets that privilege innovation generally require broadly skilled workforces. Yet, as Parker and Rogers (1999) have observed, there are a series of barriers that leave the US labor market to “approximate a ‘low wage, low-skill’ equilibrium” in manufacturing industries.1 An initial skill mismatch and the ability to pay low wages gives firms an incentive to choose a work organization and product strategy that requires few worker skills. Moreover, there is an important cooperation problem that undercuts private investment in training: either firms train workers in such a narrow way that the new skills have little general valence on the labor market – meaning almost by definition relatively inflexible skills – or they risk having their trained workers “poached” by other employers.

In terms of external relations, it is important to recall that outsourcing – the decentralization of production – can reflect very different underlying logics. In the words of Walter Powell (1990: 302), subcontracting may reflect efforts to obtain parts almost purely on the basis of price, in a “campaign to slash labor costs, [to] reduce employment levels, and [to] limit the power of unions,” or it may reflect an effort to build long-term collaborative relationships with suppliers, focused on security and quality production from skilled and innovative suppliers. The latter model bespeaks "functional" flexibility. But it is the former – which reflects instead "numerical" flexibility (Kalleberg 2001; Streeck 1987) – which tends to dominate in an American context historically dominated by arms-length relationships and capacity subcontracting. Put simply, when customer firms push their suppliers to invest in higher-level competencies, those suppliers are reluctant to do so for fears that their customers are themselves habituated to arms-length relationships likely to "hold them up" if they do.

Of course, these are but variants of classic coordination problems that potentially bedevil any political economy. Supply must meet demand and vice versa. But they are particularly vexing in the U.S. “liberal market economy” (Hall and Soskice 2001b). American secondary associations – particularly of employers, but increasingly also of workers – are notoriously weak and in any case not well integrated with the public sector in the governance of the economy. This leaves few mechanisms to permit the monitoring and sanctioning of those firms that undermine collective efforts to push firms toward high-skill strategies. The upshot is that low-skill strategies are often in fact relatively desirable.

Although such strategies do expose firms to competition from lower-wage areas and thus perhaps not feasible in the longer term, firms must also survive in the short term. Those who attempt strategies requiring significant training may see their investments go to naught as their workers are poached by others who have similarly

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1 Skill production in technical and scientific occupations that depend on general credentialing, on the other hand, are found by many to be favored by the American institutional infrastructure (Hall and Soskice 2001b).
invested. Similarly, reorienting purchasing strategy towards higher-cost suppliers who promise to acquire in new competencies is only a good idea if those suppliers in fact have the wherewithal to do so.

Since so many jobs are now in supplier firms, a sustainable and generalized high-wage, high-productivity manufacturing economy requires that small supplier firms take on high value-adding operations, develop new products, and train their workers. It is thus no surprise that American public authorities at various territorial levels have experimented with policies intended to ease the transition to a more decentralized production regime, often under the rhetoric of “cluster” development popularized by Michael Porter (see especially Porter 1998; 2000). However, beyond just a policy focus on sectors that already have “critical mass,” there is wide variation in what this actually means on the ground (Martin and Sunley 2003). In most cases, policy efforts differ little from traditional American industrial policy, captured in what Hall and Soskice (2001a) call "blunt" policy instruments, by which then mean deregulation and market incentive policies that "do not put extensive demands on firms to form relational contracts with others."

But need it be this way? The experience of industrial districts suggests it need not. By this, I do not mean that restructuring, outsourcing, and the end of vertically integrated Fordist production could reasonably have led to the formation or renewal of full-fledged industrial districts in the American industrial heartland. 2 At a national level, the U.S. likely does lack the necessary associations and institutions to mediate interests either among workers or employers (Hall and Soskice 2001b). But at the same time, it is too easily forgotten that the United States, particularly for industrial and training policy, is quite heterogeneous and considerable powers are delegated to the state and local level (Eberts and Erickcek 2002; Lowi 1985). As production is decentralized it increasingly makes sense for such regions to draw upon elements of the conceptual and theoretical apparatus that has been used to analyze industrial districts.

II. The industrial district as a unit of initiative

The claim that studies of historically Fordist manufacturing regions can and should learn from industrial districts is a controversial one. Industrial districts have -- since their rediscovery – at times been dismissed in academic and policy debates as interesting but anomalous, ultimately too dependent for their functioning on local particularities to usefully instruct those unblessed with the right history (see e.g. Amin and Thrift 1992; and Harrison 1994 for notable examples). However, such dismissals have been based on a misunderstanding of the underlying thrust of at least the best studies of industrial districts. One of the key figures in the re-discovery of the concept, Sebastiano Brusco (cited in Natali 2007), remarked for example in his "American Lectures" that he "hated people who think that Italians are easy-going people who like working together." His point was that industrial districts are particular regional economies, but in fact all regional economies have particularities. This trick is to recognize that industrial districts can and should be analyzed in general terms.

2 To be clear, in American history, one certainly does find regional economies that are industrial districts by any definition. See e.g. Scranton (1991).
The key issue is one of organizational learning (Malmberg and Maskell 2006). The rediscovery of industrial districts simply made clear that organizational learning takes place in a context. That context, moreover, goes beyond the single firm or even the network of firms to include actors outside that network in training institutions, associations, and, more generally, the "territory." Misreadings to the contrary, this never implied that particular systems were (or could have been) self-sufficient in terms of knowledge (Malmberg and Maskell 2006), and it was recognized early on that industrial districts' vibrancy depended very much on firms' simultaneous embedding in both local and global economies and knowledge networks (Brusco 1994). Certainly, standardized inputs could – and often did – come from elsewhere, but the resurgence of regional economies did at the least in the boom years of industrial districts show that the territory can represent a functional response to a fundamentally organizational fragmentation of production, as the need continuously to adjust and recombine the production process has been favored when many of the relevant productive players can jointly be embedded in a localized "network within networks." (cf., Dicken and Malmberg 2001).³

The lesson for historically Fordist regions was not so much that they needed to find ways to embed their producers in the global. That was in fact their relative strength. Their problem was embedding producers in the local. The experience of industrial districts suggests that in a world that privileges producers able to capture niches, successful regions are places that find ways to balance cooperation, conflict and competition both within and between firms. The more rapid introduction of new technologies and shortened product life-cycles has driven a reintegration of conception and execution at the point of production, which in turn privileges worker participation in the improvement of products and processes; at the same time, absent the possibility of conflict and resistance workers are unlikely fully to participate. And because production has so radically been decentralized, no single firm has the competencies necessary to compete at the cutting edge of world markets. Innovation thus requires cooperation; but without competition and copying, ideas would not diffuse as rapidly across regional producers.⁴

If the economic performance of regions is usefully to be understood in terms of the balance of cooperation, conflict, and competition in relations within and between firms, what regulates these balances? Here the literature on industrial districts is again too vast and variegated to be easily summarized (fortunately, this volume gives it some order). I thus rely on the relatively authoritative and consistent conceptualization put forth by Sebastiano Brusco.⁵

Brusco argued that the answers cannot simply be imputed from the incentives and interests of actors, as these are not independent of what he called the "rules of the game." These rules go far beyond the usual attention given to laws, property rights and so on. They include as well "unwritten norms" of commerce, understood and

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³ There is reason to think that some industrial districts today have increasingly to manage the dispersion of complex value chains across territories in a "spatial" fragmentation of production. I return briefly to this theme at the end of the chapter. See also Whitford and Potter ( 2007).

⁴ The references for this description could number easily into the hundreds. See Whitford (2001) for a review of the literature. Or read the other chapters in the handbook.

⁵ For a recent and excellent overview of Brusco's thought, see especially the 2007 volume edited by Natali, Russo and Solinas. .
enforced by the community, that dictate such things as when a contracting party can ask for guarantees without undermining trust, with whom one can and cannot share information, when third parties are expected to sanction "malfeasance," and so on. This both improves economic actors' ability to find other parties with complementary skills with whom to transact, and makes them better able to coordinate strategy with those partners once found.

In short, successful industrial districts are those in which relations are governed by rules that somehow underpin a relatively felicitous mix of cooperation, conflict, and competition in relations between and within firms. But whence come these rules? Here, studies of the Italian industrial districts are instructive. There is enough variation in their structure and performance to demonstrate that while every regional economy has its own rules, these rules are neither independent from their embedding in the larger global system, nor are they simply "written" by history. Rather, they are the fruit of at times conscious, at times incidental, action by firms, associations, and institutions that interpret and mediate local systems' insertion into the global economy.

The variability of these rules, and their importance in the coordination of the economic activity within an industrial district, underpin what is perhaps Brusco's (1992: 195) most important policy insight: the concept of the industrial district, he wrote, should be seen “not only as a unit of analysis but also as a unit of initiative: as a fully-fledged and organically unified organization, whose development is slowed down or impeded by bottlenecks that public action must turn into opportunities” to resolve problems the private sector would be unable to solve alone. Such policymaking aims not so much to direct the economy, as it does to incite local actors to revisit and adjust the formal and informal rules they use to coordinate their productive activities, to act as a system, not merely in a system.

III. Some lessons drawn

The question in historically Fordist regions in general, and in the United States in particular, is whether such policies are feasible. As I have already noted, few would accuse machinery producing regions in the American Upper Midwest of being institutionally ripe for the emergence of full-fledged industrial districts, the waves of outsourcing and the vertical disintegration of production that took place in the 1980s and early 1990s notwithstanding.

Still, the region is extremely rich in competencies and although there has certainly been some relative shift of manufacturing industries to the American Southeast, the "great lakes" states have long been – and are at time of writing – disproportionately represented in the distribution of American manufacturing employment (Whitford 2005). The problem is that the "rules of the game" are not those of a well-functioning industrial district. They do not balance cooperation, participation, and competition. In fact, they have tended to privilege only the last. The results, of course, are the aforementioned difficulties in promoting skill upgrading among the frontline workforce, and unwillingness to develop the sorts of collaborative relationships between firms that might allow firms to compete in more profitable quality-sensitive market segments.

So what to do? There have been some notable and innovative initiatives to stimulate associational initiatives to support firms trying to flexibly produce high-
quality goods using a skilled workforce. Two of these initiatives, both in the heavily industrialized American state of Wisconsin, are exemplary of the possibilities of learning from industrial districts even in the American rust belt.

**Sectoral Training**

The Wisconsin Regional Training Partnership was born of the manufacturing crisis of the 1980s and the ensuing conviction of many in the state that some sort of revamping of the regional training system was necessary if the manufacturing-dependent greater Milwaukee area was to retain a substantial core of high-paying manufacturing jobs. In light of this, and armed with strong ties to organized labor and the support of some elements of business, academics at a research center at the University of Wisconsin proposed and organized the formation of a jointly governed consortium of employers and unions. Their goal was to get a critical mass of firms to agree upon some common standards and to commit to a baseline training expenditures.

The consortium they put together did not so much fight the poaching of trained workers as it sought to ensure that enough firms were committed to training, thus ensuring an adequate pool of skilled labor, thus allowing firms that have been raided to expect to “cross-raid” someone else (and thus to be willing to train). The organization focused initially on metal manufacturing industries. It was founded in 1992 with around a dozen large union shops and their unions, covering around 10,000 workers, and at its peak included more than 100 employers (mostly, though not exclusively, unionized) with some 65,000 workers. Bernhardt, Dresser and Rogers (2001-2002: 116) of the Center on Wisconsin Strategy (which continued to provide logistical support to the WRTP) explain that at the core of the WRTP is employer agreement on a sort of “code of industrial conduct” (though not a formalized one) in which employers commit to train frontline workers, to share curricula, and to benchmark against each other; to commit to modernizing operations and to preparing the future workforce; to permit workers a say in firm governance, especially in areas of training and human capital investment; and to support workers seeking career advancement with training support and to pay rewards for skill advancement.

But of course, ensuring the commitment of multiple firms is only a part of the story. The WRTP also offered logistical support through partnerships that coordinate the delivery of training and modernization services using a series of working groups in which employer and union representatives try to identify common problems and best practices, to develop pilot projects, and to implement them. In each of the areas in which the WRTP has been particularly active – pushing modernization and new investment, the training of incumbent workers, and the finding and training of new workers – the organization’s strategy is not so much to provide direct services, but rather to serve as an intermediary, working to coordinate the many agencies and service providers that do exist in the U.S. but that too rarely work effectively as a single system.

To play this role, the WRTP has built on its access to a regionally focused organized labor presence, something that is decreasingly available in the United States, but that proved extremely useful in the Wisconsin case. Organized labor has a very strong vested interest in employers undertaking strategies that require the capital
investment and the worker skills that can in turn support high wages. It also brings knowledge of what works and does not in the day to day productive reality.

In short, it is perhaps difficult, but it is possible in the U.S. to stimulate the integration of employers, unions, elements of the state training and modernization infrastructure, and community groups to improve labor market coordination. Rather than simply training workers under the assumption that a job will be found for forthcoming – the usual “uncoordinated” approach in the United States – the WRTP tries to query employers as what jobs could exist were there skilled workers to fill them, pushes employers to invest to create such jobs, and then ensures that skills are produced to fill them. This, as Bernhardt, Dresser and Rogers (2001-2002) write, is a “level of coordination that does not happen on its own” but that requires an “organization, such as the WRTP, with strong ties” to all the relevant communities.

The WRTP is generally recognized as a success story but it should be emphasized that it is an organization whose creation was very much a conscious political struggle. It has had its share of difficulties in the wake of the recession that hit American manufacturing in the early years of the twenty-first century. We are, as Dresser and Rogers (2003: 284-5) write, talking here about the very “resistible” rise of a workforce intermediary built against an “infrastructure supporting, informing, and extending these local efforts [that] is fairly weak.” Nevertheless, workforce intermediaries like the WRTP and other example from around the U.S. can form the basis for systemic change – a “new sort of ‘American model’ in training.”

Coordinating decentralized production

The second exemplar begins in 1998 with a manager at a large Wisconsin manufacturer who was frustrated by the reluctance of many of his suppliers to undertake investments in lean manufacturing and new services associated with the new logic of organizing. He sought out the state Manufacturing Extension Partnership (MEP) and like-minded managers at five other large state manufacturers and at key state agencies to undertake collectively to resolve this problem. These managers believed that the roots of this reluctance were to be found in suppliers' rational mistrust of their customers. Relations between these large companies and their suppliers had historically been quite difficult, and were exacerbated by pressures on personnel in those large companies to extract price reductions by threatening exit. But they also knew that their own efforts to institutionalize collaborative logics of relational action would founder absent reciprocal commitment from the supply base. They included the MEP because they realized it would be difficult to encourage that commitment without help from a third party.6

The MEP program is an important, albeit perpetually embattled, piece of the American industrial policy apparatus.7 Established in the 1950s but greatly expanded during the Clinton administration, it is a network of territorial centers founded to deliver services to small and medium sized manufacturing firms. Funded partially by

6 For a full description of this consortium, see especially Whitford and Zeitlin (2004) and Whitford (2005)

7 All 50 states are currently served. The centers that have consistently been shown to improve the productivity of the firms they serve (see Bartik 2003; NIST 2003; Shapira (1998).
the federal government, partially by states, and partially by selling those services, these centers have considerable autonomy. However, as Robert Turner's (1999: 10) dissertation on the program has shown, they have for the most part operated by selling off-the-shelf technologies at subsidized rates on a first-come-first-serve basis, with a "persistent theme" being a "difficulty in promoting increased cooperation among businesses and public sector programs."

In Wisconsin, the director of the MEP was willing to experiment and, along with these large firms, solicited a small amount of financial aid from the state to form a consortium to deliver training and services to their small and medium sized Wisconsin suppliers. There is not space in this venue fully to describe the functioning, governance and subsequent development of this consortium. Its effects upon supplier performance have been documented elsewhere,\(^8\) so I emphasize here only that this consortium was founded to provide suppliers with a problem-centered training program to improve firm performance in lead and cycle time reduction, delivery, product quality, and cost.

In and of itself, this is not remarkable. What is remarkable is the way in which it was done. The consortium aimed to deliver these services by leveraging and enhancing partial collaboration between large firms and their suppliers in order to align the organizational models of the firms involved (that is, to spur investment in co-specific assets). And it had some success. The point was well made by the manager of a supplier firm who had received training and development services from the consortium:

The idea that two of my major customers would form a consortium with other people to help train their supply base, … I saw that as, 'We’re in a whole different world now.' This is no longer, 'We do three quotes and send it to the lowest bidder and every year we go out and rebid it … and if things slow up at all, we cancel everybody’s orders and we make it in our own shop.” That was the paradigm in 1990 [but it is changed today].

In short, the consortium gave this manager, and others like him, confidence that he could expect the "collaborationists" at his customers to win in struggles over strategy. The original consortium was since supplanted for a period by a smaller but more intense subset of the original members with broadly similar goals, with more resources and commitment required now of both customer and supplier participants. More recently, elements of the approach have formed the backbone for a proposal to expand a similar public-private model of supplier development in ways that allow for the delivery of services across multiple states in ways that take greater advantage of the national MEP network. Indeed, far more has happened since 1998 – some good, some bad – than can be recounted here. But the point remains: by taking the regional economy as a unit of initiative, a mix of policy makers and business actors undertook to reorient the rules of engagement by means a collective solution based on credible commitments, the exchange of information, and some form of monitoring in order to better balance competition and cooperation in inter-firm relations.

What it means, and where things seem to be going

\(^8\) See especially Rickert (2000) and Whitford \(^,\) 2000 #435.)
This chapter has focused on coordination problems associated with the organizational fragmentation production, including particularly those associated with the balance of competition, cooperation, and participation across a decentralized productive structure. Insofar as historically Fordist regions have seen a decentralization of production – and most have – policymakers in those regions can usefully draw lessons from industrial districts. The exemplars described in the chapter have not fundamentally changed the character of manufacturing industries in the state of Wisconsin. They are but two institutions in a larger political economy. They are also far from perfect; a fuller recounting of their development and functioning would be much more attentive to their limitations and ensuing evolution. But their very founding and functioning does underscore that even in apparently unfertile ground – some of the most fundamental lessons to be drawn from analyses of industrial districts have valence.

There are ways to alter the rules that govern the mix of cooperation, conflict, and competition in relations between and within firms even in historically Fordist regions. Many such regions have at least some of the bits and pieces of existing associational and relational structures that so often underpin processes of institutional change (Crouch 2005). When this is coupled with administrative decentralization, policymakers can and should try to identify those elements of their regional economy that are as much units of initiative as they are units of analysis.

Recognizing this is today more important than ever. The reader will surely note that this chapter has focused on parallels and lessons learned through the 1990s, which was the period in which historically Fordist regions reorganized to meet the challenges of an "organizational" fragmentation of production. I have focused on this period in part because the lessons to be drawn are by now reasonably well established and can thus be used more clearly to show that there are in fact useful parallels to be drawn. But this also means that certain caveats are in order.

Manufacturing industries increasingly face an emergent governance challenges that, at time of writing, remain unanswered but provocative. As Herrigel (2007: 2) observes, there is new reason to question whether industrial communities must be "located in specific and discretely bounded territories." Do social and territorial proximity necessarily overlap? This seems less clear than it once did. What had been a relatively territorially circumscribed, and thus fundamentally organizational, fragmentation of production has acquired a more pronounced spatial dimension in recent years as even complex processes have been spread across ever more geographically disparate locales.

The examples discussed above show that studies of industrial districts can serve – and have served – to illuminate strategies for managing the organizational issues associated with outsourcing. But will studies of industrial districts, with their attention to territorial solutions to organizational problems, again instruct the world when it comes to the issues associated with the spatial fragmentation of production?

It is too soon to tell, but, as Charles Sabel has written, it is worth noting that industrial districts are "on the move." There is a relative consensus that particularly in Italy such systems are no longer well understood, again in Sabel's (2004) terms, as the "world in a bottle." They are instead "windows on the world" or "open networks" (Chiarvesio, et al. 2006) whose prospects and functioning depend ever more on the interplay between – and variation in – modalities of local and global action. This has in turn led studies of industrial districts to begin to look beyond the perspective of a
single specialized cluster to incorporate inter-sectoral and inter-cluster linkages and to show that the multiplication of external relations up and down the value chain has engendered new constraints and opened new possibilities that firms and academics are only beginning to identify.

References


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