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JOSH WHITFORD

# the NEW OLD economy

*Networks, Institutions, and the Organizational  
Transformation of American Manufacturing*

# **The New Old Economy: Networks, Institutions, and the Organizational Transformation of American Manufacturing**

**By Josh Whitford**

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## **Description**

American manufacturing is in obvious crisis: the sector lost three million jobs between 2000 and 2003 as the American trade deficit shot to record highs. Manufacturers have increasingly decentralized productive responsibilities to armies of supplier firms, both domestic and abroad. Many have speculated as to whether or not manufacturing is even feasible in the United States, given the difficulties. Josh Whitford's book shows that discussion of this shift, in the media and in the academic literature, hits on the right issues - globalization, de-industrialization, and the outsourcing of production in marketized and in network relationships - but in an overly polarized way that obscures as much as it enlightens. Drawing on the results of extensive interviews conducted with manufacturers in the American Upper Midwest, Whitford shows that the range of possibilities is more complex and contingent than is usually recognized. Highlighting heretofore unexamined elements of constraint, contradiction and innovation that characterize contemporary network production models, Whitford shakes received understanding in economic and organizational sociology, comparative political economy, and economic geography to reveal ways in which the American economic development apparatus can be adjusted to better meet the challenges of a highly decentralized production regime.

## **Reviews**

*"A new economy is being born from in the old rust-belt economy, and Josh Whitford is a terrific chronicler and analyst of this extraordinary transformation-one so important yet so difficult. Anyone interested in the idea of partnership and collaborative community in industry will find this immensely thought-provoking."*

**-Professor Paul Adler, Marshall School of Business, University of Southern California**

*"Josh Whitford here demonstrates the importance of focussed empirical research in challenging stereotypes. The picture presented here of US Metalworking firms is not that of the familiar stylized facts. That is because it is the result of real, on-the-ground research-but driven also by excellent theoretical analysis and reflection."*

**-Professor Colin Crouch, Chair, Institute of Governance and Public Management, Warwick Business School**

*"At the very center of the transformations of contemporary economies is a profound restructuring of the relationships among firms. Josh Whitford's The New Old Economy provides a penetrating analysis of these transformations, showing how new strategies interact with old institutional arrangements to produce novel configurations. It should be read by anyone interested in understanding the dilemmas and dynamics of the American economy."*

**-Erik Olin Wright, Vilas Distinguished Professor, Department of Sociology, University of Wisconsin-Madison**

*"If you want to understand the past and future of manufacturing in America, read this book. With detailed research and careful analysis, Josh Whitford gets beyond the politically supercharged debate over 'deindustrialization' and 'outsourcing' to show how the increasingly global and decentralized system of production actually works and what business and political leaders can do about it"*

**-Richard Florida, Hirst Professor of Public Policy, George Mason University**

*"Based on rich fieldwork interviews in America's Midwest manufacturing heartland, Josh Whitford develops a novel account of the organizational consequences of outsourcing from large to small firms, which challenges core claims of leading sociological theories of economic coordination."*

**-Jonathan Zeitlin, Professor of Sociology, Public Affairs, and History, and Director of the Center on World Affairs and the Global Economy, University of Wisconsin-Madison**

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# Introduction

American manufacturing has seen a restructuring so fundamental in the last quarter century that its magnitude is almost hard to overstate. The biggest headlines, however, have been reserved for two developments that emphasize decline. We hear much about globalization and the outsourcing of production, which have permitted the near wholesale transfer of labor-intensive manufacturing to lower-wage areas in the developing world; and the American economy has been ‘deindustrializing’ at a rapid clip, losing roughly 3 million manufacturing jobs in the first four years of the twenty-first century alone. All told, by the end of 2004, the sector had lost 44 percent of the 22 million manufacturing jobs it had at its 1979 postwar peak, falling from 23 percent of the labor force to just 13 percent.<sup>1</sup>

Does this mean that a book about changes in the organization of American manufacturing is, as the cliché goes, a mere chronicling of the rearrangement of chairs on the decks of the *Titanic*? It is, after all, not hard to find assorted pundits, academics, and politicians to soothingly and correctly remind us that globalization and deindustrialization per se are nothing to worry about, and are on balance probably for the best for nearly all involved. The shifting of labor-intensive production abroad lowers prices domestically and can drive development in areas of the world where it is sorely needed. Deindustrialization, as Rowthorn and Ramaswamy (1997: 2, 1) write for the International Monetary Fund (IMF), has occurred across *all* the world’s advanced economies and is largely independent of North–South trade: ‘in the 23 most advanced economies, employment in manufacturing declined from 28 percent of the workforce in 1970 to about 18 percent in 1994.’<sup>2</sup> This widespread decline in manufacturing employment, they note further, ‘is not a negative phenomenon, but a natural consequence of further growth in advanced economies’. Demand for manufactured goods in the developed world has been stable over the last quarter century, which means that the rapid productivity growth in manufacturing relative to most service sectors comes accompanied, all else equal, by a necessary relative decrease in its employment share.

Yet I *have* written this book about the implications of what I show to be a very substantial restructuring of American manufacturing, premised on the transfer of many productive responsibilities from large manufacturers to their smaller suppliers. And I do believe that what I say shows that what has happened, is happening, and will happen in American manufacturing is important for academics and policymakers alike. I readily accept that deindustrialization, globalization, and outsourcing are necessary correlates of growth in advanced economies, but I also show that there is nothing ‘natural’ about them. They are political and highly differentiated processes that play out in strikingly different ways within the United States and across the developed world, with

varied distributional consequences, in response to choices made by firms, states, and workers embedded into particular institutional and historical contexts.

The research for, and writing of, this book took place with the American manufacturing sector as a whole in deep crisis: record numbers of manufacturing jobs were lost; stories about factory closures attributed to global competition, especially from China, had migrated from the back of the business section to the front page; and the American trade deficit was soaring to new records almost monthly, imperiling the economic well-being of future generations and making clear that the travails of American manufacturing are a matter of more than parochial concern. Moreover, in the (large) parish of the American Upper Midwest, where manufacturing weighs heavily on state economies and where my empirical research has been located, job losses between 2000 and 2003 were especially punishing, occurring much faster than mere productivity growth or cyclical demand effects would predict. It has been a time (hardly the first) when the *particular* patterns of globalization, outsourcing, and deindustrialization have been quite obviously painful for workers and the communities in which they live—more so than necessary—and a time when there is ample reason to worry even for those who do not ascribe to the errant belief that jobs in manufacturing are somehow intrinsically (rather than contingently) better than those in services.<sup>3</sup>

Nonetheless, I certainly recognize, as Rogers and Luria (2003: 1) write, that ‘Absent a revolution in U.S. trade policy, high-wage/low-value-added American manufacturing will soon be dead, . . . driven to extinction by more efficient or less labor-friendly domestic production, or by low-cost alternatives abroad’. But, as Rogers and Luria also note, there is much more to the story. Grounding my arguments and analyses in over 100 interviews at more than 50 metal-manufacturing firms in the American Upper Midwest, I show that there is great diversity in American durable manufacturing. There are many firms even in the central and historic ‘rust belt’ that *are* somehow groping their way towards the formation of globally competitive, highly flexible, collaborative production networks, which allow them to jointly improve old products and processes and to develop new ones more rapidly than ever before; yet at the same time these efforts have been contradictory at best and are only weakly supported by the existing American institutional infrastructure. This ‘more to the story’, I thus argue, is that there is enough new in the old economy to ensure that the ostensibly rusted metal manufacturers need not be written off as an undifferentiated mass invariably destined for a slow boat to the low-wage world, its jobs to be replaced by an ever-expanding service sector. But the transition is a spotty one, with enough failures to give pause, to remind social scientists as well as policymakers, firms, and workers that efforts to retain the remaining core of good-paying manufacturing jobs must be based on a real understanding—neither sugarcoated nor despairing—of what *is* possible in the high-wage world, of the feasible and the desirable in a world of global competition, short product cycles, and relatively unstable demand.

I build this case around three core arguments. The first follows directly from the observation that large American manufacturers—like large manufacturers across the developed world—have outsourced much of their productive capacity to smaller suppliers both in the United States and abroad. This devolution is not just quantitatively important. It represents a qualitative break with the recent past, the emergence of a *new old economy* in which most of what matters to manufacturing firms no longer happens under roofs they own or control. This has made the quality of relationships between firms much more important and their structure much more complex, even in the ostensibly mundane world of metal manufacturing. *How* (and where) these large firms choose and direct their armies of suppliers has tremendous consequences for the regional economies in which they are embedded, because firms selling in the more profitable markets where competition depends as much on innovation and quality as it does on price are more likely to use skilled and better-paid workers. Importantly, these decisions are affected by much more than trade policy, vagaries of currency markets, international regulatory arbitrage, and the like. They depend a great deal on the particularities of firms' embedding in particular historical and institutional contexts. This recognition has led many of those who sought to understand the economy by looking at what happens *inside* large companies to also devote substantial attention to how activities are coordinated and governed *between* companies.

My second core claim is that the existing social scientific literature has misdescribed the American transition to a new old economy. This is not to say, however, that it has gone unnoticed. A vibrant literature in sociology, political economy, and the business press argues that the demise of the centralized Fordist firm creates two fundamental and starkly bifurcated realities for firms and the regions in which they are embedded. The decentralization of production can entail the exploitation of market power, cost-shifting, union avoidance, and the chasing of lower wages; but it also creates the possibility of a normatively attractive new production paradigm, better for all stakeholders, premised on the creation of collaborative networks of firms that exploit multilevel relational networks to jointly compete in more profitable quality-conscious niche markets. Which path is taken, the usual argument goes, is deeply affected by path dependencies in regional, cultural, and institutional configurations—which does not bode well for the American Upper Midwest with its history of relatively atomized hierarchical and market governance. What I argue, by contrast, is that the reality is much more nuanced and that this nuance matters. Many large manufacturers in the region *are* opting to follow the prescriptive tenets of the collaborative new production paradigm *even as* their efforts are deeply constrained by the need to hedge fundamental uncertainties caused by a history of poor relationships and a lack of institutional support. The result is a relational structure that is neither the collaborative production network that theorists such as Powell (2001) call the very building block of the twenty-first century firm, nor is it an atomistic world of hostile arm's-length

contracting. Rather, it is a complex mix of the two, suggesting that the possibilities are considerably less bifurcated than the existing literature would have them be.

My third claim goes to the institutional and policy implications of this misdescription, and bears particular topical relevance given the obvious difficulties faced by many American manufacturers. I make no pretense to know the silver bullet for all that ails American manufacturing, nor do I speak to all of the many policy arenas that affect its fortunes. Rather, I focus on what follows from my second argument: firms' microdecision processes can be significantly and positively affected by adjustments in economic development policy at the state and local levels (the responsible parties within the American federal structure). I acknowledge that the institutional legacy and the historic dominance of hierarchical and market governance in the American Upper Midwest do present genuine challenges to the region's ability to stably sustain a high-collaboration decentralized manufacturing model. However, recognizing the empirical untenability of conventional and overly bifurcated understandings of the relational options employed by American manufacturers illuminates key barriers to collaborative network production *and* the tools for their resolution. Exploring complexities in relationships between manufacturers and in the strategies they employ, I argue, shows how the existing American economic development apparatus can be modified to support manufacturers' very partial, problematic, but nonetheless promising efforts to engage in regionally tied but globally competitive collaborative production models—that is, in the sorts of production models that might help American deindustrialization to in fact become the slow, steady, and relatively painless process it is sometimes (wrongly) advertised to be.

### The Chapter-by-Chapter Structure of the Argument

The book is divided into three parts. The introduction to Part I describes the changing patterns of American deindustrialization and argues that they are a consequence of radical changes in the organization of the American productive model. Chapter 1 then reviews the academic literature on what is in fact a worldwide transition from old to new old economy. It shows that there is consensus as to the general contours of a normatively desirable 'new production paradigm', but that there are disputes as to the degree to which it can be fully achieved in the American context. Chapter 2 examines some of the social theoretical implications of the increasing decentralization of production, and establishes a core theoretical claim of the book: prominent sociological theories of economic coordination too quickly dismiss systematic contradictions and hedging behavior by firms actively seeking to build collaborative network forms of organization. In so doing, these theories analytically obscure the need for, and possibilities of, policymaking to help build and sustain normatively desirable collaborative production models.



Part II (Chapters 3–5) relies heavily on a case study of metal manufacturing in the American Upper Midwest—that is, a case study of the quintessential high-wage manufacturing industry in the quintessential manufacturing region: just 15 percent of national employment is in the great lakes states, but one in four durable manufacturing jobs is located there. Extensively using direct quotes and observations from 100+ interviews conducted between 2000 and 2002 with large global manufacturing firms and their more territorially bound suppliers, I describe the enormous changes in the organization of American manufacturing. In the wake of these changes, firms are not simply making the strategic decision of whether to collaborate or not, but are instead continuously reconstituting and revising relationships as they cautiously feel their way towards (or away from) the joint definition and resolution of problems. These relationships are stably and systematically intermediate between arm’s-length and collaborative, and are characterized by ongoing contradictions that sit uneasily with the sociological literature on network production forms.

Part III (Chapters 6–7) examines the policy implications of the findings in Part II and concludes the book. I argue that absent recourse to extra-firm institutional supports, there are clear limitations to the spread of the collaborative interfirm production that a ‘high-road’ American manufacturing economy would require. But at the same time, partial collaboration and active efforts by large manufacturers and some of their suppliers to build long-term relationships is suggestive of the possibility of encouraging more. This contrasts prominent claims in comparative political economy that historically ‘liberal market’ economies—such as the United States—lack the business-coordinating capacity required to build such institutions. The argument relies heavily on the example of policy experiments in Wisconsin to show that it is in fact possible to mobilize latent business-coordinating capacity even in the ostensibly unfavorable context of Midwestern American manufacturing.

### An Issue of Terminology: The ‘Original Equipment Manufacturer’

Throughout this book, I generally refer to manufacturing firms with one of two terms—‘original equipment manufacturer’ (OEM) and ‘supplier’—which I characterize as two fundamentally different roles taken by organizations in today’s manufacturing (though in empirical fact, some companies may take on both roles). The latter term is straightforward: it refers to companies that sell what they make to other (usually larger) manufacturers, and that thus have their access to the final consumer market mediated by those other companies. The former term—OEM—is standard in manufacturing, and refers to the (usually) large companies that sell products for the most part to retailers, though sometimes directly to consumers.<sup>4</sup> Examples (none of the following were interviewed for this project) might include Ford, Caterpillar, Honda, Craftsman, General Electric, and so on. I use the term OEM throughout the book to refer to the large firms with market power that purchase components from suppliers for two

reasons: first, it is standard in manufacturing, and interviewees use it often; and second, using the more generic ‘customer’ risks confusion between consumers buying finished goods—who are not really discussed much in this book—and companies buying intermediate goods from other manufacturers, which are discussed.

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## Toward the Relational Reconstruction of Regional Political Economy

### 7.1. SUMMING UP: DECENTRALIZED PRODUCTION, THREE LITERATURES, THREE UNCERTAINTIES, AND CONTRADICTIONARY COLLABORATION

The 1980s are famous as the era when the rust belt—the manufacturing heavy Upper Midwest and Northeast—rusted. But in fact, though there certainly was substantial deindustrialization, those years were characterized even more strongly by deunionization, deurbanization, and especially by a very fundamental deverticalization of production. In the wake of increased global competition and a fragmenting of mass markets in the 1970s, some manufacturing firms were forced to close their doors. But many remained and actively engaged the new environment by retrenching to their so-called core competencies in design, marketing, and assembly by subcontracting (‘outsourcing’) other activities to a series of smaller suppliers—some abroad, but very many still in the United States—that now do much of the ‘real’ manufacturing of components. In so doing, they created a post-outsourcing manufacturing economy that is not simply a more global, less urban, less unionized, and less concentrated version of the same thing. Rather, it is substantially reorganized, a *new old economy* in which most of what matters to manufacturing firms no longer happens under roofs they own or control.

The severe crisis that struck American manufacturing at the beginning of the twenty-first century must be seen in this light, as occurring in an industry in which the quality and structure of relationships between firms is both important and complex. It means that we need to understand this old economy not only by looking at what happens *inside* large companies; we must also devote substantial attention to how activities are coordinated and governed *between* companies.

This has been increasingly recognized in the social scientific literature since the 1980s, and many theories have been generated to explain why and how flexible production—in various forms—is destined to replace ‘old’ fordist models. In this literature, there are two points of agreement that are especially relevant to the contemporary situation.

1. There are numerous examples worldwide of a normatively attractive new production paradigm, heavily influenced by the importation and hybridization of Japanese production systems. Contrary to fears in the 1980s, these practices

have proven potentially replicable, at least in part, in many contexts outside Japan. The new paradigm is premised on the interconnected diffusion of so-called 'high-performance work organizations' within firms and of collaborative relationships across firms, especially as regards the vertical OEM–supplier relationship.

2. However, this highly flexible new production paradigm comes with a double-edge: there is no guarantee that all firms or regions will be able to adequately follow its prescriptive tenets. Deverticalization does not by itself lead to collaborative network production. It too often reflects instead firms' efforts to chase lower wages both domestically or abroad, and/or the ability of large firms to shift risk and to exploit oligopsony positions. And although particular regional or national cultural and institutional configurations make it more likely that firms will follow the prescriptive tenet of the new production paradigm, this too has an ominous implication: insider firms in 'learning regions' are relatively more able to compete in high-surplus quality-conscious niche markets because they can exploit relational networks that include other firms, associations, unions, and government actors at multiple levels; outsider firms struggle with ruinous price competition from the low-wage world.

The upshot of this double-edge is that there remain big issues that must be resolved if we are to decipher—and perhaps manipulate—the future of an evidently challenged American manufacturing sector. It is clear not only that the successful governance of decentralized production can help OEMs to compete in global markets, but that it is also vital to the prospects of their more territorially bound small and medium-sized suppliers and to the large percentage of the manufacturing workforce employed at these smaller firms. Yet manufacturing regions more accustomed to hierarchical and market governance—like the American Upper Midwest—are thought ill-positioned to generate the mechanisms required to stably sustain a high-collaboration decentralized manufacturing model.

Fortunately, as I have argued in this book, there are useful tools to resolve these issues, most particularly in efforts to understand how firms manage to sustain collaborative relationships in the face of the inevitable prisoners' dilemma dynamics.

Three approaches that feature prominently in these debates—social networks and embeddedness, VoC, and neopragmatist 'learning by monitoring'—are particularly suggestive. These three positions agree on three fundamental points. First, they all hold that some form of collaborative network production is normatively desirable, at least in some industries (especially those dependent on incremental innovation). Second, all argue that collaborative firm networks are possible, citing mechanisms—patterns of social ties, formal and informal institutions, and/or learning routines—that can circumvent problems of incentive alignment and knowledge sharing that more economic literatures cite as bedeviling interfirm relationships. And third, these underlying coordination

mechanisms are self-reinforcing in such a way that relationships between firms can be expected mostly to fall into stable and dichotomous equilibrium configurations, with a world of hostile arm's-length contracting on one side and the collaborative sharing of information between weakly bounded firms on the other. Intermediate cases are not exactly assumed away, but they are left untheorized: as Crouch and Farrell (2004: 33) explain, for the social embeddedness and VoC approaches, incongruous elements are “noise” which needs to be disregarded in the interests of an elegant and sharply profiled account; for Sabel's learning by monitoring, in-between cases are not necessarily anomalous, but are again essentially noise, a transitional stage in the organizational revolution.

The first two points of agreement—that collaboration is often good, and that we can identify mechanisms that allow it to stably occur despite barriers cited by the economics of organization—are useful contributions to the understanding of economic coordination. The third suffers from the worst of problems: it is directly contradicted by the empirical evidence. The case study presented in Part II, based on more than 100 interviews at OEMs and supplier firms in quintessential old economy industry—metal manufacturing—in the quintessential old economy region, the American upper Midwest, shows the modal case of the OEM–supplier relationship to be systematically intermediate between the arm's-length and collaborative poles.

Despite this widespread reorganization of production, which has clearly raised the potential payoffs to positive-sum collaboration and that virtually requires that OEMs and suppliers share information and explicitly coordinate operations, these relationships are often quite contradictory and are characterized by strategic hedging along multiple dimensions in a sort of ongoing waltz intermingling competition, conflict, and cooperation. This intermediacy reflects firms' shared negotiation of three fundamental uncertainties that make pure strategies extremely risky: (a) *market and technological* uncertainties, partially mitigated by the decentralization of production, but inevitable; (b) *competence* uncertainties, a residue of the legacy of capacity subcontracting; (c) *organizational* uncertainties, owing to the inability of firms to be coherent strategic actors.

Market/technological and competence uncertainties are not necessarily problematic for the stories of dichotomous equilibria to which I have objected—indeed, Sabel's story of the collaborative organizational revolution is actually premised on the claim that they can set off a virtuous circle in which initial experimentation with collaboration can set the stage for further experimentation (see Section 5.2.). But as the empirical research presented in Part II shows, organizational uncertainty creates a particularly vexing set of barriers to firms seeking to build collaborative relationships. Good-faith efforts to collaborate are consistently undermined by the complexities of staff turnover and general information-transfer difficulties, as well as the oft-times conflicting incentives across different subunits of large organizations—all made worse by the rise and fall of different factions within organizations.

This point, that organizational dysfunction continues to bedevil economic coordination notwithstanding enormous changes in corporate structure, represents theoretical advance through hybridity, and is explicitly intended as a reconstruction and modification of established ideas through their application to a novel situation. Specifically, I begin with *the* core insight of post-Weberian organizational sociology—as Gibbons (1999) summarizes it, that firms are a mess, but, so long as explanation goes beyond simple aggregate interest to examine as well the actions, interests, and decision processes of subunits and individuals, they need not be a mystery—but I show that the implications of this insight must be substantially rethought and made to fit a radically decentralized industrial organization. Coase showed economists that there is no reason to expect real world firms to be oblivious to the conditions that wreck markets; by the same turn, sociologists cannot simply assume that real world networks, despite their theoretical virtues, will be oblivious to conditions known to wreck firms.

Certainly, that the blurring of organizational boundaries affects both the internal and the external has not been lost on theorists of the network organizational form. Helper, MacDuffie, and Sabel (2000), for example, explicitly argue that the emergence of pragmatic collaboration requires the contemporaneous reform of both external and internal relationships, a breaking down of traditional hierarchies and re-examination of routines through the federation of production and learning by monitoring. But the story is nevertheless one of a market-driven and seemingly inevitable transition, of initial experimentation causing reforms that despecify assets and render observed instances of hold-up and mistrust uninteresting remnants of the past, mere transitional blips. As such, it is not sufficiently attuned to problems in the morphology of the emerging network forms. There have been real and important changes in firm structure, but conflictual and centralized *intra*firm relationships nonetheless do continue to plague *inter*firm relationships, owing especially to factional conflict both within and across departments and to the difficulty of aligning particular incentives within organizations to reward behaviors aimed at cementing long-term collaboration. Supplier firms react by hedging their own collaboration in turn, even as they recognize that they are engaging in behaviors that are systemically suboptimal and part of a vicious cycle.

The result is that American manufacturing is mired in an altogether *partial* transition to a more collaborative interfirm organization of production, rife with ongoing contradictions that sit uneasily with sociological literatures on network organizational forms. Many large American manufacturers *are* making real efforts to follow the prescriptive tenets of the collaborative new production paradigm *even as* their efforts are deeply constrained by the need to hedge fundamental uncertainties caused by a history of poor relationships and a lack of institutional support. This combination of mixed motives and occasional abject failure leaves a relational structure that is neither the collaborative production network that Powell (2001) calls the very building block of the

twenty-first century firm, nor is it an atomistic world of hostile arm's-length contracting. Rather, relationships between OEMs and suppliers in American durable manufacturing are best described as a complex mix of the two, suggesting that the possibilities are considerably less bifurcated than the existing literature would have them be. We do not see the clean-but-uneven pattern of collaborative alliance capitalism implied by the social embeddedness and/or VoC positions, with insider and outsider positions explained by the oftentimes inhospitable American cultural and institutional conditions. But it is also a contradictory reality that does not fit the predictions of Sabel's learning by monitoring: my interviews squarely reject that the federation of production and initial experimentation with collaboration alone enable a stepwise and reinforcing move towards a more collaborative new production paradigm. Functionality and market forces alone, it seems, are not enough to drive an organizational revolution; politics matter too.

## 7.2. THE PRACTICAL MORAL IN THE STORY

The modal OEM–supplier relationship is empirically intermediate between arm's-length and collaborative, but this need not—in general—mean rejecting theories that predict otherwise; something is 'noise' for every theory. But in the particular, the too-facile dismissal of systematic contradiction in these relationships—what Crouch and Farrell (2004: 33) call ignoring 'incongruities, incoherence, and within-system diversities' in the quest for an 'elegant and sharply profiled account'—wrongly obscures important options available to actors in the political economy. Listening to the relational noise can offer these same actors new tools to escape theorized traps of historical and institutional circumstance.

This claim need not—indeed, should not—be intrinsically hostile to the three established theoretical literatures primarily engaged in this book. Rather, mine is a friendly correction that borrows liberally from elements of each, drawing on and contributing to economic and organizational sociology in a relational reconstruction of regional political economy to explain: (a) why efforts by OEMs and suppliers to build more collaborative relationships are so uneven; and (b) how systematic intermediacy and contradiction can be used in the service of public policy and institution building.

Specifically, following Helper, MacDuffie, and Sabel (2000: 475), I agree that the spread of aspects of the Japanese model and learning by monitoring 'even in a short-term oriented, individual interest-maximizing society like the USA' contradicts those who would argue that full-blown 'Japanese-style collective institutions' and/or a general culture of trust are required to 'generate the conditions necessary to maintain and nourish collaboration'. But I empirically reject any suggestion that this will lead to a market-driven organizational revolution as firms discover a superior set of organizational routines that then become the 'key to survival in otherwise unmanageably turbulent world' (Sabel 2004: 2). Contradictory and often failed efforts by OEMs and suppliers to build

more collaborative relationships are not so much a steady transition as they are the result of a complex but stable mix of hedging strategies. This outcome is driven not only by the need to negotiate market and technological uncertainties and a history of poor relationships, but also by unreliable contracting caused by the failure of organizations to behave as coherent strategic actors.

This does not mean, however, that we are condemned to whichever intermediate state of the political economy happens to us, varying perhaps with the relative relational competencies and endowment of recovering Fordist OEMs. Rather, modifying again an established line of argument—this time, ideas prevalent particularly in the political economy of the VoC and the sociological literature on embeddedness—my interviews with OEMs and suppliers confirm that formal and informal institutional mechanisms do affect how firms negotiate their environments. But, contrary to claims that institutional complementarities and historical specificities mean that the mechanisms to sustain interfirm collaboration cannot feasibly be built absent propitious *ex ante* conditions, there are more options available to policymakers and supportive factions within firms than conventional dichotomizing approaches would suggest.

Historical firm competencies and coordinating institutions depend on past choices and perhaps do not change easily, but they do change. Paralyzing stories of overly strong lock-in sometimes found in the social embeddedness literature notwithstanding, a core tenet of this strain of economic sociology, recalling again Granovetter's historically rooted point (1992: 7), is that 'economic institutions do not emerge automatically in response to economic needs [but] are constructed by individuals whose action is both facilitated and constrained by the structure and resources available in social networks in which they are embedded.'

Following this caution, I have in this book been attentive to the potential functionality of network governance of production and exchange on the one hand, and to the barriers to collaboration long-cited by the economics of organization on the other. I have also been thick enough in my descriptions of the OEM-supplier relationship to show that incongruities, incoherence, and within-system diversities form part of the 'structure and resources available' to actors in the political economy. It is true that the United States lacks a strong institutional infrastructure to help manufacturing firms generate the worker skills, collaborative relationships and network organizational structures required to compete in the rapidly changing and quality conscious markets that can sustain the high wages that must (and should) be paid in the developed world. But it is false that there are not sufficient tools in the United States to *build* such an infrastructure. There are many examples of coordinating workforce intermediaries at the state and local level in the policy sphere of workforce training and development. And the example of the WMDC, built jointly by OEM collaborationists and state actors, shows that there is space in the interstices of the very decentralized American economic development apparatus for novel solutions, for the incremental construction of institutions that both depend upon and strengthen existing partial collaboration between OEMs and suppliers.



The United States indisputably is, on the whole, an LME. But it does not follow that there is something to gain by following the usual liberal market policy prescriptions in all corners of that liberal market economy. And it is simply wrong both empirically and theoretically to think that state actors cannot and thus should not encourage the building of nonmarket coordinating institutions in those sectors—like durable manufacturing—favored by such policymaking.

### 7.3. THE META-THEORETICAL MORAL IN THE STORY

In *Mother Night*, Kurt Vonnegut writes that the moral of the story is, ‘We are what we pretend to be, so we must be careful about what we pretend to be.’ The metatheoretical moral of this book parallels—in a sense—Vonnegut’s admonition. To speak about and understand an indescribably complex world, we necessarily generate abstractions, concepts, ideal types and the like—that is, we pretend the world is a certain way so we can talk about it and make decisions about what seems best to do. And there is absolutely nothing wrong with this, it is inescapable; but at the same time, because we use this pretending to decide how to act, the way in which we do it, the level of abstraction, how much causality we infer from our ideal types, and so on, *matter*. We must be careful, for not all ways of pretending are equally useful: it depends on the problem at hand.

Much of the theoretical action in this book follows from this premise. I did not select the three approaches with which I am in dialogue because they are somehow intrinsically ‘wrong.’ To the contrary, each struck me as providing essential analytic tools for understanding the complex mix of collaboration and competition I heard so much about when I would talk to people at factories in the American Upper Midwest: Sabel’s learning by monitoring reminded me that apparently anomalous findings might well reflect incipient change; the comparative political economy of Hall and Soskice explained why it was so hard for firms to sustain vertical interfirm collaboration without deliberative institutions; and Granovetter’s take on social embeddedness made clear that these economic institutions would not come about just because they would be functional—real actors have to build them and they need social and political resources to do that.<sup>114</sup> Without this work, I would not have been able to ask the questions that I have asked.

But each of these approaches also struck me as somehow incomplete, as silent on aspects of the mix of relationships that, it became clearer to me with every new interview, mattered a great deal. Each has made important contributions to the understanding of decentralized production, bringing to light weaknesses in other, often more economic (and abstract), approaches that came evident as the global economy changed rapidly in the 1980s and 1990s: both learning by monitoring and the social embeddedness approach have done much to explain the spread of ostensibly anomalous ‘network’ organizational forms and the collaborative relationships on which they are premised; and Hall and Soskice

usefully render dynamic the static typologies typical of comparative political economy by asking how institutions affect and are affected by strategic interactions between firms. But for the question at hand here—the need to understand and improve the governance of decentralized production—it is not enough to theorize relationships and organizational forms previously seen as anomalous; we must also understand the salience of anomalies *within* those relationships and organizational forms.

This gap in existing approaches risks analytically obscuring the need for, and the possibilities of, constructing the institutions required of a high-wage, high-productivity, high-collaboration manufacturing economy even in the theoretically unpropitious context of the American Upper Midwest. This is the sense in which I hope to have hit on the ‘right’ level of abstraction—the proper sort of pretending—for the problem at hand, sidestepping both the fatalism and paralysis that follow from positing either an errant determinism or a too-radical contingency, and showing why an understanding of systematic contradictions can serve both theory and policy by identifying obscured and hopeful paths available to actors in the political economy.