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Remaking Regional Economies: Power, Labor, and Firm Strategies in the Knowledge Economy

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1 Introduction

Since the early 1980s, the region has been central to thinking about the emerging character of the global economy. In fields as diverse as business management, industrial relations, economic geography, sociology, and planning, the regional scale has emerged as an organizing concept for interpretations of economic change. This book draws on the rich contemporary literature on the region but also addresses theoretical questions that preceded "the new regionalism." Geographers, such as Doreen Massey (1979) and David Harvey (1989); economists, such as Bennett Harrison (1994a) and policy-makers, such as Stuart Holland (1976) raised "the regional question" in the context of arguments about equity and social justice. They understood the regional question as a way of thinking about social relations in space and about the forces shaping people's opportunities and livelihoods in a world in which capital was increasingly mobile. Within this paradigm, space – particularly the regional scale – was problematic and so, the "regional question" spurred debate about how regional spaces were organized and to what purpose.

Normatively influenced perspectives on regions and the space economy have continued in the work of Massey, Harvey, and others. In addition, valuable work has been done on intra-regional fragmentation and its corrosive consequences for the citizens of metropolitan regions (Dreier *et al.* 2001). At the same time, however, regionally focused economic development policy, "the new regionalism," has addressed enduring questions about the region from a very limited vantage point. In particular, the region has been conceptualized in ways that limit our ability to ask and answer critical questions about how regional spaces are being re-made and for what and whose purposes. This book is intended to widen the scope of questions asked about the region as a central scale of action in the global economy. It is both a critique of the "new regionalism" and a call to return to the "regional question," including all of its "concerns about the nature, causes, and consequences of forms of regional distinction" (Webber 1982).

At the core of this book are case studies of two industries that rely on skilled, innovative, and flexible workers – the optics and imaging industry and the film and television industry. These industries maintain a knowledge base in specific

regions – optics and imaging in Rochester, New York and film and television in Los Angeles, California. Both of these industries have strong networks of small and medium-sized firms. They also have major transnational firms (TNCs) that dominate global distribution markets. In each case, and not coincidental to our story, the TNCs operate within US corporate governance institutions. As publicly traded firms, their top priority is increasing shareholder value over the short term. The incentive structure within which these firms operate shapes their strategies vis-à-vis the small innovative firms in their industry network, the regions in which they reside, and the high skilled and less-skilled workers who produce and distribute their products. Our focus on US-based firms and regions circumscribes the story we have to tell but also demonstrates the continuing influence of nationally constituted rules on the capacities and strategies of firms operating in international markets. By extension, it raises questions about models of market governance and their implications for regions.

Our intensive research on photonics and entertainment media firms, both large and small, led us to question some basic assumptions behind the new regionalism and to develop an alternative framework for understanding regional economic development policy. This alternative framework is captured in a set of premises about firm strategies and regional labor markets that conflict with some of the taken-for-granted assumptions that inform much of contemporary regional policy.

Premise one: regions present firms with a set of strategic options along with production locations

One taken-for-granted idea that has been critical to the development of regionally focused economic development policy is that firms make a choice between "high road" and "low road" strategies as they respond to changing global production and consumption markets. In part, this idea stems from an interpretation of globalization as constructing conflicting choices. For the large transnational firms that are central players in re-making regions, however, a dichotomous choice between a high road and a low road doesn't adequately convey the available options. Our research indicates that TNCs frequently combine low road (cost driven) and high road (high productivity) strategies and also find ways to reduce the bargaining power of experienced and highly educated workers – aligning cost reduction with access to a high-skilled workforce. The capacity to strategically combine different location and labor force options attests to the political as well as economic power of these key players in the global economy and as our case studies demonstrate, within the region. It also raises questions about the way in which the actual processes of constructing markets and integrating production processes are portrayed.

In the popular literature, these processes of integration and linkage are captured by Thomas Friedman's contention that "the world is flat" (2005). In Friedman's new world, fostered by trade liberalization and deregulation, firms are price-takers and so getting the prices right is the single most important objective for firms wishing to become competitive players in the global economy. The role of regional policy is to "aid" firms in adjusting to a more competitive global economy and to reduce entry barriers for small firms so as to further increase competition, thus increasing productivity.

On the other side of the ledger, firms can escape price driven competition (at least theoretically) by producing value-added products and by continuous innovation. This "high road" strategy is central to regional economic development policy because the theory suggests that it can shelter the region from the consequences of cost competition among firms. Within this explanatory framework, the achievement of a more protected status in the global economy requires active regional policy. According to the new regionalist narrative, regional policy-makers must create the conditions within which firms can continuously innovate and add value to their products. Regions must provide research infrastructure, a positive business climate, amenities to attract talented managers, and, preeminently, a skilled and creative workforce. Regions that provide all the inputs to help "their" firms continuously innovate cannot be guaranteed protection from the unrelenting forces of global competition. The message is clear, however, that failure to make the public investments that will allow regionally located firms to pursue "the high road" leaves the region only the option of competing on the basis of cost.

Our research suggests that this understanding of the available options is not held by the managers of transnational corporations. Their perception of the options (both political and economic) is more accurately portrayed in the strategic management literature (Porter 1990) which presents a considerably different picture of the emerging global economy and how to succeed in it. From the strategic management perspective, firm managers must construct and secure competitive advantage, for example, by exploiting regionalized pools of skilled labor and finding ways to compete that will enable the firm to survive market volatility and surmount the drawbacks of competition based on price. From the strategic management perspective, getting the prices right is the wrong way to go. The corporate manager's goal is sustainable competitive advantage in an oligopolistic industry. Innovation plays a role but one subservient to the larger and more important goal of market dominance. This is a world in which merger and acquisition are critical tools and where the ability to shape the market through regulatory policy is central to constructing a firm that can reap the gains of opening global markets while significantly decreasing the risks of potential global competition.

In achieving the goal of sustainable competitive advantage, regions are important but, again, in relation to strategies and as a means to an end. In our industry cases, TNC managers lobby the region to provide, simultaneously, low costs of production, innovative capacity, and access to high-skilled labor. They look to regional policy as an instrumental vehicle to reduce their costs and risks (through firm-specific incentives), to provide the labor force they need, from

entry-level workers to high-skilled professionals, and to provide the amenities and environment that will attract and keep TNC managers and high-skilled workers. Of course, few regions can succeed in this game and those that do, such as California's Silicon Valley, suffer the significant ills produced by diseconomies of scale and exacerbated inequalities.

Thus, our research on firm networks in high-skill knowledge-based industries indicates that the standard depiction of the newly defined role of regions in the global economy fails to capture the dynamics shaping firm behavior and its outcomes for regions and labor. It particularly fails in answering some key questions: Are there costs to creating conditions that firms can exploit in their drive to achieve sustainable competitive advantage in global markets? Who is defining what is meant by innovation?

Are there trade-offs involved in serving the needs of TNCs against those of small innovative firms? What does the TNC-centric model mean for the creation of sustainable regional economies? Is it possible to realize a learning region that builds a higher quality of life for everyone? These are among the questions not answered by the "new regionalist" conception of economic development.

To the contrary, current policies reflect a fundamental misunderstanding of the relationship between firms and regions in the global economy. The missing element is the question of power, exercised in networks, product and labor markets, and vis-à-vis the regulatory regime that sets the terms for inter-firm competition.

Premise two: power matters in firm networks

The new regionalist literature that currently dominates business and academic conversation rarely examines what have been central elements in the analysis of space making – economic and political power. Although there are exceptions, the analyses of regional agglomeration economies and firm networks have been missing any discussion of power relations, such as those between capital and labor, among firms with different political and economic capacities, or between firms and regional or national governance regimes, private and state-sponsored.

In our case studies, we particularly concentrate on labor, both as the subject of firm strategies and as important actors in collaboration with, and in opposition to, firm strategies. By bringing firm strategies and labor together, we reintroduce the concept of power into the analysis of the contemporary geography of production. We argue that political analysis is particularly important to the geography of the information or knowledge economy because so many firm strategies are aimed at altering the rules that govern production and labor markets (Holland 1976).

Unfortunately, in its lack of attention to power relations, and emphasis on trust relations and "soft infrastructure," the contemporary literature on regions and firm networks is afflicted by some of the same theoretical problems as the concept of social capital (DeFilippis 2001).

Networks of all kinds, including firm networks, are constructed around power relations. Networks encompass hierarchies of power or they wouldn't be networks. There would be no incentive for the more powerful members to remain in the network if they didn't disproportionately gain the benefits of network participation. Just as individuals "network" in order to promote their individual interests (rather than those of the network as a whole), so do firms. Networks can and frequently do take the form of hierarchies, with marginal benefit to the less powerful members.

A second important characteristic of networks is their exclusivity. There is no utility in belonging to a network if it does not keep people or firms outside its boundaries. In this instance too, the rewards of exclusivity disproportionately go to the more powerful members of the network who can control who is in and who is out.[1]

There are important examples of open networks, such as that supporting Linux, intended to contravene the exclusivity and control manifested in the vast majority of cases. Open networks are, however, the exception that proves the rule.

The neglect of the concept of power in regional networks is particularly problematic since one of the key agents implicated in the transformation of space in a global economy is the transnational firm. Because of their size, scale, and political-economic power, an understanding of TNC strategies is critical to any comprehensive understanding of spatial transformation, including the emergence and construction of production and market regions.

What is most notable about the TNC and something we examine in detail in our case studies is the nature of their attachment to the region. While we find that TNCs are dependent on regional pools of skilled labor and other production resources, we also see how their strategies and actions are defined by their access to global networks. Unlike their local suppliers of production inputs and innovations, it is easier for TNCs to escape the boundaries of the regional network and potentially to gain access to multiple regional networks. As a consequence of this ability to operate in but also across specialized industrial regions, they can exercise power over those firms that are captured in the regional net, and over regional labor markets, even those composed of highly skilled workers.

Also missing from contemporary theory about regions is an account of how more powerful firms exercise political and economic power at various spatial scales in order to shape the labor markets and production environments in which they operate. In devising strategies for achieving sustainable competitive advantage, TNCs are not limited to simple choices based on a set of locationally specific conditions which they must accept or reject. Instead, they actively shape the conditions in which they make choices through political as well as economic action at all geographic scales.

In an odd way the role of TNCs may be neglected because they are seen as dinosaurs, the relics of an earlier age of mass production. Certainly that was the

message of Piore and Sabel (1984) in their seminal work, *The Second Industrial Divide*. Large corporations, with their stodgy bureaucracies and lack of ability to innovate, represented the past. The future was perceived to lie in small firms, clusters of trusting and cooperating entrepreneurs. Large firms and, especially, the TNC were identified with inflexibility, with the "organization man," the antithesis of the flexibly specialized, regionally-based entrepreneur.

In the 1980s, as the conversation about economic growth, innovation, and new production spaces shifted toward the regional scale, the key questions moved away from the power of the TNC and centered on whether regions were hospitable to entrepreneurial clusters of innovative, flexible small firms. The action shifted to within the region. Regional fortunes were measured in terms of endogenous factors – leadership, industrial adaptability, civic capacity. The role of the TNC was largely absent in this paradigm, perhaps because it raised unsettling questions about the limits of regional actors to influence the direction of regional economies.

There were some critical voices, however . . . Bennett Harrison's trenchant critique of the neglect of the role large corporations play in the global economy is even more true today than when he wrote about it in *Lean and Mean*. Harrison's insights about the continued power of large corporations in shaping and re-shaping labor markets and regional production centers to meet their needs were particularly prescient. He emphasized the compatibility of (industrial) concentration with the decentralization of production and, most importantly, pointed to the sources of decentralized production centers:

> Rather than dwindling away, concentrated economic power is changing its shape, as the big firms create all manner of networks, alliances, short- and long-term financial and technology deals – with one another, with government at all levels, and with legions of generally (although not invariably) smaller firms who act as their suppliers and subcontractors. True, production is increasingly being decentralized, as managers try to enhance their flexibility (that is, hedge their bets). . . . But decentralization of production does not imply the end of unequal economic *power* among firms – let alone among the different classes of workers who are employed in the different segments of these networks.
>
> (Harrison 1994a: 8–9)

Like Harrison, we do not find the TNC's power ebbing away as competitive entrepreneurs move into regional production complexes in a global economy. Quite the contrary. One of the key arguments in this book is that TNCs have adapted effectively to new challenges and opportunities so as to maintain and, in fact, increase their control over what is produced and how it is produced.

If we put the large TNC back into the contemporary regional picture, we can understand some of the apparent anomalies that commonly crop up in the literature on potentially innovative regional economies. The failure of a region to thrive is depicted commonly as a consequence of ineptitude within the region but may be a quite explicable outcome of different firm agendas and capacities to realize those agendas. For example, the absence of cooperation and the presence of knowledge asymmetries are depicted as inadequacies within the small firms network rather than symptoms of power differentials among large and small firms. From our perspective, these failures suggest the need for an explanatory framework that examines power differences as central to the dynamics of inter-firm interaction.

Our work tells us that TNCs and the small firms that supply them (and more importantly, provide the basis for innovation) do not operate in parallel universes – the TNC in global markets and small firms in the region. They come together, intersect, and compete for resources in the region. The power balance in that competition is highly one-sided and became more so, over the 1990s.

As we will demonstrate in the next chapters, the effects of this power imbalance are particularly visible in regional innovation systems and labor markets.

Premise three: labor skills are central to firm cost and innovation strategies

What becomes clear in analyzing studies of firm responses to trade liberalization, deregulation, and increased competition is that the labor force is the key element in firm location choices and in its strategies to achieve competitive advantage (Hudson 2001). In the contemporary knowledge economy, the search for skilled labor and creative capacities are central to firm strategies (Florida 2002a; Saxenian 1994). This is not news. Michael Storper laid out a labor theory of location in the 1980s that demonstrated the centrality of labor in location decisions as the relative cost of other inputs to production and distribution declined. What is surprising, however, is the lack of curiosity about the role of labor and labor skills in firm decisions, in a world in which labor and labor skills are highly differentiated and in which TNCS have considerable power to shape regional labor markets.

Our research and analysis foregrounds the role of labor and labor skills – the labor market is the key lens shaping our research. The search for labor skills is, however, understood in the context of firm strategies that are undertaken in the interest of positioning the firm in global markets. Choices about which labor markets to use and how to use them are not explicable in terms of simple, static economic calculations. They manifest strategies aimed at developing bargaining advantages with workers and regions over the distribution of risks and returns.

Two processes have changed since spatial analysts fixed on labor as the key factor in location decision-making. The first is the ability of TNCs to identify, locate, and use different labor pools, including skilled labor pools, to achieve different strategic purposes. The second is the ability to shape labor markets within regions to better meet the firm's strategic objectives and reduce its risks.

Skilled labor is not a unitary concept. Firms use skilled labor in different regional labor markets for different purposes. This has been noted by researchers who demonstrate the ways in which firms may be looking for brain-power rather than innovative capacity. For example, studies in emerging economies, such as those in Eastern Europe, India, and Turkey, with a supply of labor skilled in engineering and computer sciences, show that TNCs distinguish between the skilled labor they need for different strategic objectives, particularly their need for specialized skills and their need for innovation (Erbil 2006; Ionescu-Heroiu 2007).

The second development in strategic use of regionalized labor pools is an increased capacity to use *intra-regional* resources, both public and private, to obtain labor skills flexibly, in response to changes in market demand. This capability has always been present in the Los Angeles media entertainment industry but we found that it had also emerged in what are thought of as conventional labor markets, such as that supplying the photonics industry in Rochester. A combination of local and international outsourcing, adroit use of regional labor market intermediaries, and control of publicly financed innovation centers provides TNCS in Rochester photonics with a combination of flexibility with respect to high-skilled and semi-skilled labor and access to innovative capacity.

Grimshaw and Rubery (2005) provide insights into this process of intra-regional risk redistribution among firms. They describe how "unequal status among organizations" sheds a new light on how costs and risk are distributed among parties within a network and at the regional scale. In addition to transactions costs, power plays a role in how regional employment relations are structured – TNCs have more power to structure labor relations within regions, beyond the boundary of the firm.

Through market concentration and product line convergence, firms can create, albeit in a modified form, the lower risk conditions of the era of mass production and achieve economies of scale as well as scope. Through downsizing and the restructuring of local labor markets, including complex production networks, firms can transfer the risks of market volatility to the workforce and the small and medium-sized firms that employ them (Harrison 1994b). In these two ways – through strategic use of regionalized pools of skilled labor, and the re-construction of intra-regional labor markets – firms can reposition themselves in the global economy to secure the benefits of flexible production while at the same time reaping the rewards of more predictable mass product markets. As Henry Yeung argues, "Geographical scale has . . . become an important weapon in the continuous struggle between capital and labour in an era of accelerated global competition" (Yeung 2002).

Premise four: the role of the regional scale is becoming more important – as a source of subsidy and risk reduction to firms competing in global markets

In the 1970s, firms relied on the nation-state as a source of protection from the slings and arrows of competition in world markets. Partly because of firm initiatives to alter regulatory structures and institutions so as to create more opportunities for speculative profits, the protection afforded by national trade regulation is no longer available. Firms have not stopped looking, however, for sources of political protection from the risks attendant on competing in global markets.

Our research highlights how the regional scale has been singled out to absorb risks and costs for firms. Under the new regionalist paradigm, "regions" interact directly in the world economy. However, it is firms located in regions that have this capacity, not the places themselves.

The new regionalism does not adequately recognize the difference between regions and firm actors but, instead, obscures the boundary between the region and the firm. For transnational firms, the region is a convenient locus of action, relatively free of the onus of government accountability but, in the United States at least, still encompassing initiative, regulatory, and taxing power that can be put to the service of firm strategies.

That firms want to use regional capacities is manifestly apparent. The other side of the story – from the point of view of the regions – is equally important. What regions are experiencing is the disaggregated pieces of macroeconomic processes playing out unevenly across the nation-state – devolution of responsibility for social welfare and infrastructure and the consequences of deregulation and trade liberalization. The first of these has placed fiscal stress at the regional scale while the second has driven firms to search for scale economies. These processes have driven a wave of investment and disinvestment that lies at the heart of the regional inequality that has emerged since the 1980s. The pockets of deindustrialization and decline, the stars of the high-technology industries, the stagnant places, the growing places, the declining places, the old places, the new places, and the places remaking themselves for a new economy are only the symptoms of that process of investment and disinvestment.

The question then is to what extent regional economic development policymakers can choose a scale of action, independent of the exogenous realities of a macro-economy or the political realities of the city and the state. New regionalism is an effort to manufacture a scale – the region – in which local actors believe they can act effectively regardless of the political and economic realities operating on them.

The policy prescriptions proposed through the logic of new regionalism suggest that what is good for a regionally dominant firm is good for the region. Regional institutions, including universities and workforce training institutions, become the implicit and many times explicit partners of TNCs – providing

subsidized research and development capacity, training for a skilled labor market, investment in industry-specific infrastructure – in an arrangement that neither recognizes nor accommodates for opportunity costs to regional residents.

The assumption underlying these investments is that public, private, and civic investments in the infrastructure that makes the TNC and its network of suppliers more competitive will simultaneously boost the economic competitiveness of the region. As our case studies suggest, this narrative fails to address the distribution of risk and costs playing out across places. Ultimately, a firm's success or the competitiveness of an industry does not necessarily translate into a sustainable regional economy.

Our research focuses on aspects of firm strategies vis-à-vis regions that, while virtually absent from academic analyses and the business press, were strikingly apparent in our conversations with business executives about how they see their strategic options. Their strategies to improve their competitive position specifically involved government intervention. Because there are no regional units of government, however, demands for assistance (with respect to favorable tax policy, for example) fall on cities and counties. They also fall indirectly on state governments because cities and counties look to the state for programs and tax policies that will enable them to respond to firm requirements. Also, because large transnational firms have more influence at the state level, they are able to lobby for policies, such as support for centers of innovation, or tax rebates to lower their energy costs in a deregulated environment, that are funded out of state monies.

Because of the decentralized character of many of these demands and their positioning within public–private partnerships, they are largely invisible to the citizenry. Ultimately, however, the mechanisms of government appear to be more important than ever to the competitiveness of firms in a regionalized global economy. Firms say that they need these mechanisms to reconfigure the competitive rules of the game – to change how markets function, to provide subsidies to support high-risk investments, to open new markets, to enforce intellectual property rights, and to create production spaces buffered from the give and take of democratic practice. They legitimize their demands within an argument that links firm innovation to regional competitiveness, and regional support for innovative firms to regional prosperity. Our research suggests, however, that these links are weak if, in fact, they exist at all.

To fill out how our critique of new regionalism emerged and led to a contrarian set of premises about contemporary regionalism we move through a set of empirically informed arguments and illustrate them with two critical case studies.

Our agenda: firm strategies, labor markets, and the regional question

While putting the concept of power at the center of our analysis, we approach the regional question through two lenses. Our first "lens" is that of firm strategies. The second is that of the regional labor market. These two lenses allow us to focus on how firm managers attempt to use regional resources to improve the firm's competitive position, how regional public and private sector leaders respond to firm demands, and the implications for regional economic sustainability. We begin by describing the strategic behavior of firms, whom we treat as active participants in shaping both physical and regulatory spaces.

Certainly firm strategies include locational choices and networking to achieve economies of scope and scale. But a grasp of the full range of firm strategies is required to interpret the contemporary geography of production. They also include political strategies to remake labor markets and to reduce market uncertainties and risks, strategies to promote policies that ease mergers and acquisition, allow a free hand in post-acquisition restructuring, or sloughing off onerous pension obligations, essentially allow firms to reassign risk to other economic actors – the workforce or the state. These strategies develop partners to shoulder increasing costs and mitigate increasing risks in global markets (Badaracco 1991). Ultimately, these strategies are intended to mitigate the firm's exposure to the increasing volatility of the global economy and create the basis for sustainable competitive advantage.

So, while firm decisions about how to organize production are central to regional outcomes, those decisions cannot be understood apart from the wider range of strategic options open to firms, including those aimed at changing how markets are governed.

Firm strategies, political as well as economic, are key to any thorough understanding of contemporary locational patterns and the relationships among places and within regions. In our research, firms employ strategies at *all scales of government* to construct markets and production spaces that will reduce risks and increase profits. For example, in the case of the film industry, the ability of conglomerates to operate at multiple scales and across multiple regions to change the risks associated with product markets has given them the ability to change the production process and their locational strategies.

From the broadest theoretical perspective, our examination of the regional question recognizes that the construction of a regional action space is simultaneously an economic, political, and imaginative project (Harvey 1990; Soja 1989).

Our approach has strong connections to the studies of industry restructuring that emerged during the 1970s and 1980s and to a re-awakened interest in the questions raised by firm decisions in response to political and economic as well as regional environments. That these questions remain a lively subject of interest and debate is suggested by Dicken and Malmberg:

> We need . . . a better understanding of how firms are being organized and reorganized; how internal and external power structures are configured and reconfigured; how business strategies are developed and implemented, as part of the dynamics of the wider industrial systems of which firms are a part; and how each of these dimensions are "territorialized." This involves recognizing the nature of the firms not only as legally bounded entities and owners of proprietary assets (both tangible and intangible) but also as institutions with permeable and highly blurred boundaries.
> (Dicken & Malmberg 2001: 346–7)

The industrial restructuring studies introduced methods to analyze how industries change over time, and theories about what moves them to change, what they produce, and how and where they produce it (Bluestone & Harrison 1982; Goodman 1979; Markusen 1985, 1987; Massey & Meegan 1982). They resonate with more recent analyses that emphasize the importance of examining process in attempting to interpret outcomes (Brenner 2004).

At the micro-level, there are a small group of researchers who have looked critically at firm strategies in relation to the risks and opportunities they face in the emerging global economy (Glasmeier 2000; Schoenberger 1999). Their work indicates that these strategies reflect a particular firm's culture and learning curve; they capture something that industry trend lines alone cannot reveal.

In our analysis of firm strategies, we treat TNCs as a special case because of their capacities and resources but also look carefully at the origins of TNC power vis-à-vis the region and regional labor forces. Our analysis of the transnational firm as an interested actor in national and regional environments contravenes conventional wisdom that TNCS are global actors who operate only in the global arena and "unlike real people, may exist in many places at once" (Greider 2003). This ability, to exist in many places at once, has led to the mistaken assumption that transnational firms represent the borderless world and exist beyond the reach of national politics. Our analysis of firm strategies, laid out in the next chapter, builds on a substantial literature that demonstrates how TNCs are shaped by national institutional environments, which both provide them with capacities and constrain their abilities to move freely through world markets. In this book we look at US-based transnational firms, not as unfettered free market actors but as products of a particular market governance regime. The US regime provides a valuable set of advantages and assets, particularly the ability for some firms to swallow competitors and achieve sustainable competitive advantage in an oligopolistic market, and the flexibility to move rapidly in response to changes in demand. The regime also constructs disadvantages, particularly creating unpredictable labor supply conditions. It is some of these disadvantages that US firms attempt to address through policy initiatives at the regional scale.

Firm strategies then are not simply a question of production location. In fact, location decisions may have become less important with the panoply of spatially consequential options open to large, transnational firms. What we attempt to do in analyzing firm strategies is to broaden the understanding of how firm strategies exercised at multiple spatial scales have consequences for regions.

The second lens we use in attempting to understand how the regional scale is being remade to serve the requirements of firms operating in a global economy is that of the labor market. Although the key role of labor in location decisions is generally acknowledged, there has been little analysis of what the centrality of labor in firm decision-making means for regions. The one exception is a literature that makes the case that firms are following skilled labor (Florida 2002b). In fact, this has always been true. If you want skilled financial analysts or skilled actors, you go to New York City. If you want skilled musicians, you go to Los Angeles or Nashville.

Our case studies focus on regional labor markets that depend on skilled labor but, in our cases, skilled labor still follows jobs in an industry. A cinematographer wanting more than occasional jobs may want to live in Eugene, Oregon but he or she still has to move to Los Angeles in order to pursue a full-time career. An entrepreneur in photonics may want to start his business in Boise, Idaho but will more than likely be drawn to Rochester, New York to obtain the machining and engineering skills that can enable his business to grow. Thus, the cases we examine emphasize the role of labor skills as critical to regional agglomeration economies.

In analyzing these two regionalized industries, we look at the intersection of labor demand and labor supply rather than separating them as is the conventional practice. We probe how the most powerful firms in the regional network exert power over labor intermediaries (including unions in the case of the media industries) so as to ensure that their needs for skills and flexibility are met first. We also explore how the discourse of a regionally based global economy feeds into inter-regional competition and how that competition is driven by coalitions of labor and capital. The result is the undermining of distinctive skilled labor markets in which labor has considerable bargaining power and the construction of regionalized industry labor forces which can be used more flexibly and cost effectively within and across regional economies.

What does this understanding of the regional question imply for approaches to regional policy?

Recently geographers have begun to show renewed concern over the question of the policy relevance and public policy applications of the research in economic geography and whether that research promotes better conditions for real people in real places (Lovering 1999; Markusen 1999, 2001a; Martin 2001; Massey 2000; Pollard *et al.* 2000; Storper 2001). Ron Martin makes the argument for policy engagement as follows:

> the improvement of socioeconomic welfare had to be *one of the primary aims* of the discipline: the essential motivation is to change the world not just to analyze it (see Markusen 1999). This means several things. It behooves us to expose and explain the inequalities and injustices that contemporary economic-political systems routinely produce. It also requires us to interrogate and evaluate existing policies and policymaking practices to reveal their limitations, biases, and effects. And it means seeking to exert a direct influence on policy-making processes, at all scales, with the aim of producing more appropriate and more effective forms of policy intervention.
>
> (Martin 2001: 190)

What, then, does our alternative perspective on the regional question imply for regional policy? In Section 3 of this book, we take up two key frameworks for regional policy and examine why they have been so limited in producing sustainable regional development. The two frameworks are regional innovation systems and learning regions. Both are founded in commonsensical truths: innovation produces jobs, and knowledge produces problem-solving, creative solutions, and new products. The problem we see is in the links made between innovation and knowledge creation and the ability to grow and sustain healthy regional economies.

The first "paradox" we examine is that around the concept of innovation. Process innovation and product innovation have different implications for job creation, the first leading to fewer, high-skilled jobs and the second, to job creation, at least for industries in the first phase of the profit cycle (Markusen 1985). Even when an innovation emerges in a region, the ability of that region to foster and take advantage of product innovation is determined by the answers to a key set of questions: 1) Who is interested in seeing the innovation come to market and why? 2) Who is interested in financing commercialization and where are they located? 3) Where are the skills available to produce the new product? So, the power of large firms to control which innovations come to market, the location of venture capital, and the location of product production all may be geographically distanced from the site of invention.

We also probe the "disconnect" between theories that advocate regional learning as a basis for regional innovation (and development) and the reality of inequality in regions organized around knowledge-based industries. The problems here are specialization of knowledge, project-based work, and high measures of labor segmentation, all of which create barriers for workers who want to develop career paths by learning and gaining knowledge in an industry over time. Ironically, regional innovation systems are more likely to be characterized by skill shortages than by a culture of continuous learning.

We examine the ways in which, while learning resources may be present, they may not be used in ways that create collective benefits. Rather they are selectively used to enable firms to compete in the global economy. We also look at how the concept of the learning region might be re-framed to focus on the value of the necessary pre-conditions and to emphasize inclusiveness.

Our final chapter attempts to "put the pieces back together," laying out some ways to think about regional economic development that take into account the central role of the labor force and its capacities for learning, and recognizes the role of power in determining how those capacities are distributed. We also recognize the limits of learning and labor force-oriented policies in constructing regions that provide for a high quality of life for all regional residents. Access to a learning environment and to education are necessary but not sufficient conditions to create healthy sustainable regions. While we advocate ways to realize the learning region in all its positive potential, we look at the possibility for combining the investment orientation, which is at the center of the learning region, with a commitment to regional policy that aims to alleviate inequality and its costs. Learning and labor force policies need to be combined with economic development policies that foster healthy regions through affordable housing policies, access to health services, and a collective commitment to a higher quality of life for regional residents.