Chapter 11

Competition in Space and between Places

Eric Sheppard

Competition is all the rage. It is, as Erica Schoenberger (1998) puts it, a hegemonic discourse in economics and economic geography, and has been central to how economic geographers think – at least since they took economic theory on board in the 1960s. Economic geographers do not write many articles explicitly on competition but, like any hegemonic discourse, it percolates our thinking without us realizing it. Discourses are ways of talking about phenomena that frame how we think about them, what we take to be natural or unexceptional, and what we find controversial. Barnes (this volume) defines a discourse as "a network of concepts, statements, and practices that produces a distinct body of knowledge." A hegemonic discourse is one that dominates thinking to the point where we have difficulty conceiving of alternative ways of discussing the phenomenon. Competition is also a discourse of the powerful, both in academia and in the real world. It is broadly believed that unfettered competition is good for society. The World Trade Organization has been created to reduce barriers to international trade. A Multilateral Investment Agreement is currently being forged to eliminate political barriers to the international flow of investment capital in all forms. Structural adjustment agreements signed by countries with the International Monetary Fund and the World Bank, reducing government regulation within a country and at its borders, have become pervasive and accepted as the key to economic growth. Not only firms, but also nations, cities, and localities are enjoined to be more competitive if they wish to prosper. The political and economic elites of places, large and small, rich and poor, accept the legitimacy of this discourse – even those from places that have been hurt historically by competition.

Competition is not only a foundational idea in economic and social theory, but also in biological evolutionary theory. Indeed, over the last century social scientists have frequently appealed to notions of struggle and selection in Darwinian evolutionary theory to justify the centrality of competition in human societies. In this view, just as animals struggle to survive and evolve, so must humans compete to survive and prosper – implying that competition and self-interested behavior simply reflect human nature. In the late nineteenth century, in the form of social Darwinism

(the view that competition in society, as in nature, promotes the survival of the fittest and progress to a better future), Darwinian theory was used to justify the competitive ethos of Victorian capitalism (Spencer, 1851; Hofstadter, 1955; Bowler, 1984). It provided a rationale for both colonial expansion ("the white man's burden") and eugenics (selective breeding of humans to eliminate "deviance" and promote "intelligence").[1]

In fact, Darwin borrowed the idea from economics. He was inspired to make struggle and competition central to his evolutionary theory by the economist (as well as population theorist and priest) Thomas Malthus (Stigler, 1987; Livingstone, 1991). Darwinian evolutionary theory remains controversial among biologists. Prominent critics question the view that competition drives evolution, and that the survival of the fittest results in superior life forms. Alternatives can be conceived. The geographer Kropotkin was among the first to argue that cooperation is pervasive among animals (Kropotkin, 1939 [1902]). Stephen Jay Gould (1989) argues that evolution is chance-ridden and does not justify views that animals currently at the top of the food chain, mammals in general and humans in particular, are superior. Such attempts to create alternative discourses have had little impact, however, on our tendency to think of competition as age-old, inevitable, natural, and beneficial.

Within economic thinking, the discourse of competition is that market-driven (capitalist) competition is generally economically and socially beneficial. This has been articulated through two prevalent metaphors expressing how competition works. The first and dominant one is *competition as invisible hand*. Here, competition, unfettered by social or political constraints, is seen as resulting in a stable equilibrium allocation of economic resources among members of society; one that is both efficient and equitable (on equilibrium, see Plummer this volume; on the invisible hand, see below). The second is *competition as evolutionary progress*. In this conception, competition is an ever-changing and unstable dynamic process following endless twists and turns, but generally promoting technological progress, increased productivity, and higher wages. (Nelson and Winter (1982) call this Schumpeterian competition or progressive capitalism, although Schumpeter (1942) was less optimistic that capitalism must progress and survive.) Both metaphors can also be found in economic geography. Location theory is exemplary of the former (Lösch, 1954; Krugman, 1991; Fujita et al., 1999), and recent research on competitive advantage and new industrial spaces draws on the latter (Porter, 1990; Storper, 1997).

In this chapter, we look at how these ideas have structured theories about competition among capitalists in space, examining in turn: single firms competing within the same industry, spatial competition among different economic sectors, and competition among places. In each case we will see how one or both of these metaphors has structured thinking. At the same time, however, we will see how careful attention to the geographically extensive nature of economies can call into question the logical validity of the economic discourse of competition. In pursuing this second theme, I am using competition to make a more general argument: economic geography is much more than simply applying economics to things geographical, even if we restrict our focus to economic processes. A geographical perspective can call into question some time-honored beliefs in economics itself.

Firms Competing in Space

Understanding the behavior of firms competing in space to sell the same product to geographically scattered consumers has been a defining problem of economic geography since the development of central place theory. The German economist August Lösch (1954 [1940]) invoked the invisible hand metaphor as a normative ideal for society, applying economists' theories of perfect competition to firms located in space. He did this both because he saw competition as promoting choice, and thus the human freedom envisioned by the idealist German philosophers he admired (Gould, 1999), and also because it seemed a better alternative to the National Socialist regime in which he lived.

The idea of the perfectly competitive market has shaped economic thinking about competition since Adam Smith (1776), often seen as the world's first economist. Smith argued that when firms compete to sell the same product in the same market, then the more firms there are, the more the competition and the lower the prices that consumers will pay. Later, neoclassical economists refined this claim into a precise, mathematical argument. Perfect competition is defined by: (i) egalitarianism – the presence of so many buyers and sellers in a market that no individual has the power to influence market prices; (ii) free entry – anyone can enter the market and start selling if they wish; (iii) full information – everyone is always fully informed about conditions in the market; and (iv) absence of the state – the market is not subject to state regulation. Under these conditions, prices can be defined that ensure that supply matches demand (and the market "clears"). In this market equilibrium, everyone pays the same price for the same product and capitalists make zero profits (implying that consumers are getting the lowest possible price). Smith's view was that, even when capitalists only pursue their own self-interest, free competition provides an "invisible hand" which ensures that their actions are socially beneficial. The theory of perfect competition exemplifies this notion and provides conditions under which it will work. Its "popularity... in theoretical economics is as great today as it has ever been" (Stigler, 1987, p. 535). Neoclassical economic theory also shows that under perfect competition the market equilibrium is *stable* (cf. Plummer, this volume). This means that once equilibrium is reached no further change will occur, because no-one in the market has any incentive to change his behavior – for example by lowering prices. This means that the second metaphor, competition as evolutionary progress, is irrelevant under perfect competition because no change occurs after equilibrium is reached.

Lösch imagined such a market operating in the simplest possible spatial context: identical retailers, evenly spaced apart in an unlimited uniform plain, selling to identical consumers, also uniformly spaced across the plain, who visit the closest retailer. Applying all the assumptions and logic of perfect competition to this idealized geographical model, he made an interesting discovery: while firms will locate as close to consumers as possible, and will make minimal excess profits, the prices they charge are higher than those predicted by non-geographic theories of perfect competition. This is because when competition occurs in this landscape, firms are able to exert monopolistic influence over nearby customers who have no alternative sellers nearby. This local spatial monopoly enables them to charge higher

prices. Empirical studies confirm this theoretical result. For example, supermarket prices are higher in lower-income areas whose residents are less able to travel to more distant competitors (cf. Fik, 1988).

Space, then, calls into question the applicability of the invisible hand metaphor, a core idea in standard economic theory, to economic geography, even in a hypothetical case constructed to look as much like perfect competition as possible. Others have confirmed that when perfect competition is attempted in space, the result is imperfect or monopolistic competition, not perfect competition (Curry and Sheppard, 1982; Greenhut et al., 1987; Ohta, 1988; Mulligan and Fik, 1989). Competition in space thus challenges the claim that perfect competition eliminates profit and minimizes prices.

Things are even more complicated once the real geographies of markets are taken into account. When markets do not operate on the head of a pin, customers cannot know the price in every store they might visit, even in stores with which they are familiar, and would not always go to the cheapest store anyway. Space is also not a uniform plain. In the real world, space is differentiated into central and peripheral locations, and the economic distance between customer and retailer depends less on physical distance than on transportation technologies and the time-geographies of daily life. Customers' uncertainty means that there is no uniform price paid by everyone (unlike economic theories of perfect competition). Spatial differentiation means that some firms, because they occupy advantageous locations, will always do better, making considerable profits while others make none at all. Firms in realistic geographical landscapes are not competing on a level playing field, even when the conditions of perfect competition hold.

Some other widely accepted ideas in economics also seem questionable. In the theory of perfect competition, and in micro-economics in general, it is assumed that self-interested capitalists seek to maximize their total profits (their revenues minus their costs). When the landscape is spatially differentiated, this assumption can be questioned. Firms competing in space can increase their profitability if they seek to maximize the rate of profit on capital advanced, i.e. revenues divided by costs, instead of total profits (Sheppard et al., 1998).[2]

Paying attention to space also challenges the idea that the market equilibrium will be stable. Koopmans (1957) showed long ago that "equilibrating prices cannot form in any spatial location/allocation model" (Harvey, 1999, p. xxvi). Recent work has elaborated on why this is the case in realistic geographical landscapes, suggesting that market equilibria are at best *quasi*-stable in spatially differentiated landscapes. This means that there are incentives for firms to disrupt the competitive equilibrium by engaging, for example, in price wars. By reducing its price substantially below the equilibrium, a firm can increase its profitability – inducing other firms to do the same thing (Sheppard et al., 1992). Such instabilities suggest a spatial economy characterized by fluctuation and change, or evolutionary progress, rather than by an invisible hand.

Of course, economists know that their theory of perfect competition is unrealistic. In reality, some firms always do better than others, and not only because they may occupy more advantageous locations. Michael Porter (1985) dubs this a firm's "competitive advantage:" its ability to make a higher rate of profit and expand its market share. As we abandon the invisible hand for the evolutionary progress

metaphor, efficiency is no longer sufficient to guarantee competitive success. In a world of uncertainty and change, capitalists must also be imaginative, flexible, and opportunistic. They must develop more efficient production methods, build better mousetraps and new products, reduce labor costs, and pay attention to developing opportunities such as trends in consumer demand. Capitalists with these qualities are said to be entrepreneurial, and entrepreneurialism is seen as the factor differentiating winners from losers in economic competition. Invoking the idea of entrepreneurialism in this way is much like invoking "survival of the fittest" in biological evolutionary theory. Firms, like organisms, are seen as living on the edge. The challenge is to remain competitive, with survivors being those individuals best able to live off their wits.

Those mainstream economists who do employ the competition as evolutionary progress metaphor stress entrepreneurialism as the key to competitiveness.[3] Implicit in this approach is the assumption that the only important difference between firms is the entrepreneurial skills to be found in the firm itself. Little attention is paid to the broader context within which firms are embedded. In all other ways firms are seen as competing on a level playing field. In this view, competition is promoted by supporting entrepreneurship and eliminating regulations and constraints on capitalists' actions. This is argued to stimulate dynamic competition, to allow anyone who is entrepreneurial enough to succeed, to support innovative and creative behavior, and to benefit society. Thus the shift from the first to the second metaphor does not disrupt the hegemonic discourse that capitalist competition in space is beneficial. The second metaphor becomes a kind of dynamic hidden hand, with the same prescription for economic ills as the first metaphor – unfettered capitalist competition.

This seemingly straightforward conclusion is called into question, however, by economic geographers. They have studied a variety of factors affecting the performance of firms – factors suggesting that other reasons, in addition to entrepreneurialism, are necessary to account for success or failure. First, firms do not occupy favored locations only because they made the right choices. They may simply set up by chance in locations that are close to customers, in industrial districts, or accessible to information (Webber, 1971). Second, firms' successes also depend on their past history. For example, they may face sunk costs – money invested in old production technologies that have gone out of style, or locations that have been abandoned by the gales of economic restructuring (Walker, this volume). Clark and Wrigley (1995) argue that sunk costs vary for idiosyncratic reasons from one firm (and location) to the next. Third, economic processes are always embedded in particular societal contexts (Martin, this volume). Firms found in places where the state favors capitalism, facilitates a well trained and cheap workforce, and/or subsidizes the industry that they belong to, inherit a competitive advantage from the particularities of their embeddedness (Storper, 1997). Fourth, decisionmaking within firms, and its impact on their success, is based on such non-economic factors as corporate culture (Schoenberger, 1997). Finally, firms respond to market uncertainty by bending the rules, completing mergers, lobbying, and colluding, all of which reduce competition in a market (Harrison, 1997). These considerations suggest that luck, history, geography, favoritism, culture, and ruthlessness, and not just entrepreneurialism, affect a firm's competitive success. Research into

inter-sectoral and place-based competition clarifies the importance and significance of these considerations.

Competition in the Capitalist Space Economy

Extending the invisible hand metaphor

The metaphor of competition as invisible hand initially was developed by Adam Smith for a very particular situation: firms competing to sell the same product in the same market. In order to support the argument that competition benefits society as a whole, economists had to extend their theory to consider competition among different types of firms; it had to apply to steel firms competing with computer firms, not just to steel firms competing with one another. Economists refer to this as competition between firms in different markets. John Bates Clark (1899) pioneered this extension, helping solidify the so-called "marginalist" revolution in economic theory which came to form the core of neoclassical economics (Plummer, this volume). Clark's approach was to focus on the technologies used by firms, defined by the quantity of capital and labor they use in production rather than on the products they produce. He took as his starting point the conditions of perfect competition listed above. In addition, capital and labor, the inputs constituting a firm's production technologies, were seen as homogeneous inputs, which are not produced within the economy but available in limited quantities to all firms. It was also assumed that labor and capital can be transferred without cost from one firm to another (implying no geographical barriers to capital and labor flows).

Beginning with these assumptions, Clark and subsequent theorists conclude that in a competitive market the wage rate and the rate of profit (i.e. the prices paid to purchase labor and capital as inputs for production) are equal to the *marginal productivity* of labor and capital.[4] This extends the invisible hand metaphor in the desired way, because it suggests that competition makes sure that wages and profits reflect the value of labor and capital to society (i.e. their productivity): "what a social class gets is, under natural law, what it contributes to the general output . . ." (Clark, 1891, p. 313). This suggests that pure forces of economic competition assure a rational basis for wages and profits. If wages are low and profits high, this is not because workers are exploited by capitalists, but because their value to society (i.e. their marginal productivity) is low. The prices paid by consumers for a good are also shown to equal the desirability to them of its purchase (i.e. its marginal utility): "There is no conflict between the interests of . . . the producers and those of the consumers" (von Mises, 1949, p. 357).

In essence Clark and subsequent neoclassical analysts argue that competitive markets create a stable and harmonious outcome for capitalist production. Each good is sold at a price reflecting its usefulness; profits and wages represent the social value of capitalists and workers; firms make no excess profits and live on the edge of survival; and no rational economic actor would disturb the equilibrium. The market ensures that competitive and self-interested economic action produces the desirable if unintended consequence of a socially beneficial economic harmony. Thus the state should not intervene unless markets fail.

Two important aspects of real economies were neglected by this argument, however. First, it is assumed that firms never sell to one another, but only directly to consumers. Second, it is assumed that there are no transportation or communication costs. These turn out to be rather critical assumptions: if they are made more realistic, neoclassical conclusions about the general validity of the hidden hand metaphor can break down. They deserve detailed consideration.

Critiquing the invisible hand: interdependent firms

Firms do not in fact purchase capital as a homogeneous input for production, but purchase a variety of raw materials, machinery, and infrastructure, manufactured by other firms producing such "capital goods." They need money capital to pay for these inputs, but money is not itself a production input – it is a means of paying for them. A more complex but also more realistic view is to think of an economy as an input–output system of interdependent firms (Walker, this volume). This means that each firm buys inputs from other producers, and sells its outputs to other producers and consumers; commodities are produced by means of commodities, not by some mythical homogeneous capital input (Sraffa, 1960).

A competitive market equilibrium can be described for such interdependent firms; the critical question for our purposes is whether such an equilibrium is consistent with the invisible hand metaphor. Karl Marx (1972 [1896]) in fact described just such an equilibrium in the third volume of *Capital*, published posthumously in German, at the same time that Clark was writing about perfect competition. In Marx's equilibrium, firms in all sectors of the economy (and all regions) make the same rate of profit on the capital they advance to pay for production. If the rate of profit is higher in steel production and lower in wheat production, for example, then investors are expected to disinvest from wheat production, raising its price and increasing profits as wheat supplies diminish, and transfer funds to steel production, where prices and profits will fall. Marx did not have available to him the tools used in economic theory today, but subsequent analysts have confirmed the logical validity of his insights (Sraffa, 1960; Morishima, 1973; Roemer, 1988).

This equilibrium is quite unlike the invisible hand (Walsh and Gram, 1980; Roemer, 1981). First, wages and profit rates in competitive markets cannot be determined solely by economic considerations, i.e. by their contribution to "the general output." They are always influenced by the social and political power of workers and capitalists as they struggle over how to share the surplus created by capitalist production. Second, equilibrium market prices are not equal to the desirability of a commodity to consumers, but are equal to the cost of production incremented by the general rate of profit.[5] Third, firms do not live on the edge of survival making zero profits, but accumulate profits. The rate of profit a capitalist makes depends on the overall power of capitalists to increase their share of the pie, and on any particular competitive advantages they have, for example, based on monopoly power, on lower production costs, or on better products.

Fourth, the equilibrium that results is neither harmonious nor stable. Workers can always improve themselves by organizing to increase wages (Herod, this volume) – and capitalists can lobby government to lower taxes and wages and reduce state

regulation, thus increasing profits. In effect, there is competition between social classes that cannot be resolved by the market, since there is no socially optimal wage or profit rate. When workers or capitalists successfully ally to promote their collective class interests (Sadler, this volume), they can contest and destabilize any market equilibrium, forcing the state to step in (often in support of one interest group over others, cf. Painter, this volume: table 22.1).

In addition to social classes disrupting competitive equilibrium, individual firms are motivated to engage in what Storper and Walker (1989) call strong competition. They act strategically to enhance their market share by many mechanisms other than pricing strategies (Kalecki, 1938; Semmler, 1984; Eichner, 1987; Lee, 1994). As geographers have also documented at length, they use their profits to develop new technologies, invent new products, relocate, and exclude competitors (Walker, and Schoenberger, this volume).

Critiquing the invisible hand: space and geography

Clark's neglect of interdependencies between firms is paralleled by a neglect of the costs of transportation and communication. In essence, the economy is treated as if it exists on the head of a pin: "'There must be perfect, continuous, costless intercommunication between all individual members of the society' – so Jones in Seattle would know the price of potatoes and be able to ship to Smith in Miami a bushel of potatoes at every moment in time" (Stigler, 1987, p. 534, quoting Knight, 1921, p. 78). Only recently have the full implications of this, for both neoclassical and Marxist economics, been laid out by economic geographers (Harvey, 1982; Smith, 1984; Storper and Walker, 1989; Sheppard and Barnes, 1990; Swyngedouw, 1992; Webber, 1996; Webber and Rigby, 1996). The stuff of economic geography has been the geographical variation in what firms produce, how they produce it (and thus their linkages with other firms), labor relations, and access to finance. As a result of complex spatial divisions of labor (Massey, 1984), commodities are traded between regions, both from firms to consumers and from one firm to another. A unique economic sector also exists – transportation – which produces the necessary commodity of transportation services, so that commodities can be shipped from one place to another.

Economic geographers examining the functioning of a spatially extensive capitalist economy have concluded that incorporating space into our thinking poses further challenges to economic theory. First, the complexities of space mean that the decisions individual capitalists make, about where to locate, how to set prices, what to produce in which quantities, which technology to use, and who to trade with, may well have unintended consequences that undermine the functioning of competitive markets. Even when firms make decisions that seem to be economically beneficial in the short run, once the ramifications of these decisions have concatenated through the geographical economy, the result may be geographies of production that are less profitable than before, not more profitable. Marx referred to the tendency of the rate of profit to fall, even as capitalists work to increase it, as one of the forces undermining capitalist production. Such tendencies seem to be enhanced by the economy having a spatial dimension (Sheppard and Barnes, 1990).

Second, geographically uneven development is not only consistent with but frequently facilitates capital accumulation. When there is uneven development, workers in wealthy regions may find that their interests correspond more with those of local capitalists than with those of workers in poorer regions. This has long been recognized at the international scale. For example, colonialism was heartily supported by workers in eighteenth-century Europe – not only because of racial prejudice but also because their wealth was enhanced by impoverishment in the colonies (Galtung, 1971; Blaut, 1993). It has been less widely recognized that the same differentials apply within nations. It is often assumed, for example, that class interests are rather homogeneous within a nation (Barnes and Sheppard, 1992). Yet, spatiality complicates the standard Marxian argument that an economic actor's interests depend only on the class(es) to which he or she belongs (Sadler, this volume). Not only are class alliances weakened by social differences among workers (in skills, gender, race, etc.) and among capitalists (whose interests depend on the economic sector to which they belong, their firm size, and their social identities, Sayer, 1995), but they are also weakened by differences in location. Place-based alliances arise where capitalists and workers in a place ally to defend it against economic uncertainty, and compete against those in other places (cf. Urry, 1981; Hudson and Sadler, 1986; Sheppard and Barnes, 1990, chapters 10–12).

The added complications that the spatial differentiation of economic processes bring to the potential fractions and alliances that may develop within and between classes qualitatively increase the instability of capitalist competition (Sheppard and Barnes, 1990). Even finance markets, often pointed to as the lubricant for competitive markets, may undermine equilibrium in the space economy (Webber, 1987). Thus, as suggested by Koopmans, space is a destabilizing factor. Economists interested in economic geography keep competitive market equilibrium at the center of their attempts to explain the geography of production (for an overview, see Sheppard, 2000). By contrast, many economic geographers have become skeptical of the usefulness of equilibrium models as a tool for making sense of the economic landscape. Some argue that much systematic economic geographical analysis and theorizing is still possible (Plummer, this volume). Sayer (1995) deduces that such problems beset competitive capitalist and centrally planned socialist societies alike, arguing that the complex socio-spatial divisions of labor and of economic interest found in actual economies require a "third way," market socialism, which combines the flexibility of markets with the egalitarian vision of socialism. Webber and Rigby (1996) develop a disequilibrium approach to national economies in a global context. Others suggest that a more drastic modification to economic geography is necessary. Barnes (1996, p. 250) argues that the equilibrium models consciously or unconsciously employed by economic geographers entail an essentialist way of thinking about economic geography that is just as problematic as the equilibria themselves: "The best we can hope for are shards and fragments."

It may seem that these economic geographers are adopting the evolutionary progress metaphor for competition as being more appropriate to spatially extensive economies. This is not the case, however. While having a similar vision of the processes of competition as an evolutionary out-of-equilibrium process, they typically draw very different conclusions about the merits of competition, arguing that capitalist competition undermines social harmony and enhances social and spatial

inequality. This is a discourse of competition as uneven development, requiring state intervention or social action to mitigate its worst consequences, not as a socially beneficial process that society should avoid disrupting.

In light of the difficulties in applying the invisible hand to spatially extensive economies, it is perhaps surprising that the discourse about the social function of "free markets" remains hegemonic today despite its logical flaws. One reason for this may be located in the history of economic thought. The marginalist approach of J. B. Clark et al. developed in the late nineteenth century in response to Marx's relentless criticism of and pessimism about capitalism (Marx, 1867; Harcourt, 1972; Pasinetti, 1981). In economics, too, ideological beliefs about capitalism color the theories and discourses used.

Places in Competition

When competition occurs between firms, and classes, competition also occurs between the different places in which they are located. It is thus important to consider whether place itself makes a significant contribution to competition. Economists tend to argue that competition between places is simply competition between the economic actors in those places, and can be analyzed by the same (aspatial) theory of competition. Certainly, economists' prescriptions for reducing geographical inequalities in development are the same as those for reducing social inequalities: the elimination of barriers to free competition. This belief carries over into the policy arena, where it has long been argued that free trade and unrestricted capital and labor mobility result not only in a harmonious social allocation of economic assets but also a harmonious and appropriate spatial allocation – a geographical version of the invisible hand.

David Ricardo (1951 [1817]) famously argued that when a place specializes in producing commodities for which it possesses a comparative advantage, trading its surplus for other commodities produced more efficiently elsewhere, then the international economy operates more efficiently (Grant, this volume). Subsequent trade theorists refined this approach. They deduced from the assumptions of perfect competition that local capitalists, acting self-interestedly, will produce the commodities that exploit a place's comparative advantage, and that perfect competition operating at an international scale will allocate the benefits of specialization and trade equitably between countries (Ohlin, 1933; Wong, 1995). Trade theory presumes, however, that capital and labor do not move between places, only commodities. This is not true, but neoclassical economics has also considered the opposite case. Suppose each place has access to the same production technologies, but has available different quantities of labor and capital as inputs. Suppose, further, that there are no restrictions to the mobility of capital and labor between places (something that is promoted for capital these days, but certainly not for labor, cf. Leitner, and Mitchell, this volume). In this case, beginning with the assumptions of perfect competition, it is concluded again that the actions of self-interested local capitalists, and of workers and investors seeking to find the best place to sell their labor and capital, will create a harmonious geographical allocation of economic activity with equal growth rates everywhere (Borts and Stein, 1964; Siebert, 1969; Henderson, 1987).

The real world falls somewhere between these two hypothetical extremes, of immobile commodities and immobile capital and labor. Capital, labor, and commodities are all mobile, to some extent. Yet, it tends to be presumed that if the invisible hand metaphor holds for the extreme cases it must also be true for more realistic intermediate situations. There have been significant elaborations of trade theory, in the "modern" and "new" international trade and growth theories (for a review see Wong, 1995), but these tend to reproduce the claim that free trade and mobile production factors reduce geographical inequalities in wealth, *ceteris paribus* (Fujita et al., 1999; Sheppard, 2000). Thus the invisible hand metaphor is argued to apply to competition between places, because in large measure competition is represented as perfect competition between capitalists.

The writings of Michael Porter in recent years have provided an analogous discourse about competition between places, but one that draws on the evolutionary progress metaphor. He begins by making inter-firm competition equivalent to inter-place competition, extending his theory of the competitive advantage of firms (Porter, 1985) to the competitive advantage of nations, regions, and even urban districts (Porter, 1990; Porter, 1995). The distinctiveness of his work stems primarily from his use of the evolutionary progress metaphor instead of the invisible hand. He argues that places can create competitive advantage; that competitive advantages are not all equal; and that the local state can intervene to help identify the right opportunities, selectively supporting those firms that efficiently pursue them. He sees the right opportunities as those that characterize successful industrial districts, where clusters of related firms generate dynamic external economies (Amin, this volume). Finally, he argues that promotion of competitive advantage can achieve a desirable development path for places, characterized by good jobs at high wages in a "green" physical environment.

Yet in the final analysis, Porter's vision remains within the discursive frame of neoclassical theories of competition. First, places are treated as independent actors, like the firms of neoclassical theory, for each of which a desirable competitive advantage can be identified. If this means computing in Silicon Valley or high technology in Paris, in the American inner city it means food distribution, discount retailing, suppliers of trade show exhibits, and courier services (Porter, 1995). Porter locates the distinctive competitive advantages of places in their particular values, culture, economic structures, institutions, and histories. Second, the role of states in facilitating this process is limited to creating "specialized factors" (education, infrastructure, health care); enforcing product, safety, and environmental standards; shaping investment goals; deregulating finance markets; promoting free trade; and enact anti-trust regulation – basically correcting market imperfections.[6] Third, the key to pulling this off is local initiative: competition among forward-looking firms, with favorable state policies, is necessary for innovation and competitive advantage.

Thus, competition is conceived of as occurring among places that begin competing on a level playing field, with fortune favoring the entrepreneurial (Leitner and Sheppard, 1998). While different specific advantages will develop in different places, the result is a positive-sum game in which all places can achieve desirable growth. This vision has spawned innumerable studies by consultants hired by local governments to identify their competitive advantage. Indeed, it is now widely argued that entrepreneurial competition between localities can reduce geographical inequalities

in economic welfare and promote national economic growth (Peterson, 1981; Lovering, 1995; Hall and Hubbard, 1998). Yet this analysis ignores the other reasons that can make the difference between success and failure in competition between places: luck, historical geography, favoritism, and ruthlessness.

Thus the recent interest of economists in competition between places deploys the same discourse about competition, whether couched in terms of the hidden hand or of evolutionary progress. By contrast, economic geographers conceive of places as more than just a point on a map, and argue that competition between places cannot be reduced to competition between firms. As for the case above, of competition in the capitalist space economy, they argue that in a geographically differentiated economy the appropriate discourse for capitalist competition is that of uneven development.

In doing so, they contribute to a long-standing literature critical of arguments that all places have the same chances of reaching prosperity. Dependency theorists were very critical of international trade theory for suggesting that it does not matter what a place specializes in or how it is plugged into the world economy. They documented the growing gap between the ability of First World countries predominantly exporting manufactures, and of Third World countries predominantly exporting food and minerals, to gain from international trade. They argue that free trade is not fair trade, because trade enhances inequalities between core and peripheral countries in the world economy (Prebisch, 1959; Frank, 1967; Porter and Sheppard, 1998). Similarly, economic geographers argue that processes of uneven development and periodic restructuring better characterize competition between places than do mainstream theories predicting regional convergence (Harvey, 1982; Smith, 1984; Martin and Sunley, 1998; Sunley, this volume). Regional political economists, elaborating a critique of the neoclassically inspired "invisible hand" arguments summarized above, argue that the claims of free trade theory and neoclassical growth theory are not necessarily correct for a capitalist space economy (Sheppard and Barnes, 1990).

Turning to Porter's approach, places do not, and never will, compete with one another on a level playing field. They also are neither like, nor reducible to, firms. Cities, for example, have distinctive characteristics and histories, and are differently situated within the larger political economy. At least three dimensions of difference can be identified, each of which tilts the playing field to favor some cities over others: embeddedness, historical geographical trajectories, and favoritism (Leitner and Sheppard, 1999). First, every city is *embedded* in a set of national and regional institutions, regulatory systems, traditions, and norms (Martin, this volume). For example, European Union (EU) cities are embedded in a broader context very different from that of US cities – despite some convergence in recent years. In the EU, it is still seen as more legitimate for states to intervene in markets, and the belief that individuals are responsible for their own success or failure is less popular. There are also differences within the EU. The tradition of antagonism between capital and labor in the UK, for example, is very different from the corporatist tradition in Germany or Austria, where labor may be more influential in local economic development policymaking.

Second, each city occupies a *unique geographical trajectory* as a consequence of its historical role and location within the broader evolving political and economic

system, a uniqueness that creates differences in the ability of individual cities to respond to economic and political restructuring. Economic restructuring favors locations that are well suited to new growth industries, and hurts those better suited to declining industries. How suitable a place is may have more to do with geo-historical happenstance than initiative; indeed there are many cases of cities whose very success in attracting the previous wave of industrialization creates a built and social environment that the next wave of growth industries finds unattractive (Harvey, 1985). For cities occupying different trajectories, identical strategies may have very different consequences, and different strategies may be necessary to achieve the same goals.

Third, higher levels of the state frequently exercise *political favoritism*, either deliberately through spatially targeted policies or as the unintentional result of national policies with different local impacts (Painter, this volume). Markusen et al. (1991) show, for example, how US Federal defense policies, combined with the geostrategic thinking of the US Joint Chiefs of Staff, systematically encouraged defense-related industries to move from their original Midwestern locations to the "gunbelt" of the southeast and southwest.

An uneven playing field also means that the broader consequences of competition between places are different. Michael Porter argues that all cities can use competitive advantage to create a "high road" to urban development, where growth and prosperity reinforce one another. On an uneven playing field, however, disadvantaged locations frequently feel compelled to lower wages to compensate for their disadvantage. Intensive spatial competition can then drive wages down everywhere, resulting in beggar-thy-neighbor competition (Leitner and Sheppard, 1998, 1999), as the First World learnt to its cost after the mid-1970s.

There are other differences between competing firms and competing places. Cities are fixed in place and must adapt to or seek to alter the particular advantages and disadvantages of that location. They are governed by a more-or-less democratically elected government, which has limited powers and serves at the pleasure of the electorate. The legitimacy of the governance structure depends on a local state's ability to juggle growth agendas and welfare needs. There are also very few controls over who enters the city and who leaves, making it impossible to exclude undesirable residents from the city. Finally, many of the firms in a city sell to urban residents, implying that higher urban wages can increase local capitalists' sales, and profits.

By contrast, firms can relocate their activities and workers, if it suits their purposes, when their current location becomes undesirable. They are governed by a management structure with a simpler goal: to meet external (particularly stockholders') perceptions of an efficiently run firm. Firm management is autocratic, with absolute power, in principle, over the operation of the firm, subject to the cooperation of its employees. This includes the power to recruit those who can contribute to its efficiency and to exclude those who do not – by firing them or denying them access to its private property. Finally, the employees of most firms are not major customers for its products, meaning that higher wages are seen as a drain on profitability instead of a way to increase revenues. Firms thus have more options and powers than cities in seeking to increase their competitive advantage, and pursue much less complex and tentative goals.

Beyond Competition?

As we have seen, economic thinking about competition draws on two metaphors about competition. In the first, competition is a harmonious process, an "invisible hand" enabling capitalism to achieve an equilibrium that can provide for the wishes of all. In the second, competition is a dynamic process of evolutionary progress, through which strategic firms and places play a game of ever-shifting competitive advantage. These different visions of how capitalist competition works, however, contribute to the same hegemonic discourse: unrestricted capitalist competition is a socially beneficial process facilitating personal freedom and social rationality, which other institutions should not interfere with. Even strong critics of capitalism have come to accept competitiveness as a geo-economic imperative, however, and have sought to identify how places can solidify their position in the competition for mobile finance capital (Evans, 1995; Sayer, 1995; Markusen, 1996; Storper, 1997). The result is the common idiom of the "free market," a phrase so widely used by academics, politicians, and in advertisements that we do not question it. Yet the "free market" is a figure of speech: outside the intellectual utopia of perfect competition, there is no logical link guaranteeing that markets are free, or that freedom implies competition.

Paying serious attention to how geography affects competition helps expose contradictions in the discourse of competitive markets. The emphasis on place-based difference in this discourse, both as the source of a distinctive competitive advantage and as a location for economic strategy, suppresses the equally central role of spatial inequality. When the larger spaces within which spatial competition occurs, and the uneven development that typifies economic differences between places, are reintroduced into the analysis, the dynamics of competition are revealed as fraught with negative rather than positive connotations. Competition is reframed as breeding inequality and constraining the possibilities of places, even as it celebrates difference and the possibilities of places.

Discourses of "good" competition should be expected to dominate those of "bad" competition in this era, when capitalism seems triumphant, making it all the more imperative to engage in the kind of deconstruction attempted here. For example, revealing these contradictions can reveal ways of thinking about how to cope with mobile finance capital other than local entrepreneurialism. Indeed, firms already practice alternative strategies. Mergers, strategic alliances, collusion, and lobbying are standard forms of collective action used by firms to deal with those vicissitudes of competition that they cannot handle separately. Equivalent strategies for places include inter-urban international collaborative networks in Europe; living wage initiatives in cities across the USA seeking to require all firms receiving local government subsidies to pay their workers decently; and international collaboration by labor and grassroots organizations (Leitner and Sheppard, 1999; Schoenberger, 1998; Herod, this volume). Revealing the darker underbelly of competition also creates space to analyze how discourses of competition (rooted in European eighteenth- and nineteenth-century thought) are masculinist, postcolonial, and Eurocentric, and push out of the picture more radical alternatives based on collaboration, cooperation, and emancipation (cf. Gibson-Graham, this volume).

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Endnotes

1. In 1899, on the occasion of the US takeover of the Philippines from Spain, English novelist Rudyard Kipling penned:

   Take up the white man's burden –
   Send forth the best ye breed –
   Go bind your sons to exile
   To serve your captives' need . . .
   (Kipling, 1917, 215)

2. The difference between total profits and the rate of profit is like the difference between thinking about your bank account in terms of the total interest you are paid, in dollars, on the one hand, and the annual rate of interest you get, on the other.
3. This differs from the world of perfect competition and the hidden hand. When all actors are equally powerless to influence prices, and are fully informed about current and future states of affairs, capitalists need no entrepreneurial vision. They simply need to be efficient and rational.
4. The "marginal productivity" of capital or labor is the amount of extra output that can be obtained by employing one extra unit of capital, or one extra hour of labor, in production.
5. This idea actually dates back to Adam Smith.
6. For example, if markets fail to pay adequate attention to the environmental consequences of production, because the full social and environmental costs are not internalized in market values, then state regulation is necessary to ensure that this occurs.

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