CHAPTER 7

The City and Economic Geography

*Then and Now*

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The place of the city in the rise of capitalism, both in the past in Europe and America and in the present in Asia and Africa, is one of the great puzzles of economic geography. Oddly, urban geography and economics have mostly gone their own ways over the course of modern scholarship in the social sciences. From time to time, interest in the city as an economic force—rather than as a way of life, monumental space, or cultural center—reappears in the literature. Recent years have seen a dramatic revival of such interest.

Some of the hottest ideas in economic geography and spatial economics over the last twenty years have concerned the role of cities in three domains: globalization, industrial clustering, and innovation (or creativity). These themes have featured repeatedly in the works of the leading economic and urban scholars of our time, including Saskia Sassen, Paul Krugman, Manuel Castells, Michael Storper, Allen Scott, Ken Glaeser, and Richard Florida.

Some significant advances have been made during this period in the systematic analysis of what makes cities tick as powerhousees of economic growth, yet I wish to argue that these themes are not as new as they seem. Indeed, they involve the rediscovery of basic principles of the operation of capitalist space economies and of urban economic geography. The phenomena they highlight go back to the early modern era, ramping up with a vengeance with nineteenth-century industrialization and continuing right through the Fordist and high-tech eras of the twentieth century.

Recent work builds on previous generations of scholars of the capitalist city and its economy, if not always in clearly acknowledged ways. The pioneers of urban economics before midcentury were George Allen (1920), Alfred Weber (1909), Robert Haig (1927), Walter Christaller (1933), Edgar Hoover (1937), and August Lösch (1940). They were succeeded after the Second World War by a new generation of university researchers, including Raymond Vernon (Hoover and Vernon 1959), Walter Isard (1956), Brian Berry (1967; Berry and Horton 1970), and Eric Lampard (Lampard 1955; Perloff, Lampard, and Muth 1960)—not to mention the great independent thinker Jane Jacobs (1969).
Allan Pred should be included among the list of great postwar students of urban economic geography. For the first half of his career, Pred produced an astonishingly rich series of studies that focused on the economy of cities. The key works are *The Spatial Dynamics of Urban Growth in the United States, 1800–1914* (1966), *Urban Growth and the Circulation of Information* (1973), *City-Systems in Advanced Economies* (1977), and *Urban Growth and City-Systems in the United States, 1840–1860* (1980). At the time he was one of the three most-cited geographers in the English language, along with Brian Berry (Pred’s doctoral advisor) and David Harvey.

I want to highlight the work of Allan Pred on the three key themes of contemporary urban economic geography: globalization, industrial clustering, and innovation. In each of the three key thematic areas, Pred had something vital to say and did so by means of extensive empirical, historical research. Like all good scholars, he was in dialogue with previous thinkers, such as Lösch, Weber, Hoover, and Vernon. Like many social scientists of his generation, he was a systematic model builder. He was also deeply influenced by the emergence of climatographs, or the data-driven study of economic history, led by Simon Kuznets and his circle at the National Bureau of Economic Research. Pred believed in mustering good quantitative evidence to back up his theories. But he was never a pure modeler and had a profound respect for the importance of history—and historical trajectories—in how places arrived at their present condition.

In what follows, I take up each of the three topic areas in more detail, laying out what contemporary urbanists are saying about the city in the modern economy, then reviewing what Allan Pred had to say in his relevant works, and highlighting his key contributions that remain pertinent to debates today over cities and globalization, cities and industry, and cities and creativity.

**Global Cities and City Systems**

Among economists, globalization is usually thought of in generic terms of flows of trade and finance between nations, and certainly such flows have increased dramatically over the last fifty years. But there is much more to the geography of the global economy than that. For one thing, those flows travel along definite networks between places: transportation routes, electronic cables and microwave stations, pipelines, and the rest. And such networks are managed by large firms, whether manufacturing corporations like Samsung, retail companies like Walmart, or intermediary shippers, merchants, and logistics handlers such as Evergreen.

Whatever the means or management, the web of international networks along which goods, money, and information flow is so striking that observ-ers such as Manuel Castells (1989, 1996) have labeled the new global system as “the network society” and referred to this global geography as a “space of flows.” While true, this view of contemporary globalization fails to realize that capitalism has always generated a space of flows along the networks of commerce, finance, traders, and information. This was already clear in the nineteenth century, as Allan Pred (1966, 1973) showed in his research on U.S. cities a generation before Castells. It goes back much further with the rise of commerce and commercial cities in Europe, as Pred (1984) showed in a study of merchant family networks in the eighteenth century. Jan De Vries (1984), Fernand Braudel (1982), and other historians have shown the same to be true back through the seventeenth century and beyond.

Another dimension of the contemporary geography of globalization is that its spaces are not dispersed just anywhere; the “end of geography” as predicted by Richard O’Brien (1992) is not upon us. Nor is it a matter of connecting national spaces, as in international trade theory. Instead, it is made up of “nodes and networks,” as noted by geographers Ash Amin and Nigel Thrift (1992) and of a mix of specific locales knitted up across the world, or “the local and the global,” as discussed by other geographers such as Doreen Massey (1994) and Erik Swyngedouw (1997).

What Pred also saw clearly is that the nodes in the networks are chiefly cities, as researchers such as Ken-Ichi Ohmae (1995) and Allen Scott (1998, 2008) have declared anew for the global economy. In the 1960s and 1970s, a discussion arose among urbanists and urban geographers about “systems of cities” (Berry 1964; Bourne and Simmons 1978). Pred became a leading commentator on the subject through a series of pathbreaking studies of American urban history over a decade and a half (1964, 1965, 1966, 1973, 1977, 1980). While, at that time, the reference space was principally national in scale rather than global, the key idea was clear: cities were the key nodes of economic activity and they related principally to one another. In his extensive research, Pred proved that—contrary to central place theory (Christaller 1933; Lösch 1940; Berry 1967)—and theories of imperial cities lording it over hinterlands (Innis 1935; Cronon 1991; Brechin 1999)—cities do most of their business with other cities, not with the surrounding countryside. Moreover, Pred showed this to be true from the outset of commercial and industrial urbanization in the United States—pushing the origins of U.S. urban integration back a century earlier than previously recognized (1980, 117).

Along with the (re)discovery of globalization in the 1980s came the (re)discovery of a world of cities (Friedmann and Wolff 1982; Castells 1989). Indeed, the recent explosive growth of cities from China to Africa means that the global city system is more robust than ever (Scott 1998, 2008). A misleading aspect of
the new focus on global cities, however, has been an exaggerated focus on the Big Three: New York, London, and Tokyo (Sassen [1991] 2001; see also King 1990). While other cities are sometimes mentioned in the same breath as the Big Three, such as Los Angeles, São Paulo, and Beijing, the notion has persisted that the only cities that really count are the supersized ones. Worse is the belief that this is a new phenomenon generated by globalization. Neither is true, as Allan Pred well knew.

In fact, capitalist cities have always come in many sizes, from the largest metropolitan areas to the smallest towns, all of which are linked together. Indeed, this is whole point of speaking of systems of cities, as Pred did. City systems are hierarchical, with a small group at the top and steadily widening numbers at every scale below, as has been known for a long time (Zipf 1944; Madden 1956; Berry 1961). Indeed, an essential task for urban theory has been to explain urban hierarchy, going back to Christaller’s (1933) central place theory and Lösch’s (1940) market threshold variant on central places. But in no way should the existence of city hierarchies be read as saying there are only a handful of “global cities” that matter.

Pred went further than those before him in an effort to account for rank-size inequality, combining Löschian thresholds with Keynesian multiplier analysis and Gunnar Myrdal’s circular and cumulative causation (as will be detailed in the next section). His model was laid out early on (Pred 1966) and remained much the same over all the works considered here (cf. Pred 1973, 1977, 1980). In short, he argued that early starters have “initial advantage” over late bloomers, big cities have persistent advantages over smaller places, and the advantages of the largest cities tend to increase over time. A generation later, Allen Scott has made the same case for global city regions, large metropolitan areas, and initial advantage—but on the basis of external economies rather than Keynes and Myrdal (cf. Scott 1998, 2000, 2005, 2008).

Although most of his work was on the nineteenth century, in City-Systems in Advanced Economies (1977) Pred looked at how large, multilocational corporations build interurban networks and concentrate their headquarters and support services in the top-most metropolitan areas. Corporate hierarchies were a popular way of explaining uneven development in the 1970s, but Pred’s approach was more sophisticated than others because of its sense of the cross-cutting effects of interurban networks (contrast Hymer 1972; Massey 1984). Sassen ([1991] 2001) expanded the simple corporate hierarchy model to include the clustering of financial and business services in her global cities but again missed the system quality of global urbanization.

Writing in the final decades of high Fordism, Pred was struck by the long-term stability of the urban hierarchy (e.g., 1977, 33–37)—though he was aware that some cities that thrived in the past had been eclipsed by a changing industrial order. By contrast, later economic geographers paid more attention to upheavals in the urban-industrial hierarchy due to major industrial transitions and the expansion of capitalism in Asia (e.g., Scott 1988a, 2008; Storper and Walker 1989).

Another favored idea of the last twenty years has been that of production networks, or commodity chains, that span the earth from continent to continent. Recognition of such long-distance production systems, whether in electronics assembly or retail sourcing, has been one of the most fruitful areas of research in economic geography (Gereffi and Korzeniewicz 1994; Fields 2004; Coe, Dicken, and Hess 2008). Nevertheless, as Scott (1998, 2008) has insisted, few of these supply networks reach into rural areas; most of them link up centers of production in cities and industrial districts within cities. Cities are the prime locus of industrial and commercial activity, as they have been since the early days of capitalism, and the complexity of modern production chains has not changed that (Pred 1980, 167).

**Industrial Clustering and Urban Agglomeration**

A tremendous leap forward occurred in economic geography in the 1980s as the implications of the decline of high Fordism set in, forcing scholars to come to grips with a radically reorganized space economy (Amin 1994). The first glimpses of this came with the discovery of horrific deindustrialization in Britain and the United States circa 1980 (Bluestone and Harrison 1982; Massey 1984). This upheaval demanded a rejection of optimization theories of industrial localization in the manner of Weber (1909) and Isard (1956) and of simple decentralization theories based on wage differences (Borts 1960) or product cycles (Vernon 1966). Something more dramatic was up, and it meant rethinking the basics of industrial dynamics and their relation to places (Massey 1984), particularly the opening up of what Scott called “New Industrial Spaces” (1988b) and Michael Storper and I (1989) called “geographical industrialization.”

This kind of pursuit led in three main directions. One was appreciating that the Japanese revolution in mass production was wiping out (and replacing) large swathes of heavy industry in North America and Europe (Kenney and Florida 1993; Sayer and Walker 1992). Another took up the question of the high-tech (electronics) revolution that had spawned the world’s new leading industry and was spreading into almost every other domain of the economy and daily life (Morgan and Sayer 1988; Scott 1993; Saxenian 1994). A third was
a newfound appreciation of the productive power of spatial clustering of bevy
of smaller firms in industrial districts (Becattini 1978; Storper and Scott 1988;
Storper and Christoperson 1987).

At first the greatest play was given to the idea promulgated by Michael Piore
and Charles Sabel (1984), based on their study of central Italy, that the key
post-Fordist shift was to a system called "flexible specialization." But the most
fruitful development was the rethinking of the whole process of spatial con-
centration, not simply as a replacement for Fordism but as a major force in
the history of industrialization from the beginning (Marshall and Marshall 1881;
Allen 1920; Sabel and Zeitlin 1985; Scantro 1997). Industrial clustering has
been prominent not only in craft industries like jewelry and clock making, but
recurred in steel and autos, petrochemicals, and food processing; came back
with a vengeance in electronics and software; and even showed up in Japanese
just-in-time production (Kenney and Florida 1993) and in spades with the in-
dustrial revolution in China of our time (Krugman 1995).

The analysis of spatial clustering brought back the other, relatively neglected
side of Weber's classical location theory: agglomeration. The combination of
neoclassical equilibrium analysis in economics, central place theory in geogra-
pahy, and the widespread decentralization of large Fordist factories in practice
had led most economic geographers to neglect the topic of spatial clustering
in the postwar era. By the 1970s, the study of industrial location had become
obsessed with corporate decision theory and spatial organization (Dicken
1971; Hayter and Watts 1983; cf. Walker 1989). Meanwhile, most urbanists of
the 1960s and 1970s, including urban geographers, had forgotten entirely about
industry in the city. They shifted their sights to such themes as consumption
and housing, politics and land development, and racial segregation and spatial
inequality in cities (e.g., Harvey 1973; Castells 1977).

But not Allan Pred, who put out a series of studies of the economics of met-
ropolitan growth from the mid-1960s through the 1970s. His project from the
outset was "the formulation of a geographic location theory originating with
the consideration of urbanization and industrialization . . . as interacting spa-
tial processes" (1966, 5, 12f.; cf. Pred 1964, 1965). The starting point for Pred's
approach was Weber's notion of agglomeration economies, which he took for
granted (Weber 1909; Hoover 1948; Isard 1956). In brief, firms are drawn into
the city because of the lower costs of shared infrastructure (ports, railway ter-
minals, electricity, and buildings); aggregate costs of transport of goods are
reduced by proximity of urban industries, whether it is between firms or to
transshipment points; and employers benefit from sharing a large pool of labor,
and one that is already disciplined and skilled in the industrial arts.

To the basic ground of agglomeration theory, Pred added that firms benefit
from the size of the urban market, or "threshold effects," of assembling enough
buyers of specialized products (whether intermediate or final) and that these
benefits are the greatest in the largest cities. As he noted, with the growing
complexity of material inputs and the growing demand for a greater variety
of (skilled) labor, the cost and threshold advantages of cities over dispersed
locations were enhanced by advances in industrialization (1966, 44, 79). To
this argument about rising productivity, he added that cities provide more and
cheaper sources of bank capital (1966, 80).

Pred also applied the Keynesian idea of multiplier effects, or the circulation
of money through the urban system. Such multipliers involved both capital
investment and worker spending on consumer goods (Pred 1966, 30–32, 42–43;
1973, 191–93; 1980, 125–31). Key aspects of this feedback system were capital
investment in transport and communications infrastructure to keep goods and
information flowing toward the major centers; the proliferation of newspapers,
advancements, and other means of disseminating business information; and
the building up of real estate and construction of the city itself (Pred 1980,
128; cf. Brechin 1999). In his discussion of multipliers, Pred rejected the basic/
nonbasic industries approach popular at the time, realizing that markets and
feedback loops could be both local and distant (1966, 30).

Finally, Pred employed the idea of circular and cumulative causation, which
had been developed by Gunnar Myrdal (1957) to explain international ineq-
ualities. In this, labor and capital flow out of less developed regions into more
advanced regions, helping the latter grow and stifling the former. Myrdal's
approach, and similar work by Albert Hirschman (1958), went against the
neoclassical orthodoxy that growth ought to spread outward from developed
centers to underdeveloped peripheries (e.g., Borts and Stein 1964). Pred's
innovation was to apply these ideas explicitly to metropolitan growth and city
systems, as a way of explaining both urban concentration of economic activity
and the relative stability of urban hierarchies once established (1966, 15, 26;

Such agglomeration economies are still the foundation stones of any theory
of urban concentration. But the literature on industrial districts since Pred's
time has gone further in the analysis of the collective logic of spatial con-
centration. Of fundamental importance are external economies of many interact-
ing firms, or increasing returns to scale for the whole district (Young 1928;
Lampard 1955). Another key insight is the power of economies of scope, or
the correct scale of capital equipment and production relative to market size
(Panzar and Willig 1981). The analysis of such effects has been taken to a high
level of formal modeling by economic geographers such as Scott (1988b, 1993)
and Storper (2013) and by geographical economists such as Krugman (1995;
Fujita, Krugman, and Venables 1999). Nonetheless, Allan Pred understood very well the payoff to specialization among many firms, the process of vertical disintegration, and external economies as not just additive but multiplicative (e.g., Pred 1966, 14, 41, 61).

The elaboration of the theory of industrial clustering was the most significant advance in economic and urban geography of the 1980s and 1990s. Many layers of nuance were added to the basic model along the way. One is the importance of shared social relations or the implicit and explicit ways of doing things that characterize tightly knit industrial districts, which allow for efficient, unstructured interaction, mutual aid, and cooperation (Saxenian 1994; Storper 1997; Cooke and Morgan 1998). These social interactions feed into the dynamism of industrial districts brought about by concentration of expertise, collective problem solving, and learning by doing, and therein lies the strong impulse for innovation in clusters such as Silicon Valley electronics or Parisian fashion (Florida 1995; Cooke 2002; Gertler 2003; Scott 2005).

The worm had truly turned from the midcentury model of innovation carried out in corporate laboratories (Schumpeter 1942). It was accompanied by a mad rush by cities, states, and countries to build research parks to try to capture the Silicon Valley magic—most of which failed because they never grasped the key ideas of economies of specialization (the need for many complementary firms), innovation as a collective problem solving (not just science coming out of university labs), or historical trajectories (the deep history of most industrial districts, including Silicon Valley) (Saxenian 1985; Massey, Quintas, and Wield 1992).

Nevertheless, what was regarded by industrial geographers as a great breakthrough into the realms of innovation had been a central concern of Allan Pred much earlier. Indeed, Pred saw cities as the principal loci of innovation, for much the same reasons as in industrial districts: the power of spatial concentration. Moreover, for Pred, as a student of the nineteenth century, industrial geography and urbanization were the same thing seen from different angles—the lesson that postwar economic geography forgot but which was rediscovered by urban economic geographers such as Scott (1988a, 1993), Storper (1997, 2013), and myself (Storper and Walker 1989).

Information and Innovation in Cities

Today we hear a great deal about the knowledge economy, the digital economy, the cognitive economy, and other variations on the post-Fordist theme that there has been a historic transition from the era of the mass production of goods to one of the production (and consumption) of intangibles, whether in the form of software, entertainments, or designs. This has led to studies of “cultural economic geography” (Sheppard and Barnes 2003), the “cultural economy of cities” (Scott 2000), and, most famously, the “creative class” as the pivot of urban revival (Florida 2002, 2005).

This view of things is not entirely new, however. The pioneering study of knowledge in economic growth was by Fritz Machlup (1962), while Daniel Bell (1973) declared the coming of the “post-industrial society” a decade later. The cybernetic revolution was in the air in the 1960s, long before the age of the Internet, and it had an enormous influence on thinking about information, systems, feedback, and much more. Allan Pred was a keen student of the era and took it all in. Then he went looking for the role of information in American history and the growth of cities, particularly in the sequential studies, Urban Growth and the Circulation of Information: The United States System of Cities, 1790-1840 (1973) and Urban Growth and City-Systems in the United States, 1840-1860 (1980).

What Pred discovered was that the urban-industrial revolution of the nineteenth century was not simply a matter of the production and exchange of goods but was necessarily accompanied by—and propelled by—the circulation of information (Pred 1973, 1980). Information was essential to the conduct of all trade and production; indeed, it was the nervous system of all enterprise, the brains of modern business. So the capitalists of the antebellum United States did not just set up factories and warehouses; they established newspapers by the thousands, set up a national post and package delivery network, and strung a million miles of telegraph lines (cf. Henkin 1998, 2006). They had to communicate, and what they were talking about was prices, orders, and payments, not to mention market prospects and competitors, and this information flowed from city to city around the country. Talk about the space of flows!

In Pred’s model of city systems, the networks and flows between cities are not simply about trade and movement of goods but are fundamentally about information, such as demand, investment, and business conditions (1973, 1980). He also knew that long before modern electronics revolutionized communications via the telephone, computers, and the Internet, earlier networks of merchant contacts, postal routes, newspapers, and, later, telegraph lines had produced a space-time compression as radical as anything in our lifetimes (cf. Marx 1964; Kern 1983). If, as Alfred Marshall has said, “the secrets of industry are in the air” in industrial districts, Pred went further (and he had read his Marshall) in saying that the secrets of business were singing along the wires, spreading a wealth of economic knowledge from city to city in nineteenth-century America (Pred 1973, chaps. 2, 3, 5; 1980, 145–69). The circulation of information is, moreover, sharply biased, not just toward cities in general, but
toward the biggest commercial and industrial centers; such bias is important, for example, in explaining the rise of New York to supremacy among U.S. cities in the early 1800s (Pred 1973, 16–19).

Information alone is not enough, of course; the question is to what use is it put? Trade and marketing are one purpose, management another (Hoover and Vernon 1959; Beniger 1986), banking yet another (Hamelink 1983). But information is the raw material of knowledge, and it is knowledge that is the crucial input to everything else in the system of production and circulation of goods and services. Moreover, the generation of new knowledge is critical to the process of economic innovation that is at the heart of modern capitalist growth. Pred was centrally concerned with the role of innovation in urban growth dynamics, whether single metropolitan areas or systems of cities (1966, 1973, 1977, 1980). He was steeped in the postwar revival of the economics of technological change brought about by the work of Joseph Schumpeter (1939, 1942), Robert Solow (1957), Nathan Rosenberg (1963), and Gary Becker (1964).

Pred realized that a key driver of uneven development was the process of innovation and that large cities were the biggest centers of innovation (e.g. 1966, chap. 4). This was quite the opposite of the conventional theory of “innovation diffusion” popular at the time (e.g., Hagerstrand 1952; Berry 1973; cf. Pred 1973, 228ff). A quite striking discovery of Pred’s was that even when new information and innovations appeared in peripheral areas or towns down the urban hierarchy, they tended to filter up to the biggest metropolitan areas, reinforcing their advantages in the race for growth and solidifying the urban hierarchy (Pred 1973, 236, 264). In other words, cities do not always generate the newest and best ideas, but they do almost always capture them eventually. Cities not only enhance creativity, they are the chief sources of demand for new technology (Pred 1973, 90).

These ideas speak directly to recent debates over innovation in cities, especially under the rubric of “creativity.” Richard Florida (2002, 2005) says that urban growth flows from the activities of the “creative class,” mostly professional, technical, and cultural workers. But this formulation is one-sided. Skilled and talented people move to cities because that is where the jobs and the economic action are to be found. As Pred notes, “Urban industries and their multiplier effects created the employment opportunities that successively attracted . . . migrants to infant metropolises, and eventually led to additional manufacturing growth” (1966, 39). Of course, the influx of workers helps drive the next round of growth, which attracts more people, and so on, but this is a mutually reinforcing spiral based fundamentally on the actions of industry: the clustering of firms, continued capital investment, and external economies of spatial concentration (Scott 2008; Storper 2013).

A central idea of the urban economists of Pred’s early years was face-to-face communication (Hoover and Vernon 1959). Urban innovation derives from the way information flows along “the web of interpersonal communication” that flourishes in cities and especially large metropolitan centers (Pred 1966, 127–31). As Pred puts it, “The multiplication of interactions among the growing number of individuals engaged in the manufacturing and tertiary sectors enhances the possibilities of technological improvements and inventions . . ., enlarges the likelihood of the adoption of more efficient managerial and financial institutions, increases the speed with which locally originating ideas are disseminated, and eases the diffusion of skills and knowledge brought in by migrants from other areas” (1966, 28). Recent literature about innovation and creativity in cities goes further than Pred in its analysis of the richness of social relations, problem solving, and learning-by-doing within industrial districts (Saxenian 1994; Storper 1997; Cooke 2002). But not surprisingly, the central idea of face-to-face communications has been revived by economic geographers (Storper and Venables 2004; Storper 2015).

In recent years, the evolving social division of labor and advances in digital technology—not to mention the cultural turn in social sciences—has led economic geographers to pay closer attention to matters of culture, mental labor, and creativity in the dynamics of urban growth (e.g., Lee and Wills 1997; Scott 2000, 2005, 2008; Currid 2007). Allan Pred’s later work tracked such changes and has much to offer on the cultural economy of the city, but I leave consideration of that to other contributors to this volume.

Conclusion

In sum, Allan Pred had a great deal to say in his early work, from 1965 to 1980, about three of the most important dimensions of the modern space economy: the leading role of large cities in capitalist development, the inexorable spatial clustering of industry and management, and the dynamics of information and innovation in the modern economy. Crucially, Pred helped overturn previously dominant ideas about cities and hinterlands, networks and hierarchies of cities, urban industrialization and clustering, and flows of information among cities and people within cities. His theoretical exercises and empirical research are still valuable models of rigor and sources of insight for urban and economic geographers today.

While some of Pred’s ideas have been superseded by more elaborate studies of external economies, industrial districts, and learning regions, among other things, his conclusions are sometimes still more pertinent than those of later writers. First, city systems and hierarchies are older, more extensive and more
entranced than the recent fashion for "global cities" and "spatial fixes" would lead one to believe. Second, urban growth is about not just industrial districts but the dynamics of urban agglomerations as a whole, and it rests not just on external economies but on spatial inequality in labor and capital flows. Third, the biased flow of information is crucial to big cities' dominance, and creativity is only one element of the forces at work spurring innovation in cities. Most of all, Pred showed that cities have been at the heart of the geography of capitalist growth for the last two hundred years, and in that regard there is less new under the sun than our contemporaries may think.

NOTES

1. Personally, I learned a great deal from Pred as a young professor at Berkeley, and it enabled me to contribute to the New Industrial Geography of the 1980s and 1990s (e.g., Storper and Walker 1989; Sayer and Walker 1992). I should also mention another colleague, James Vance (e.g., Vance 1970), whom Pred (1966) pays tribute to as well.

2. Allan Pred was well aware of this intertwining of scales, and he began calling his undergraduate course "The Local and the Global" twenty-five years ago.

3. Oddly, Allen Scott's efforts to widen the domain of urban activities to all "cultural-cognitive" functions (2000, 2008) forgets completely the force of finance and management (business services) in the buildup of the biggest cities.

4. What is striking in reading the introduction to Pred (1966) is how he stood at the threshold of systematic urban economics, with remarkably little to go on in the literature up until then.

5. At the time Pred was writing, there was a flurry of interest in matters of communication and networks, following from World War II and the birth of computing (cf. Meier 1962: Olson 1965).


7. Florida's ideas grew directly out of the advances in research of the 1990s, which lost their subtlety in being distined into the punch bowl of policy pronouncements that he likes to stir. Florida's theory is a kind of spatial reworking of Becker's (1964) "human capital" theory, but while the rising capacity of labor is a key facet of technological advance, it must be put into the full (spatial) context of capital, companies, and cities, not to mention the characteristics of the technologies themselves.

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