

**The City:<sup>1</sup>**  
**Center of Economic Reflexivity**

by

Michael Storper  
Professor of Regional and International Development  
School of Public Policy and Social Research  
University of California, Los Angeles (UCLA)  
Los Angeles, CA 90024-1467 USA  
Tel: +1-310-825-2718  
Fax: +1-310-206-5566  
email: mstorper@gsaup.ucla.edu

and

Professeur Associé  
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## I. The Nature of the City in the Globalizing Capitalist Economy

Those who are interested in cities have found themselves in a curious position in recent years. There has been a spate of new theories about the nature of the urban economy, but most of them cannot account convincingly for why cities should continue to be the geographical foci of capitalist economic activity in a period where the constraints of proximity seem to be disappearing. Whether the urban economy is seen as an agglomeration of higher order business and financial services [Sassen, 1991]; a flexibility pool for 'post-fordist' capitalism [Veltz, 1995]; or an informational economy [Castells, 1989], the story of urbanization which is told does not add up to the living result of the urban economies which are before us. At the same time, those concerned with urban society have been overwhelmingly preoccupied with the city as a site of social disaster: oppression, poverty, dualism, and crime are the themes, a dark view which has certainly always been present in urban sociology, but which traditionally took its place alongside visions of the city as the bearer of modernity, progress, liberty, and creative experimentation or, more neutrally, as a cauldron of change *tout court*. Both of these fields of reflection about the city are shot through with a concern about 'globalization,' a set of presumptions about its links to these urban social and economic processes.

In addition to frequent errors of empirical generalization which can be found in some major contemporary theories of urbanization, most such theories share a fundamental theoretical lacuna. They all conceive of the city as a *machine*, by which is meant a geographically-dense socio-economic system which functions according to the laws of a kind of urban physics. The changes with which urbanists are concerned -- in economy and society -- are then viewed as the result of a change in the

motive power of the machine, from national capitalism to global capitalism, and from manufacturing to service industries. Via the intermediation of particular local factors, these forms of motive power ‘produce’ cities, which are seen as subassemblies in the overall mechanical structure of the forces and flows of global capitalist society.

This is an altogether misleading imagery for the economics and social dynamics of cities in high income countries (and some middle-income countries) in today’s global economy. The economic role of these cities is not as a mechanical node in a bigger machine; the society of cities, likewise, while altered by urban economic forces beyond the control of urban citizens, is not a simple outcome of economic change. Two main arguments will be developed in this article.

First, the nature of the contemporary city is as a local or regional ‘socio-economy,’ whose very usefulness to the forces of global capitalism is precisely as an ensemble of specific, differentiated, and localized social relations.<sup>1</sup> These social relations consist of concrete relations between persons and organizations which are necessary to the economic functioning of those entities. Cities are sites where such relations are routinized through rules, institutions and, most importantly, conventions, many of which are localized and are different from one city to another. Moreover, the clustering of economic activities together in cities -- both manufacturing and services -- are frequently characterized by interdependencies which are indirect or untraded, and not simply by the direct, local traded linkages which are the staples of urban economics.

Conventions and relations have always been central elements in the distinctiveness of the economies of big and middle-sized cities. In many ways, however, their importance is increasing

because of transformations in contemporary capitalism, which may be summed up as an enormous leap in *economic reflexivity* [Giddens, 1992]. This term refers to the possibility for groups of actors in the various institutional spheres of modern capitalism -- firms, markets, governments, households, and other collectivities -- to shape the course of economic evolution through reflexive human action. Increasing economic reflexivity has been made possible by the development of new metacapacities in modern capitalism., among which we may cite three: (a) the vast expansion of the nature and spheres of control of firms, markets and government institutions, involving deeper and more immediate feedbacks from one part of these complex structures to others than ever before, dramatic cheapening of many forms of material production, and great increases in the variety of material and intangible inputs and outputs; (b) a vast spatial extension and social deepening of the logic of market relations; and (c) a generalization of the culture of modern organizational methods, bureaucratic rule, and abstract communicational processes to more dimensions of social life than ever before. As a result, capitalist firms and markets, but also individual consumers and government institutions, are now capable of generating much more variety in their actions than ever before, at a faster pace than ever before. In turn, firms -- but also governments and other institutions, as well as households -- are forced to adapt to bewildering levels and rhythms of variety generated by others. They way they do this is by perfecting their capacities for organized, collective reflexivity. In the economy, reflexivity is the means to engage in competitive learning; in society and consumption, reflexivity is necessary in order to obtain 'satisfaction,' but also to cope with the counterpart of generalized economic reflexivity, which is new forms of *risk* for every individual, firm, household, and public institution [Beck, 1992]. *Important and distinctive urban dimensions of this reflexivity, in both production and consumption, take place in cities; they are*

*dependent on the concrete relations between persons and organizations which are formed in cities; and they are coordinated by conventions which have specifically urban dimensions and in addition are often different from one city to another.*

The second major point I wish to argue in this paper is that the city in a global economy is not a mere basing point for globalized, placeless economic forces, i.e. a mere subassembly in the global machine. Instead, when global firms and forces locate in big cities, they do so in part to tap into the distinctiveness of the local there, for two reasons. They wish, on the one hand, to gain access to the local, conventionally and relationally-distinctive society in order to service it and earn profits there. They wish, on the other hand, to gain access to the specific forms of reflexivity which reside there, so as to use them as inputs into their global systems of production and marketing. The causality is therefore two-way in nature.

The focus of contemporary urban theory is very different in this analysis from what it is when the city is conceived as a machine. In the latter, the city machine is broken down into traditional subassemblies such as industries, occupational groups, income groups, and such, and the discrete interactions between the parts examined. No matter how well done, this procedure, as we shall see in the following section, leads to empirical dead-ends, phenomena whose urban nature cannot be accounted for, as well as whole dimensions of urban life about which it has little to say. What is distinctive about cities is the ways in which groups of actors -- tied together by their relations and conventions -- engage in specific processes of economic and social reflexivity. The city is then the locus of spheres of action whose components do not correspond neatly to traditional categories of urban theory or statistical measurement. These worlds of urban action must become the focus of urban

theory, analysis, and policy.

## **II. The State of Urban Theory Today:**

### **Global City, Dual City, World City, Informational City, Post-Fordist City**

The encompassing theories which once guided our understanding of the city -- welfare economics, marxism, or urban ecology -- have in recent years given way to a wide array of theoretically unorthodox attempts to come to grips with evolutions in western cities that seemed no longer to be illuminated by those grander perspectives, at least in their pure forms. The insights they have generated are significant; but each creates limits to its explanatory power when it treats the city as a machine. Four such machines are examined here as a way of assessing the state of the art in recent urban research: the city as the machine of global financial capital, or the 'global-dual city;' the city as the machine of multinational enterprises, or the 'world city;' the city as the machine of information processing, the 'informational city;' and the city as the machine of flexible input-output structures, or the 'post-fordist city.'<sup>2</sup>

#### **The Global-Dual City**

The notion of a 'global' city results from ambitious attempts to link big theoretical categories -- industry, location, labor markets, population demographics -- to large-scale empirical outcomes. The purest version of the story is told in Sassen's [1991] work on New York, Tokyo and London. Certain

industries are held to be global industries by virtue of the high degree of internationalization of their inputs and outputs: the financial services industries are the key examples. These industries, in turn, have an occupational structure characterized by large numbers of very highly paid workers, who have decisive effects on the private and collective consumption patterns in the cities where they are clustered. They have high incomes but little time, leading them to demand high levels of personal consumer services, which are furnished by low-waged, mostly immigrant populations. Thus, the global city is a dual city.

There are core elements of truth in this story, but as a theory of urban growth, it does not work, because the tendencies toward growth of financial and advanced services industries, as well as their urban agglomeration, can be found much further down the urban hierarchy than merely in these three global cities. For the American case, it is true that the location quotients for financial services are considerably higher in New York than in any other city; but it is also the case that other advanced services industries have high and growing location quotients in a surprisingly large number of cities [Pollard and Storper, 1996]. Moreover, a wider sample of industries which share the essential characteristics of the financial services ensemble -- high-wage composition and export-orientation -- notably, a broad group of what we may call the “intellectual capital” industries.<sup>3</sup> These industries have a much more complex localization pattern than as implied by global city theory. In a sample of twelve major US metropolitan areas, we discovered that the growth rates of intellectual capital industries tend to reflect overall growth rates for the metropolitan areas, holding location quotients stable. Thus, there is an overall shift toward these activities in the American economy, and this shift is occurring even in regional economies where no particular signs of specialization in such industries is apparent. It may be

that such industries have a decreasing propensity to agglomerate, or that there are incipient agglomerations whose presence is not strong enough to detect at the moment. This pattern differed significantly from another group of industries with high wage and high skill composition, the ‘innovation-based sectors,’ where locational differentiation is much more pronounced from one metropolitan area to another. Table 1 shows these findings.

### **The World City: Multinational Capitalism’s Bureaucratic Hierarchy**

The ‘world city hypothesis’ was initially outlined by John Friedmann and Goetz Wolff [1982] as an extension and reworking of urban hierarchy theory. The theory is rich in its observations about the social and demographic character of the biggest cities in the world, but we shall concentrate here on the core elements it adduces to explain patterns of world urbanization. The theory maps out a rather conventional hierarchy of cities -- first tier, second tier, third tier, and so on -- but instead of remaining at national level, it argues that a unified global hierarchy of cities has now come into existence, in which national urban hierarchies are subagent components, in the sense that the primary motors of growth transmission have shifted from national to global scale, and therefore the cities at the top of each nation’s urban system are something like first line receivers of such growth impulses, which they then divide and distribute down their respective national urban systems.

What is it that influences patterns of urban growth in this world city system? The primary force is held to be the administrative order of transnational enterprises: such firms have planetary spatial logics of production and marketing in which cities become functional nodes, arranged hierarchically. Thus, the



top cities in the world urban system -- the 'world cities' -- are the places preferred by transnationals as basing points for their top administrative and decisionmaking activities; the second tier cities are those which account for secondary regions and/or functions in the corporate hierarchy; and so on down the pyramid. Implicit is the notion that these supra-national actors determine the shape and form of urban growth today.

The world city hypothesis certainly called our attention to a growing reality: the growth of transnational enterprise and its implantation in the world's great cities, at a time when those cities seemed to be undergoing widespread transformations in their economic bases, social character, and spatial structures. The central empirical claim of the hypothesis -- the locational behavior of the world's largest and most transnational firms -- has been largely upheld [e.g. Chesnais, 1994]. Yet it is not clear that the world city hypothesis can stand in as an explanation of contemporary growth and change in the cities comprising the first and second tiers of its global urban hierarchy.

While foreign transnationals are certainly visible in New York, Paris, Sao Paulo, London, Los Angeles, and Sydney, no research has ever shown that they constitute either the lion's share of growth or the structural motor force of metropolitan growth in any of them. Even in cases of extreme internationalization -- the most extreme is probably the City of London, whose firms' inputs and outputs are extraordinarily mobile, a high percentage of the firms are British and their employees are UK citizens [Thrift, 1994]. The fact that Los Angeles firms are now more sensitive to international markets has big impacts on employment and location in Los Angeles, and certainly alters the ground rules for economic growth there. But most Los Angeles transnationals grew up in Los Angeles and their success in international markets was due to an expansion of their core, locally acquired, expertise; the latter

permitted them access to world markets. Paris is certainly the basing point for transnationals wishing access to the French or European markets, as a look around La Défense will attest. But to claim that the primary force in the growth of Paris has shifted from national to transnational, from city-hinterland relationships to city-international relationships, would be unsustainable. Paris became the primate city in the French urban system because of the structure of the French State, and later continued this as its agglomeration economies became unbeatable -- inducing massive migration from the provinces -- and complemented the concentration of administrative, social and political power [Marchand, 1993]. Were things the other way around, one would expect Germany -- as Europe's economic superpower -- to have Europe's world cities, and not France and the UK. Likewise, the USA has proportionally much less of a world city in New York than its corporate economic power would suggest, and this has much more to do with the particularities of the American political and urban systems than with the behavior of transnational enterprises [Markusen and Gwiasda, 1994]. Tokyo certainly fits the definition of a world city, but in an economy as fundamentally closed (on the input side) as the Japanese, this is because Tokyo (like Paris) is the primate city in a powerful national economy [Machimura, 1992].

The problem, then, is not in world city theory's descriptive veracity, although the theory does exaggerate the role of global as opposed to national forces. All the big cities are more penetrated by foreign investments -- in both administrative activities of transnationals and in production and service activities -- than they were twenty years ago, in step with the growth in world trade as a proportion of world output. It is, rather, that the world city hypothesis sheds little light on the process of urban growth today; it simply asserts that these big cities are subassemblies in the world urban machine for the optimal flows of capital, labor and goods. The world city hierarchy it maps out corresponds quite

neatly to already-existing national urban hierarchies; all that is necessary is to draw international lines linking the national pyramids into a super-pyramid. Thus, for the time being, the great cities of the world cannot be conceived primarily as cogs designed to fit into the bigger administrative machine of transnational enterprises.

### **The Informational City: The Machine of Cyber-flows**

For Manuel Castells [1989], the Informational City is merely the manifestation of a broader phenomenon, the Informational Society. Though many others have attempted to come to grips with the high technology revolution on the city, Castells' theory is the most ambitious, because he analyzes not just the high technology industries, but more importantly, their effects on economic and social practices across-the-board. His argument is especially pertinent to those interested in the city as an advanced service economy because he argues that the principal effect of the technological revolution is the service transformation. He uses little of the conventional language of the service economy literature, eschewing sectoral analysis in favor of a more panoramic approach. For Castells, there is

‘....the new social structure that characterizes our world: the informational society. By such a concept, I understand the social structure where the sources of economic productivity, cultural hegemony, and political-military power depend, fundamentally, on the capacity to retrieve, store, process and generate information and knowledge. Although information and knowledge have been critical for economic accumulation and power throughout history, it is only under current technological, social, and cultural parameters that they become directly productive forces. [...] Information becomes the critical raw material of what all social processes and social organization are made.’[Castells, 1992: 2].

Castells sees information, as the raw material of the economic process, as itself quite indifferent to space, because the technologies of information transmission are now approaching the point where the friction of distance is nil. Thus, his economy is a service economy in the sense that information is something like a service, but he largely eschews sectoral analysis as such. As a result, the world economy has been fundamentally changed from a space of places to a 'space of flows' [Castells, 1989:6]. Still, there is a structure to the flows of the informational economy: a structure of networks. Most of these are the networks constructed by multinational corporations, whether internal to the enterprise or with their selected interlocutors. In this sense, Castells' map of the urban hierarchy depends on factors similar to those identified by the world city hypothesis. What anchors these networks, gives them shape and makes them urban? The social class which runs these networks -- the new information elite -- has to be socialized, and this is done in the world's great cities, where the masters of the global space of flows congregate, and between which they circulate comfortably in a sociological space which is largely similar, from Cologne to Chicago to Caracas. The service *industry* analysis of the global city is transformed into an information *class* and *social networks* argument here.

This description hardly does justice to Castells' analysis of the geography and urbanism of the informational society, which is rich in observations, many of them critical and pertinent. In what follows, we shall address the positive analytics of Castells' theory, rather than its social criticism. Three major criticisms can be levied at the notion of an Informational City as a node in a territory-less global "space of flows" of global firms, weakly anchored into such nodes principally by information elite socialization and association.

First, "information" as a meta-theory of contemporary capitalism is seriously imprecise. Every

epoch of capitalist development has had some set of scarce factors or processes which, because of their scarcity, constitute the focal point of competition and the motor of change. These have always, in some way, reduced to knowledge, in the broad sense of the capacity of the dominant firms or nations to do things the others could not do: late eighteenth century England possessed hardware and methods of production organization which were scarce and gave her producers fantastic advantages over others and hence defined the relations of domination-subordination within the capitalist world economy of that time [Mokyr, 1989]. The ‘American system’ of production came along much later and did the same thing for American firms [Hounshell, 1984]. Such advantages permit great wealth accumulation in the form of higher-than-normal profits, but also often translate into military superiority. These examples could be multiplied many times over and in many ways could be applied to pre-capitalist European economies. In this sense a focus on knowledge as the center of what makes a wide variety of social processes tick, is nothing new.

Information, curiously enough, is *not* a scarce commodity today [Chesnais, 1994; Delaunay and Gadrey, 1988]. It has become totally banalized, mass produced and distributed. The fact that lots of it is distributed by huge global firms is, in many ways, not very significant, because in terms of capitalist competition, the markets in which they operate are often highly open and highly contested, even by Third World firms and countries.

Knowledge, defined as know-how or skill, however, is another matter. It has been radically redefined, away from principally manual forms to intellectual or abstract forms, away from direct goods production. Knowledge and know-how are not routinized, standardized and perfectly codified. They take many forms. The first type is formal but non-standardized knowledge, as in the activities of

conception, production planning, and into the constant pushing outward of the technological frontiers of many industries. The second, and the quantitatively most important form is the quasi-customization of professional services and the linking of goods and services to customers[de Badnt and Gadrey, 1994; Gadrey, 1994; Decoutere, et al 1995; Dejellal and Gallouj, 1995],<sup>4</sup> in which the human relation and its dialectical relationship to knowledge and interpretation, is critical. Knowledge-based labor is the rare, scarce, not-easily-imitatable heart of the competitive process in contemporary capitalism, the source of superprofits and the key to relations of domination and subordination; knowledge and know-how are specific, not general assets [Lundvall and Johnson, 1992; Dosi, Pavitt and Soete, 1991]. It is the development and mastery of specific forms of know-how that count today. Castells' focus on information technologies and the material networks of information transmission and exchange errs in stressing the fundamentally non-scarce, banal element of the economic process today, not its rare, competitive, driving edge.

This leads directly to the second problem with the informational city theory. The organization and spatiality of knowledge is very different from that of information. The same forces that are currently pushing for a globalization of the knowledge-based economy, also encourage a certain re-territorialization of key economic and social processes. Ironically, Castells' 'space of flows' resembles nothing more closely than the vision of neoclassical economics with respect to territory: a grid of homogeneous, interchangeable, frictionless, perfectly substitutable inputs. Certain contemporary developments do push in this direction. They include increased economies of scale which cheapen transmission; telecommunications and travel technologies; the internationalized *lingua franca* of

business and bureaucracy, as well as Castells' elite solidarity. But this is only part of the story. It misses the most important aspects of contemporary economic organization: knowledge is highly embedded in organizations, dependent on specific communication channels and structures, which make it possible not only to get access to it in raw form, but more critically, to interpret it and apply it successfully to concrete uses. Some of these push very strongly against the seamless abstract space of flows and re-embed knowledge in territorially specific actors and assets. These include: (a) uncertainty as to the meanings of information and as to unstandardized, or unknown future applications, which require non-codified, culturally-embedded, and trustful communication among knowledge-holders, whether inside big firms or in external economic relations; examples include technological frontiers, but also customized or semi-customized service delivery;<sup>5</sup> (b) ongoing change in information and its transformation into knowledge, or evolution of knowledge, leading to the same emphasis on interpretation, and the same need for embedded human relations to make interpretation and communication possible [Lecoq, 1994]; examples include markets characterized by uncertainty, fashion, or demographic shifts;<sup>6</sup> and, (c) spillover effects, i.e. relations of interdependency between one type of knowledge and another, whose frontiers change, again requiring interpretation and communication; examples include the manufacturing-manufacturing link (upstream-downstream, or cognate technological fields), or the manufacturing-conception-services link (engineering-manufacturing)[Cohen and Zysman, 1984; Von Hippel, 1987]. All of these processes require relations and routines which are specific to the product, the sector or the operant cultural context, not standardized anonymous interactions. Such relations and routines frequently involve dense human relations, many of which in turn involve locational specificities and proximity between individuals, firms, and institutions.

Statistically, this relational and territorial embeddedness of knowledge has been found to have significant effects: abstract and codifiable technological information moves in Castells' space of flows, but technological and practical mastery, i.e. knowledge, is not globalized. Patel and Pavitt's [1991] statistical work has shown that the technological excellence of global companies is highly national and not very globalized. Of the world's 500 biggest firms, only a handful have less than 2/3 of their employment and 3/4 of their value added in their home countries. And the increase in world trade has been accompanied by increased national specialization, not convergence. A global economy is emerging, then, but it is not about a homogeneous space of flows. It is instead a complex meeting of new kinds of globalized flows and new kinds of territorial economies. Castells' theory takes one side of this complex process and elevates it into a highly misleading metaphor for the whole.

Castells claims that very high percentages of workers in our economies are 'information workers.' But this is a clearly hyperbolic claim. Jean Gottman [1989] long ago identified big cities as major transactional nodes due to the need for face-to-face interaction in corporate administration, R&D, trade, media, and so on. But high percentages of urban workers are still involved in making goods, and delivering routine services directly to consumers. Even using a very liberal definition of information workers, our research suggests that this percentage, for the US as a whole, is about 74%, and for our sample of twelve big cities, it is not less than 65% (see Table 1). Routine information services are now increasingly decentralized to the suburbs, small cities, or even offshore, as manifested in the front-office-back-office split locational pattern. The knowledge part of the economy goes well beyond the financial services sector of the global/dual city theory, but it is much more restricted than what is identified by Castells. It includes many intellectual functions in the economy which are



characterized by uncertainty, interpretative interdependence, and hence the need for confidence and specificity in relations. These are the functions likely to have strong dependence on proximity with other activities and to be embedded in specific territorial contexts as a result of the development of the relational frameworks in which knowledge is developed and deployed.

### **The Post-Fordist, or Flexible City**

The redefinition of the theory of localization has been more than ten years in the making, part of a widespread inquiry into the ‘resurgence of regional economies.’<sup>7</sup> Localization economies, of course, have long figured prominently in theories of urban growth. Beginning in the early 1980s, however, social scientists began to try and understand an apparent re-regionalization of certain forms of production, and as a sub-set of this phenomenon, the general reprise of urban growth at the expense of more peripheral or less urbanized regions.

All of the attempts to revive and refashion localization and agglomeration theory have attempted to respond to two particular historical realities: one is the break-down of the post-war economic order and the apparent transition away from the organizational model of mass production; the other is change in the sectoral composition of employment and output, away from manufacturing and toward services, and within manufacturing toward high technology products.

The first was formulated as an extension of transaction cost economics [Scott, 1988]. The model extends the insights of Coase and Williamson, which claim that transactions costs and production costs both figure in the determination of how production will be organized, either internally to a firm or in

the form of an external network of relations between firms. Since transactions have geographical dimensions and hence, costs, it follows that such costs will also enter into the determination of how production itself is organized. The division of labor in the modern economy hence becomes partly determined by the geography of production, as well as a cause of that geography, in the sense that if geographical proximity reduces transaction costs enough, firms will be able to externalize more relations than they otherwise would be able to do, hence adopting a different organizational model than they would otherwise. Empirically, when production is characterized by strong uncertainties (technological change, fluctuating markets, unequal distribution of information between parties), or by dense substantive content to transactions (e.g. knowledge that cannot be codified and routinized), and when these uncertainties cannot be resolved by internalizing activities within firms (i.e. making them administered by bureaucracies rather than transacted in markets), then the conditions for many transactions and high costs of covering distance in transacting, are in evidence. The case where geography actually has an effect on organization is something like when a high tech firm is in a region where there are many specialized workers, it can afford not to internalize those workers, but instead to hire and fire or to subcontract more readily than it would otherwise have to do. Both these dynamics tend to generate agglomeration. The reprise of city growth in the 1980s is accounted for by showing that cities are places of multiple agglomeration economies of the industries which are growing: high level services, and high technology. These industries, so it goes, need externalization for both flexibility and proximity. The city is a nexus of these complex, uncertain, high cost, and necessarily flexible input-output relations between firms. Empirically, the vision is of a 'post-Fordist city' since their economic bases are made up of industries which conform to this analysis of needing flexibility and getting it

through agglomeration, and these are not typical post-war mass production sectors, but based on a different organizational model from that of post-war mass production; hence, there is a post-Fordist urban economy.

A second version of agglomeration theory distances it from sectoral analysis. It argues that macroeconomic instability affects a wide range of sectors, not just cutting-edge services and high technology. This, combined with the liberalization of labor markets, permits and obliges firms in many industries to seek greater and greater flexibility. From this point onward, the story's detailed analytics are similar to those described above. The important difference is that the city is no longer theorized as a set of overlapping sectoral agglomerations, but rather as a single gigantic 'flexibility pool.'<sup>8</sup>

Empirically, these theories lead to fruitful observations about transactions-rich urban economies and they allow us to understand the *dynamics* of agglomeration and de-agglomeration. Post-Fordist city research shows that the agglomeration effect attached to such externalization is particularly powerful for parts of the advanced business and financial services industries (including , but not often studied, media and advertising), certain parts of the high technology industries, and to a lesser extent (at least in the USA), certain design-intensive manufacturing processes. Contemporary capitalism is an enormous machine for generating change and variety: this constantly re-creates the basis of agglomeration, through new products and services and the forms of transacting they require. But modern capitalism also pushes in the direction of routinization and standardization of knowledge, products, and hence, transactions, leading to a tendency to peel activities away from high-cost areas such as cities. This is just as true of services as it is of manufacturing. The ratio between the two generates a rate of urban growth in a particular place, and a rate of urban versus non-urban or peri-urban growth in general.

But there are also some apparent anomalies. One has to do with the locational behavior of very big firms. Many of the activities which have been localized in big cities are branches of big firms. Why, if such firms internalize certain functions, do they keep them in big cities, or cities at all? If they do so because they continue to rely on outside suppliers, why do they not routinize their supply relations and decentralize them? Or, why do they not use their enormous monopsony power to attract those services to themselves, wherever they locate? The partial answer to both these questions is that they do. High technology aerospace firms in the USA are doing both of these increasingly (Lockheed's moves to Georgia, for example). But many cases remain where such firms do not do so.

What is missing? First, the nature of the risk which gives rise to the compensating strategy of "flexibility-through-externalization+agglomeration," can no longer be accommodated within standard analyses. Risk has become an increasingly endogenous property of the economic system itself, a product of reflexivity: one firm's or person's reflexivity is the other's uncertainty, and vice-versa. Firms and individuals have to use flexibility to hedge, not against current conditions, but against this overall, increasingly unknown, and increasingly general condition of the economy, its markets, technologies, and organizational arrangements. There is a kind of 'super-risk' at work, well beyond what the post-Fordist city hypothesis analyses through its model of the division of labor.<sup>9</sup>

Second, the post-Fordist city hypothesis is overwhelmingly concerned with 'hard' transactions, essentially input-output relations between firms (buying and selling goods, services, and information), and between firms and workers (hiring and firing). The city is depicted as a risk and proximity-based input-output machine, designed to reduce firms' transacting costs. But certainly firms have vastly increasing capabilities to reduce those costs, through telecommunications, organizational streamlining,

and transportation improvements. More importantly, firms and individuals are interdependent in ways that do not get expressed through trade with each other: signals and cues from the environment which hone the sensibilities of key actors, for example, and integrate them into the relational context necessary for them to maintain their competitiveness. Input-output relations are only the tip of the iceberg, which is a context defined by conventions and relations which permit actors to understand how to negotiate complex input-output relations. Moreover, conventions and relations are key *untraded interdependencies* which lie at the heart of specialized urban agglomerations. Note that these conventions and relations are true externalities, in the sense that they are not assets which can be fully privatized; therefore they have *spillover effects*. We are now far away from the transactional analysis of post-Fordist agglomeration theory and into a domain where we are concerned with agglomerations as the urban contexts for action frameworks.

This story applies to higher order service conception and delivery, market tailoring for market spread, advanced financial services, higher order government activity and research, media-entertainment, telecommunications, and advertising, and certain kinds of customized manufacturing: firms in all of them are highly dependent on successful reflexivity for their survival. This pattern is much more sectorally broad and geographically-extensive than the New York, Tokyo and London economies; they are just particular cases of the general nature of city economies in late modern capitalism.

The theory of agglomeration-as-transactions-*costs* needs a complement which goes beyond costs to qualitative dimensions of transacting, i.e. beyond the notion of an input-output machine to something more qualitatively rich and complex.

### III. A Theory of the Urban Economy: the Social Organization of Economic Reflexivity

Many of the central aspects of contemporary urbanization receive attention in the theories reviewed above and must figure prominently in any effective theory of the city today: the service industries, and especially financial services and advanced business services; flows of information, and the development of technologies which make them possible; the location of big, multinational firms; the flows of capital, information, knowledge, and goods administered by those firms; the financialization of capitalism. But none of the theories reviewed seems to put these phenomena together in a way which effectively accounts for their role in urbanization. This would require that we separate their effects on urbanization from their effects on advanced capitalist economies and societies more generally.

If we put this in a more critical way, it can be seen that most of the categories used to theorize and to measure the urban economy are not adequate to the task. This is especially true of economic categories. Such units as 'industries,' or 'occupations' -- the categories used by global-dual city theory -- are much too aggregated, in many cases, for it is distinctive subsets of industries or occupational groups that we find in cities. But they are also too small, in the sense that urban economic agglomerations often contain parts of many different industries. Even the concept of 'commodity chain' (*filière*) -- at the heart of post-Fordist city theory -- subtle as it is, misses the mark, for it is often parts of such chains and combinations of the parts of different chains, that can be found in cities. 'Firms,' which is the theoretical and accounting unit of world city theory, is certainly well wide of the mark, for it is only certain parts of firms, especially the world's biggest firms, which are to be found in the world cities. The use of a critical input unique to cities might work, as in the attempt of informational city

theory, except that it is precisely this input whose management and distribution is not unique to or even particularly concentrated in, cities, with the advent of spatially dispersed data processing, technology, and back offices.

To construct an effective theory, then, we need more targeted theoretical and statistical categories. I propose that *what is principally common to the export-oriented economic specialization activities of cities is that they are concerned with the social organization of economic reflexivity*. We defined this earlier as a characteristic of contemporary modernity in which organizations -- both private and public -- and individuals, devote themselves to the deliberate and strategic shaping of their environments, in part by taking a critical perspective on them. In economics, this reflexivity is now the major means to competitive learning. But it is not just true of producers in capitalism; individuals in their roles as consumers, workers and citizens are now critically reflexive,<sup>10</sup> generating an enormous variety of new consumer tastes, worker capacities and creativities, and citizen demands and reactions. Let us begin here with the production side of economic reflexivity in cities; in the following section we will return to the consumption-citizenry side.

The organization of reflexivity is importantly, though by no means exclusively, urban. This is because reflexivity involves complex and uncertain relationships between organizations, between the parts of complex organizations, between individuals, and between individuals and organizations, in which proximity is important because of the substantive complexity and uncertainty of these relationships. These two characteristics of relationships frequently requires that they be embedded either in direct, concrete relations between individuals or that they be carried out according to locally-evolved routines or conventions which permit actors caught up in these complex relations to go forward under conditions

of great uncertainty or substantive complexity. In other words, the transactional tissue of these urban activities is of a conventional/relational nature, and it is urban because certain conventions and relations only work in the context of proximity.

This permits us to redefine the ‘what’ of the urban economy as the parts of firms, production systems, industries, and the overlapping parts of different industries or firms articulated into urban economies, and which carry out reflexive activity, and constitute the export-specialized economic bases of contemporary cities. Redefining the urban economy as worlds of purposive reflexive action, however, gives us an object of analysis which cuts across the categories used by all the theories reviewed in the previous section, targeting the theoretical specificity of what is the urban export base. *The economies of big cities, in other words, should be analyzed as sets of partially overlapping spheres of reflexive economic action*, and the structures of those activities, in addition to traditional economic descriptors, must include *their conventional and relational structures of coordination and coherence*.

Now we need to turn to the ‘how’ of the urban economy. The urban economy no longer operates as a simple input-output machine. These conventions and relations, once established, function much like *productive assets* for the organizations, individuals, and places -- i.e. cities, in this case -- which possess them, because these relations and conventions are both *localized* and *specific*. Reflexivity is given shape and order through the development of proximity-dependent relations and conventions, ensembles of which define cognitive and pragmatic contexts common to a group of actors and which permit them to carry out a particular kind of purposeful collective economic action. The contexts are specific, coordinated worlds of action. Rather than try to define the urban economy by the



crude traditional categories, which are both too big and too small, we must redefine it as specific worlds of action sculpted by these conventions and relations. The empirical task is to identify for each city, the what -- the purposeful spheres of reflexive economic action which are localized there -- and the how -- the way these activities are coordinated by conventions and relations.

The principal task is to analyze what actors are doing and how they coordinate with each other.

Examples of such urban worlds of reflexive action might include the following:

- \* the New York financial services complex, viewed in terms of its specific pragmatics -- the 'securitization' of capital in this case -- and in terms of the principal ways firms and individuals are coordinated in this world, the specific rules, routines, and principles of evaluation they use.

A contrast between New York, London, Tokyo and other financial markets, would reveal very important differences;

- \*the Hollywood entertainment/media complex -- how its economic, technical, and artistic actors are built into a system for producing mass entertainment products and how this very likely differs radically from its English, French, or Italian counterparts;

- \*Silicon Valley as a core technology agglomeration, viewed in terms of the specific relations and conventions which give rise to its technological prowess, in comparison with other places such as the Ile de France sud, Cambridge, Boston, or Taipei.

- \*intersecting pragmatic contexts -- such as the worlds of art, fashion and media in Paris -- which are tied together by complex networks, routines, unwritten rules, and formal institutions;

- \*the evolution of Lyon as a reflexive capital, but no longer absolute productive center, of the Rhone-Alpes region, in terms of the overlapping political and business services provided to the

region's good-producing economy, as a key space of representation for regional political and business elites.

*In all these cases, it is not just the geometry of these systems which is of interest, but the constructed mentalities and frameworks by which the actors involved evaluate and interpret their contexts in an ongoing way, and on that basis adjust their participation in the context.*

The urban parts of productive activity, of course, are often inserted into bigger, non-urban networks, such as firms, industries, filieres, and so on, in which other sets of geographically-extensive rules and relations give order to the overall system, whether these be the bureaucratic structures of big multinational firms, the laws of a nation, or the structure of a market.

### **The Reflexivity Class in the City, the Nation, the World**

The city is indeed a place where social processes, figures, and objects are represented and socialized, a key place where collective identities are formed and solidified. As we have noted, sociologists have attempted to understand the contemporary city by calling attention to the professional-managerial-technical occupational stratum (global-dual city) or the information elite (informational city) which carries out this key process of representation. At the same time, however, it is claimed that new technologies make possible new patterns of 'time sharing' and of segmentation and recombination of actors, all of this without direct proximity. It is difficult to reconcile these views, for the city cannot be the center of representation of key social processes without people who interact to carry out this activity.

As with the production categories of industry, firm or filiere, our analysis suggests that the

categories of 'representation' and the occupational strata that go with it, are both too broad and too narrow to capture the specificity of the contemporary urban economy. They cover workers in non-reflexive as well as reflexive activities. The theoretical object should be redefined as the population which generates and manages reflexivity. Obviously, this presents enormous challenges from a methodological point of view.

The problem then becomes how this population is formed, how it functions, and the role of the city in both. Cities appear to contain specific groups of such actors, tied together by complex combinations of their formal professional credentials, cultures, and the conventional-relational tissues in which they evolve their skills through local on-the-job experience. For example, certain kinds of professional-scientific-technical skills are more and more internationalized, through the convergence of business school training and scientific education among the advanced countries, as well as through experience in globe-girdling corporations. All of these forces promote inter-firm and inter-national mobility through routinization and codification of skills. Yet such skills are often honed, added-to, and specialized when they are deployed in a specific sectoral/geographical context, in two senses. First, specific career experience progressively distances an individual from skills learned in school. Second, relations are built up (networks) and routines or conventions are learned, which become part of each worker's 'human capital,' well beyond the stock which is created via formal schooling [Asanuma, 1991]. Cities thus contain communities of reflexivity workers who insert geographically-generic skills into geographically- (and otherwise) specific conventional and relational contexts, such that they are made effective under conditions of uncertainty. These groups of actors engage in a kind of cognitive

‘translation’ between geographical levels: national-regional; national-international; city-regional hinterland [Gadrey, 1994]. By way of metaphor, there is something like a relationship between a lingua franca and local dialects and specific customs of speech at work. This relationship takes a hierarchical pattern in the case of ubiquitous activities like financial transactions; it takes a more nodal and disorganized pattern in the case of manufacturing and in the delivery of services by transnational corporations where extensive market adaptation, customization and after-sales follow-up is needed [Chesnais, 1994]. Each kind of activity will have a different spatial pattern of translation, reflecting the spatial arrangement of its reflexivity workers and the conventional-relational tissues by which they are bound into effective worlds of economic action. In other words, we need a completely new way of conceiving the geography of the key urban actors of contemporary capitalism and a new analytical problematic, which is the nature and functioning of worlds of action of the reflexive classes, at different, partially-overlapping geographical scales.

### **Globalization and Localization**

There is a dialectical dynamic of globalization and localization at work in the construction of city economies today, with many apparently paradoxical dimensions. The organization of reflexivity by local, regional, national and global firms pushes all of them toward cities. Globalization is both the top-down force of organizing markets and production systems according to supra-national competitive criteria and resource flows, and the bottom-up pull of localization of both market penetration (a process requiring global firms to insert themselves in conventional-relational contexts of their markets, not a simple technocratic operation) and the effort to tap into geographically-differentiated producers’ capabilities

(the specialization of technological knowledge and sensibilities, and its ongoing redifferentiation through reflexivity in the advanced industrial world). Globalization is encouraged by the new global *lingua franca* used by reflexive workers to communicate, while localization takes its place due to the ongoing fragmentation and redifferentiation of specific groups of reflexive producers into specific productive communities, defined by their particular technical skills and the deployment of those skills through specific conventions and relations. City economies are pulled simultaneously in both these directions by these forces and it is the interrelationship between the two which has to be appreciated in the study of any particular city's economy.

#### **IV. Reflexive Consumers and Citizens and Urban Collective Consumption**

Cities are not just sites of production, they are also important sites of consumption. Not long ago, both orthodox urban theory -- in the guise of central place theory -- and Marxist urban theory -- in the form of the theory of collective consumption -- placed consumption at the heart of the urbanization process. I want to argue that *reflexive consumption* has become an important constituent of the contemporary city economy, and that there are important organizational and geographical linkages between reflexive production and consumption which are highly urbanized today, most notably in the form of certain kinds of services. One of the key linkages is that of the city as a space of social representation, to which we have alluded above.

For what we might call certain kinds of 'elite' services -- forms of consumer variety which, only a generation ago, were found exclusively in the downtown commercial district of the major cities -- there has been a clear decline in central place functions. Consumer variety has increased and has been decentralized, such that (in the American case) regional malls within metropolitan areas and in smaller city-regions now offer astonishing arrays of fine goods, as do the downtowns of many provincial European cities, where those goods were once available only in major capitals. The same is true of many consumer-oriented services, through the development of better service-delivery organizations. At the same time, other new specialized consumption habits have developed, and they do appear to have strong hierarchical central place characteristics: these are what Sassen and others refer to as the 'yuppie' economy of the global cities. In all this, however, certain important geographically-localized forms of specialization seem to exist. In part, long-lasting distinctive aesthetic cultures of production and consumption are in evidence, and have little to do with the yuppie phenomenon: we can find this in the production of theater, music, art and to some extent, food. In part, new versions of local elite consumption are highly internationalized, with the same products and services making their appearance in standardized forms in many places (rue du Fbg. St. Honoré, Rodeo Drive, Fifth Avenue, or malls like Bergen County and Chevy Chase, or the South Coast Plaza); but there are also many instances of particular services and products appearing to serve distinctive urban populations, and generating supply as a result of such demand. Elite consumer reflexivity is thus a curious mixture of the very cosmopolitan and the local, and its feedbacks to production of goods and delivery of services is most complex. This includes, very importantly, *collective consumption*. This is a special case, since collective consumption is by definition highly rooted in long-lasting institutions (social and urban services) and in the built

environment (housing, streets, parks, etc); as such, it has a tendency to be highly differentiated from place to place. But it is differentiated not only as a result of inertia from the past; the collective reflexivity of urban consuming classes appears to lead them in wildly different directions from city to city and nation to nation.

Middle-class or mass city consumption presents its own set of complex dynamics. Big urban conglomerations appear, more and more, as repeating patterns: the same movies (multiplex chains in the 13th, 9th or 6th arrondissements of Paris show the same films; as they do from Universal City to Hollywood to Santa Monica, in Los Angeles), the same chain stores, and so on, from one part of the metropolis to another. This has been celebrated variously as the 'polycentric' metropolis or 'urban village.' It is evident that most of these activities have lower central place thresholds than elite consumption, and that the middle-classes have increased in numbers and purchasing power. On this basis, central place theory cannot tell us much about urbanization today, since the thresholds for these activities are met many times over in today's big cities.

It appears, however, that middle class consumption has not simply been massified. It has also been fragmented and specialized in certain ways, into sub-class lifestyle, age, ethnicity, gender, and other kinds of fragments. Thus, in Los Angeles, there is the rock-music section of Sunset Boulevard, the hip 'urban grunge' boutiques on Melrose Avenue, the gay downtown in West Hollywood, innumerable ethnically-demarcated consumption villages, the differentiated bourgeois cultures of Brentwood, Beverly Hills and Santa Monica, and so on. The suburbs are also highly differentiated along all these lines, including the supposedly homogeneous white middle class. Many such fragments consist of goods with lower thresholds, and still others of consumer services such as specialized retail

operations, restaurants, clothing stores, music clubs, and so on. These are not only yuppie environments; they display a wide range of class and income characteristics, in addition to their liminal characteristics. They are manifestations of consumer reflexivity, and they reflect both the influences of cross-cultural internationalization which homogenize cities and new forms of relocalization which redifferentiate them. These are also conventionally and relationally defined worlds of consumer-producer action.

The *spectacle* is a particularly important form of consumption which involves a high proportion of service [Debord, 1976]. Spectacles are both deliberate and organized consumer experiences, and forms of social life which 'rise up' from the street, and are not fully organized or internalized by commercial organizations. In big cities, the former has in recent years become more and more reflexive with respect to the latter, reducing the time gap of imitation and cultural 'colonization' by commercial forces. The complex relationship between the two, in the context of increasing reflexivity and increasing fragmentation and diversity of reflexivity, yields our characteristic and confusing impression of both sameness and difference in urban consumption.

Distinctive reflexive cultures -- youth, ethnic, gender-based, social movement or lifestyle based - - are big inputs into the bottom-up aspect of spectacle creation and the forms of aestheticization to which it gives rise. The commercial recuperation and packaging -- i.e. *representation* -- of the experiences generated by these cultures, in goods but also in spectacles (which in turn sell goods), are major parts of the urban economy today. Nowhere is this more important than in the media and entertainment industries. These sectors are perhaps the most dramatic example of the back-and-forth relationship between standardization-cosmopolitanization and destandardization-specificity to which we



have alluded many times. On the one hand, the media and entertainment industries use technologies of delivery -- for both private electronic consumption of images and sounds and for public consumption of organized spectacles -- which are capable of greater and greater economies of scale, but also economies of variety within that scale. On the other hand, there are important, constantly re-created differences in aesthetic sensibility, on both demand and supply sides, for both sorts of services. The film, television and music complexes of London, Toronto and Los Angeles are all within the English-speaking world, but they have very different specializations and talents, all the while borrowing elements from each other through cosmopolitan exchange (and even though the quantitative dominance of Los Angeles is currently unchallenged). Differentiation grows more with other cultural factors. It is not possible to get into these complexes and function in them without getting into the conventions and relations which tie the producers to each other, or which tie them to particular groups of consumers.

The importance of cities as sites of consumption in general, of collective consumption, and of feedbacks from consumption to production, can only be understood if we are willing to conceive these activities as worlds of conventionally- and relationally-structured action, with the action frameworks of specific groups of consumers and producers as the object of analysis. One major dimension of the latter is urbanness in general; another is the specificities of particular cities; for both, there is an ongoing dialectic of homogenization between cities and between urban and non-urban, and their geographical re-differentiation, another major target of the geography, economics and sociology of services.

## **Conclusion**

The city has never been a machine. Indeed, throughout the literature on cities, one can find reflections which recognize, implicitly or explicitly, that the city is a crucible where the ingredients, once put in the pot together and cooked, often turn out very different from what we can deduce from their discrete flavors. Yet much urban theory does not want to theorize this dynamic, instead stressing expert understanding of the ingredients and not getting too deep into excessively complex combinations of them. In this respect, it is like most social science, remaining wedded to the notion of society as a set of rational action processes. This epistemological bias, no matter what its political coloration, creates severe limitations for understanding the urban social and economic process today, some of which we have been able to suggest in this paper.

Recent social, technological and organizational developments make this more than ever the case, for they have strengthened the role of reflexive action in urban economy and society. Firms, individuals, other organizations, construct purposive and pragmatic worlds of action -- chiseled out by conventions and relations. In the economy, there is more locational separation than ever before between that part of productive activity heavily based on reflexivity and that which is involved in the cognitively and organizationally routinized production of goods and services. Cities get more than their share of the former. This activity can only be fully understood when its constructed collective action dimensions are taken into account, as well as its machine-like characteristics. The same, we have argued, is true for many forms of consumer behavior, citizen behavior, elite behavior and non-elite behavior. The worlds of action which make up the city economy and society are hybrids, constrained by the machine-like forces of late modern capitalism, but themselves enabled by the ways that system not only permits, but in certain ways, thrives on social reflexivity.

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## NOTES

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1. A kindred argument has been proposed by Amin and Thrift, 1993, in their notion of “institutional thickness” of localities.

2. There are at least two other perspectives which I have chosen not to include here. One stems from the recent work of Robert Beauregard, claiming that urban research needs a return to the city as a physical-built environment. Beauregard argues that urban theory which abstracts too completely from the physical misses the specificity of the urban milieu. This perspective is not yet well developed as a research paradigm and so is difficult to evaluate. Moreover, it merits a certain skepticism with respect to its theoretical claim: certainly the city as a locational structure and ensemble of built forms is both reflection of social-economic dynamics and, perhaps, a force shaping the latter. But it does not follow that the lacuna we are about to identify in socio-economic approaches to the city will be filled in by attention to the built environment. Many of these lacuna -- the explanation of the economic force of the city, of its social dynamics, etc -- are obviously *not* explainable via reference to the built environment.

The second emergent perspective calls itself “critical urbanism” and is principally an urban derivative of post-modern philosophy and social theory in general. As yet its urban variant has not generated theory or results which are markedly different from its general variant. And it explicitly rejects conventional notions of theorizing the city, preferring a critical perspective to a “positive” perspective (citations).

3. These are defined empirically in Pollard and Storper, 1996.

4. There is a virtual consensus on this in the literature on services. See, for example, Delaunay and Gadrey, 1994; Gadrey, J. 1994; Decoutere et al 1995. See also

F. Djellal and C. Gallouj, 1995 who argue that some services require general benefits of urban location, but others require very specific benefits of local downstream linkages. M. Jouvaud, 1995 also argues that many services are forms of “co-production,” some requiring local “partners” and others having longer-distance relations to their cooperants and shows the first case to be an empirically important one for the Marseille-Aix region.

5. What Lundvall and Johnson 1992, call “knowing who,” “knowing where” and “knowing how.”

6. Uncertainty is a central element in the new “cognitive turn” in the study of technological change.

7. I review this issue in great detail in M. Storper, 1995

8. This is Veltz', 1995 analysis of Paris in particular and post-Fordist urban economics in general.

A third version of agglomeration theory takes a different approach. It suggests that there are

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such things as “innovative milieux,” places in which embedded social relations permit innovations in products and processes. While not limited to big cities, some versions of milieux theory include big cities. Others, especially of the Italian version, suggest that big cities are unlikely to be innovative milieux because their size discourages the focused social coherence which, it is held, leads local economic actors to maximize innovative potential.

9. Young (1928), was prescient about the cumulative, endogenous nature of change in the division of labor, due to the way that one change makes necessary practical adjustments in the tasks which surround it. Recently, evolutionary economists have extended and formalized these intuitions, in an explicitly heterodox way. On the more orthodox side, there are also efforts, as in Fujita, M and JF Thisse, 1995

10. Of course, using the term “critically reflexive” does not imply any kind of judgement as to whether the result of such reflection are good or bad, right or wrong, in the sense of conventional modernist ideas about “true” versus “false” consciousness. It means, simply, that the act of reflection about the environment, with a view toward strategically acting upon it, is now a more or less explicit part of the action frameworks of individuals and organizations.