

## THEORETICAL NOTE

### A Regulationist Approach to the Future of Urban Ecology\*

By Alain Lipietz

#### 1. Introduction

For a long time now, History and its substance, Time, have held pride of place in the eyes of philosophers and social scientists. Geography and ecology (whether natural or urban), as well as its substance, Space, were relegated to a passive role, an empty setting or scene within which "events" would be deployed, in which they would "take place." Yet it was well-known, for example, that geography used to be at once the matrix, domain, cause, variable, and end product defining the most spectacular kinds of social praxes (war and public works), as if to indicate that History was the mere handmaiden of Space. Space (and Geography) seemed to incarnate the "dead weight" of things while Time (and History) came to embody creative freedom and the potential of progress.

One of the reasons for this prejudice undoubtedly has been the often repressive use, for the past century, of geopolitics and urbanism. Those who rewrote the map of the world and its territories, more often than not, were the politically dominant classes, and the reforming or revolutionary action of the dominated classes became inscribed in and against an already given space, one which was opposed by its passivity.

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A more intellectual reason to me seems to be the following: "Time" is already difficult to think about and this thinking requires the use of language and analogies. Further, where can the images for these analogies be found if not in the language of space? "Field," "area," "domain," "level," "infra-" and "superstructure" — these words amount to so many spatial terms monopolized by the sciences and philosophies of history and sociology. How is it possible now to truly think "spatially" or "about spatiality" if the terms that come to mind are already spatial analogies? Will it be possible to speak of a "scansion of space"? Even the most fundamentally dialectic images of thought owe their provenance to spatial conceptualizations: "One never bathes twice in the same river...there is harmony in equal and opposite tensions, like the harmony of the arc and the lyre" — so says Heraclitus.

The great difficulty for humanity today, however, the problem of its own becoming, very much seems to be "space" — the space of humanity: the environment. Also, how humanity creates and resides in it, and how humanity is now at risk of failing with it. This is also the great difficulty of ecology, specifically one of its branches, urban ecology, which concerns the greater part of humanity and requires it to confront a world that is entirely of its own making.

In this essay, we will start with an epistemological reflection on space, its practices and social structures. We will also have the opportunity here to introduce a few fundamental concepts governing our approach to regulation. We then will bring into play the results of the prospective inspired by this approach. We shall do this by imagining, for advanced capitalist countries, development models for the future. We will naturally concentrate on the spatial implications of these models, and we will seek to establish that they all lead to a vindication of the urban, *une revanche de l'urbain*. Also, we will inquire into what form the regulation of all these possible futures may take, along with their risks and expectations.

## 2. The Material Dimension of Social Processes

Every social process and practice is a material process: reproduction, work, eating, entertainment, education, play, creativity, love, war. By this very token, they possess a spatial dimension. They are not inscribed "in" space; they *are* space and compose its many threads. They thus are human space, the geography of humankind, or,

if you will, urban space. Political ecology assumed its dominance from the moment that we became aware that there was no longer — or almost no longer — a "natural" virgin space for human action, that there was no stationary or eternal stage remaining upon which human action would unfold.

Human space therefore is nothing more than one material dimension of the social totality (the other dimension being Time).<sup>1</sup> It is understandably complex, being itself the nexus of a great many social relations and praxes. Each social relation (which is itself a rendering routine of praxes) thus engenders its own topology (productive space, juridical space, geopolitical space, domestic space), and, from the articulation of all these multiple topologies, concrete space results. Our thinking can then be deployed in a double register. What is said of social relations and practices immediately possesses a spatial translation. Let us examine this further.

Every social process, in effect, can be understood as governed by contradictory social relations; each process unites and opposes agents through the reproduction of their social praxes. The stabilization of one process means that these very relations hold, despite (and even through) the working out of the conflictual character of these practices. Thus, love relations are reproduced within lovers' quarrels, salary relations arise out of strikes, etc. It is this surprising effect (stability obtained despite, or even through, conflict) which is called "*régulation*" in French.<sup>2</sup>

The *structuring of space* is one of the material dimensions of this stabilization of relations which structures social practices. In this regard, it is at first sight the result of this stabilization. The "*choréograpy*" of Hagerstrand illustrates this aspect quite well: because it is human nature to assemble regularly under certain

<sup>1</sup> See A. Lipietz, *Le Capital et son espace* (Paris: F. Maspéro, 1977): "Le national et le régional: quelle autonomie face à la crise capitaliste mondiale?" Paper given at the conference on spatial structures and social process, Lesbos, Août, 1985 (*Convergence Orange* CEPREMAP No. 8521).

<sup>2</sup> In English, "regulation" translates roughly to the French "*réglementation*," which is only one possible form of "*régulation*." However, since the translation of the seminal text by Michel Aglietta (*Régulation et crise du capitalisme* [Paris: Calman-Lévy, 1976]), "*regulation*" is more frequently taken in the French sense of the "Regulation School."

conditions, and for humankind to continually circulate close to those same places, human beings quite naturally wind up forming places and networks, much the same way one crushes a path into a lawn by always crossing it in the same place. But this structuration of space is at the same time the *material base* of this social stabilization: once the social places and the networks are defined, the infinite plasticity of social practices, as Marx has noted, is framed or reified. In this sense, human space is *already* a mode of *régulation*.

Once stabilized, social processes present a duality between two aspects: one a "structure which reproduces itself," and the other "individual practices and strategies which crisscross." The first provides the skeleton and frame for the second; the second is essentially its flesh and blood, its stability and consistency. To use another image, think of weaving, and the threads which compose woof and warp. In social processes, this duality "structure/agency" simultaneously authorizes reproductions, strife, recurrent transformations, crises, and revolutions.

Spatially, it is this same duality which is expressed as "human ecology" (that is, the strictly artificial and cultural domain of political ecology and, in particular, urban ecology). Each individual human action is embedded in a preexistent space, an always already given space, and participates in the creation of material conditions of all other human activities (in cities, traffic, production, waste). Each human activity occurs within an "environment," but also is an integral part of all other human activities and their environments. In turn, each activity can transform (for better or worse) every other environment (e.g., the construction of a apartment building or the disposal of garbage).

Methodologically, the following results from this discussion: the "future of space" (and urban space in particular) must be understood in terms of both worldwide social evolution (and the manner in which it restructures its space) and also the manner in which existent space already limits and conditions that social evolution. The relationship between space and social process is the central outstanding illustration of Marx's thesis, constant from the *Theses on Feuerbach* through the *18th Brumaire*, and according to which: Mankind makes its own history, but on the basis of what is inherited from the past.

More precisely, the "future of space" is not a simple projection mapped by the future of society. Society will evolve and recreate itself

only because it is already rooted and made material in terrain: it already exists as a form of territory. Human space as such is therefore already a constraint for future society (as well as a starting point for it). The contradictions between these existing spaces (between those forming civilization materially as we know it today) and those "projected spaces" (the materialization of development models competing for the future) also will have to be regulated.

### 3. Post-Fordism Development Models: The Vindification of the Urban

The ambitious methodological program implied here can not even be sketched in this discussion. We shall consequently limit ourselves here to the following exercise: an exploration of the spatial consequences of the two major and contradictory relationships of capitalist economics: market relations and capital/labor relationships. Without a doubt, we shall be concerned here with the major factors determining the structuring of space. These two areas (industrial relations and industrial organization, to use academic terminology) have been explored by economists of the "French Regulation School." Let us recall at the outset a few conclusions of this research.<sup>3</sup>

Fordism is the name that has been given to the capitalist development model which was prevalent in advanced capitalist societies from the 1950s to the 1970s. It is characterized by the following features:

- Labor organized under the form of Taylorism and mechanized, with a polarization of qualifications and responsibilities between those who design production and those who execute it;
- Mass consumption as the principal outlet of production;
- The organization of economic activity by oligopolies (either directly through internal hierarchies or else through subcontracting);
- The institutionalization and optimal structuring of management and corporate structure through, among others, social legislation, group meetings, and "Welfare State."

<sup>3</sup> For a critical introduction, see R. Boyer, *La Théorie de la régulation* (Paris: La Découverte, 1986). See also Lipietz, 1977, *op. cit.*; D. Leborgne and A. Lipietz, "New Technologies, New Modes of Regulation: Some Spatial Implications," *Society and Space*, 6, 3, 1988.

This model took its spatial materialization as a functional hierarchy of districts within cities, between separate cities, and even within villages. This "functional organization of space," a pillar of the politics of urban and regional management, and even of architecture, is one of the major characteristics of "modernity."

The crisis of Fordism therefore is in reality a double crisis (at the very least, and to limit ourselves to a economic sense): that of Taylorism itself and that of the rigidity of conventions governing Fordist economy. Taylorism was unable to function with the advent of new technologies; and the fixed structure of national modes of regulation became destabilized by the whirlwind of international competition. After ten years of ineffectual action, two paradigmatic axes arose to resolve the crisis: the first questioned the rigidity of the modes of regulation; the second attacked Taylorism itself.

The first axis, which since the late 1970s has inspired so-called Neo-Fordist or even Neo-Taylorist models, aims to reestablish the *flexibility* of market relations, not only within each economic sector of production, but also within labor-capital relations themselves. This model reworks labor to make it a simple transaction liberated to be borrowed and declined at will by the employer.

The spatial form (of spatial regulation and not only of spatial "deployment") of such models implies a return to urban concentrations. Social regulation, in effect, takes the universal form of direct marketing (between employers and workers, and between managers and contractors). Proximity then becomes the condition of social and economic interaction, whereas, with the Fordist "hierarchy," everything was spread out, controlled by hierarchies but nonetheless dispersed over a "topology." From this fact there results a tendential "remetropolitization" of urban forms. Post-modernism privileges erratic interactions in a disorganized society, whose segments are collected into megalopolises torn by strong social polarizations.

The second axis of socio-economic evolution, which structures the models we usefully can call post-Fordist, aims on the contrary to go beyond the "conceiver-executor" opposition. Its aim is a cooperation negotiated with the dominated players in the economic process, workers and contractors. Its tenets are job qualification, application of human resources, "just-in-time" organization of fluxes, and strategic cooperation between companies.

On first sight, the spatial form of these models is the same. Explicit cooperation and negotiation presuppose face to face relations, therefore proximity and urban concentration; it signals the end of branch plants outside urban areas. But this time, it is a question of a negotiated collective and a contractually stabilized interaction, with all the corresponding institutions (professional associations, research and development departments, arbitration boards and union locals). Post-Fordist urban life rests on the "organized mobilization of territories."<sup>4</sup> It may take the form of a metropolization, but above all it will be in the form of smaller and well-organized production systems forming parts of larger networks.

This divergence of models to replace Fordism cuts vertically across the capitalist world. It does not pass between the former Fordist center and its periphery; it divides the old central economies. Great Britain, the United States, and France all rallied around neo-Fordism. Germany, Switzerland, Austria and the north of Italy have espoused post-Fordism (Japan has managed to combine both models).<sup>5</sup> Los Angeles is carried away by a megapolization through which it resembles Sao Paulo. On the other hand, the capitals of European post-Fordism (Frankfurt, Munich, Milan) remain metropolises. There are only two megalopolises in Western Europe: Paris and London. And they are both in neo-Fordist countries.

#### 4. Territories, the Forms and Dangers of Regulation

The social and ecological consequences of megapolisation, in the North and the South alike, is one of the greatest menaces that the neo-Fordist models can impose on the future (I do not limit myself here to the future of urban space). The multiplication of social ills (drugs, epidemics, urban despair), congestion, pollution of the biosphere, exacerbated social polarizations, all this is well known and very often

<sup>4</sup> See A. Lipietz, "Capital-Labour Relations at the Dawn of the 21st Century," UNU/WIDER, Project on Capital-Labour Relations, 1990, mimeo (to be published by Clarendon-Oxford in English in a volume edited by S. Marglin and J. Schor).

<sup>5</sup> D. LeBorgne and A. Lipietz, "Fallacies and Open Issues of Post-Fordism," International Conference on Pathways to Industrialization and Regional Development in the 1990s, Los Angeles, March 14-18, 1990. To be published in English in a volume edited by Scott and Storper by Unwin and Hyman.

denounced. If London and Paris are running behind Los Angeles, the latter is espousing (with its greater wealth, but also its greater instability) the profile of Mexico City or Sao Paulo, which seem in places to resemble Calcutta. The positive side to megapolitization is certainly not to be ignored: in the center of these megapoli and in the richness of their creative but transient interactions, there sometimes springs up poetic sparks of post-modernism. I have run across Greens bored to tears in Frankfurt, that "far too small city." But the potential creativity of the Great City which inspired so many poets has too great a cost: social exclusion and ecological disaster.

The choice of post-Fordism and its urban forms (networks of average-sized cities and metropolises built on a human scale) can avoid disastrous conclusions, while at the same time safeguarding spaces for unlikely creative interactions. But this choice will only be set into motion by the mobilization of social forces (ecology, feminism, a renewed interest in unions, grass roots involvement, etc.), and by a real cultural investment on the part of architects and all others involved in municipal and rural planning and maintenance.

Existing space brings into play a frightening constraint. Just as the nature (more or less "social" and explicitly regulated) of the Fordism of the 1960s has tightly steered the direction different countries have taken through the 1980s,<sup>6</sup> likewise the urban space bequeathed by the 1980s will impose ever more rigid limits on our choices in the 1990s. From now on, the present urban environment (that is, the product reaped by the crisis of the 1970s and the 1980s) imposes itself as an insurmountable problem (and no longer as a space for a solution) for the megapolises most committed to the "flexible" models. Congestion, pollution and ghettos hardly favor a mobilization around a collective effort to undertake urban projects.

Whatever the "state of these places" may be, however debased they are, the reconstitution of a controlled space, in the spatial form of negotiated social compromises, remains the only useful objective for progressive forces in the urban arena. The regulatory forms effecting the transition to such "projected" spaces from "inherited" spaces are, on the one hand, "community democracy," and, on the other, "interspatial

<sup>6</sup> As has been strikingly established in R. Mahon, "From Fordism to...?" *Economic and Industrial Democracy*, 8, 1987.

solidarity."<sup>7</sup>

*Community democracy* describes a collection of political and infra-political forms (cooperation and negotiation, whether professional or grass-roots) which regulate<sup>8</sup> areas seeking to reach a collective mobilization of local human resources without denying at the same time the diversity of the community. Community democracy combines, intrinsically, substance and procedure (What is the basis for negotiation? What are the procedures to govern negotiation?). It implies, among things:

— Negotiation between unions, local state agencies and companies, in order to raise the level of qualification and to define the aims and organization of production;

— Evolution of the Welfare State (which in Fordism was the bureaucratic apparatus charged with redistributing purchasing power and no more) toward the financing of a third sector of social production (next to the public and private sectors), which would be 1) self-managed; 2) contractually negotiated between its employees and its recipients; and 3) dedicated to social utility (improving the quality of life, cultural sponsorship, domestic services, and so on).

— Increases in free time which would keep pace with human progress, as a condition of existence in urban civilization and with all the promises for variety and freedom granted by post-modernism. I mean by this a notion of free time for people who, while remunerated in a socially useful task, do not find their lives absorbed by their working hours.

But community democracy would be a vain term only if competition between territories (between cities, between regions, and between nations) led each local area to manage its "foreign constraints" by accepting more difficult and more precarious living and working conditions simply in order to compete. Community democracy can only find its full expansion in every locale if each is accordingly protected from unfair competition as well as the "socio-ecological dumping" of surrounding areas (in particular, those territories opting for the neo-Taylor model). Common game rules therefore must be

<sup>7</sup> On the argument that follows, see A. Lipietz, *Choisir l'audace: Une alternative pour le 21<sup>st</sup> Century* (Paris: Découverte, 1989). Forthcoming in English by Polity Press.

<sup>8</sup> The English term "governance" is quite accurate for those forms of "régulation" not resting on the market or the central State.

adopted in exchanges (merchandise and capital) between territories. This fact has been admitted for a long time in interregional and intranational relations. It becomes urgent with relations among nations on the same unified Continent (the famous debate on "European social space," the North American Free Trade Agreement) and even in international relations (the debate on the social and ecological conditions for the GATT).

But these interterritorial game rules possibly may be untenable for certain territories, if we take into account their wealth, their competitive edge and their indebtedness. These rules would wind up, in fact, causing the marginalization of these territories, dislocating them and exposing them to uncontrollable fluxes (as the German unification has so forcefully reminded us). These rules are only tenable if they are accompanied by a *massive interterritorial solidarity*, and by the assistance of permanent financial and technological support granted to the least successful territories by the most successful.

Today, the economic, ecological, and demographic crises which ravage the majority of the world, in the South and the East in particular, provoke the destabilization of every community by migratory fluxes. As far as the territories leaning towards community democracy are concerned, it would be pointless as well as monstrous to declare a police action in order to defend them against these fluxes. The fitting response is to put into place negotiated common rules, with permanent assistance to territories in trouble, which would give everyone a homeland to live and work in.

If we wish to avoid Berlin becoming the third unruled megapolis of Europe, the EEC and Germany will have to develop forms of solidarity not only for East Germany, but for all of Eastern Europe as well. By that example, we can measure how much the future of the urban is deeply rooted in historic determinations made manifest by geography; also, how much the future of space will depend on decisions arising from customs, finance, macroeconomics, and the law — and how much urban ecology is the total expression of the totality of social practices.