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The Relevance of Sociological Perspectives for the Study of Urban Fragmentation Processes

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1. Introduction

Chicago in the Thirties was the fastest growing and biggest city of the United States. When Al Capone impressed the people in the street, students - coming from small rural communities of the Mid-West or often of European origin - were sent out to observe the urban community. They must have been overwhelmed by the varied patterns of culture of different social categories, such as the Jews living in their ghettos or the 'hobos' in their bohemian ambience. The famous sociologist Louis Wirth concluded, on the basis of these studies, that the urban community was "socially disintegrated" (Wirth, 1938). Although at the city level social disintegration could be observed, the social contacts between the residents were not as superficial and secondary as Wirth suggested: at the neighbourhood level, within the segregated communities, the social contacts were face-to-face and rather primary (Blauw, 1986, 24-36; Morris, 1968, 22-25). It seemed that Wirth's 'urban problem' could be solved only if the social order was somehow repaired. We, on the other hand, have become familiar with this "urban mosaic" and we are inclined to accept this social situation as characteristic of urban life.

Wirth's evaluation of urban social life had been deduced from the idea that society ought to be harmonious and based on a value consensus (Smith, 1980, 1-48). One may want to condemn Wirth because of his bias. But let us be generous to him. There is still the same danger and we might be trapped in the same pitfall. As we start with the idea of overcoming urban fragmentation processes, one can wonder whether there should be something like "urban cohesiveness". Are we then not making a similar value-judgement, based on the ideas of government officials who, in their role as urban planners, prefer order above disorder, structuration above fragmentation? It is worth being precise when defining the problem, as this effects our observations and subsequent conclusions.

2. Definition of the Problem

Which are the processes which we may consider as urban fragmentation processes and how can they be typified?

Fragmentation is observed by comparing areas on different spatial levels:

- On the national level there is a fragmentation into crisis versus development areas, and into densely populated urban areas and sparsely populated rural ones.
- At the city level fragmentation is seen in a split between increasingly prosperous and increasingly poor districts; within certain districts large municipal housing estates are lacking in social cohesiveness between residents.

This suggests the following comments:

1) The basic assumption underlying the idea of fragmentation is that it still does matter where a household is living or where a company is located. But does 'place' matter? Distances can easily be overcome by the modern means of communication, and the consequences of living close to each other can be reduced by measures aiming at physical isolation. Thus, one should specify for which situations place does matter and for which it does not.

2) The fragmentation processes that we observe do not necessarily imply that there is an increase in social inequality, an aspect that European governments and their citizens do not consider desirable. What can be observed is an increasingly uneven spatial distribution of households or companies, as measured by their income or profits. This process may also be accompanied by an increase in wealth, and even by an increasingly more equal distribution of income among the population taken as a whole.

Segregation, the unequal distribution of the population according to criteria such as class, ethnicity or other, is as such not necessarily a social problem (Blauw, 1991). It becomes a social problem only if it is defined as such by the people involved. It might be problematic for the government: in that case it should be considered a policy problem. However, the fragmentation processes described above are considered to be problematic to the people involved, and especially to the more deprived part of the population; politicians and government officials consider them problematic since they have to guarantee, within a policy of social equality, that their citizens have access to a minimum of facilities. An underlying argument in favour of this policy may be the prevention of violent conflicts between haves and have-nots and/or the prevention of an invasion of poor people into richer areas.

3) What can be seen at one level may remain invisible at another. Thus, it is plausible that, because of a process of scaling up, the social differentiation that could be observed earlier at the district level can now only be observed at the city or regional level. (An interesting example of this scaling up is the changing level of analysis of Marxist social scientists: they have moved from the national to the international level).

Another fragmentation process concerns urban policies working on a case-by-case basis (instead of working from an overall planning scheme). This fragmentation process is different from those mentioned before as it does not concern a spatial phenomenon, but a social one, as a possible cause of the spatial fragmentation. The spatial consequence of such a policy is a random distribution of totally different types of building environments. This mixture might be as problematic as the mixture of factories and residential districts in the first half of this century, a situation which, at the time, was criticized by the functionalist town planners of the CIAM. A more contemporary example is that of the construction of monumental public buildings that attract traffic into a residential district or that of a TGV passing through people's backyard.

This last fragmentation process concerns the social process of the individualization of family life and its consequences for housing. It is different from the processes described before and is less amenable to being manipulated by urban planning policy as it is related to the underlying process of evolution in the culture of Western societies.

Given the aims of our social policies and given the fragmentation processes we have described, we must ask ourselves what can be - or has been - done in order to overcome the fragmenting.

We would like to suggest that linkages should be laid between the poles that have emerged, i.e., between the general and the particular, between the collective and the individual, and between the public and the private. This of course presupposes some understanding of the technical, economical and social processes at the source of the fragmentation process. The type of analysis chosen will have consequences on policy recommendations. We are demonstrating this below, by looking briefly at some sociological types of analysis: functionalism, critical sociology, and the interpretative perspective. Some recent developments in social theory will also be considered.

3. Functionalism

The term 'functionalism' may sound confusing to a mixed readership of urban planners and social scientists. To urban planners the term refers to the ideas of the CIAM (Congrès International d'Architecture Moderne), when it pleaded for a spatial separation of the urban functions of housing, work, recreation and transport. As for functionalist sociologists, like Parsons and Merton, they see functions as having to be fulfilled in order to ensure the continued existence of society. According to Parsons, four functions have to be distinguished: transmission of norms and values (the social function), adaptation to the external environment (the economic function), goal attainment (the political function), and integration (the cultural function). Parsons assumes that each of these functions has to be fulfilled within distinct social subsystems. According to his assumption, every institution or organization should then have a certain amount of autonomy, allowing it to be viewed as a social (sub)system characterized by a mutual interdependence between its elements and a degree of delimitation against the environment. However, one should realize that the abstract idea of a social system does not easily correspond to concrete organizations. A social network may well overlap beyond the existing organizations and, as such, be considered a social system.

The sociologist Robert Merton (1957) gave an interesting new turn to the "orthodox functionalism" of the social anthropologists. He criticized the implicitly conservative postulate according to which each social phenomenon has its own function (and as such cannot do without) and introduced the concept of 'functional equivalents': another social phenomenon, social structure or organization can take over a given function. If we apply this notion to functionalism as it is seen by planners, this means that, for example, the function of communication that had been fulfilled by private transportation may be transferred to a public transportation system; in time, this same communication function may be taken over by tele-communication. Along the same line of thinking, there is no fundamental argument against private companies becoming responsible for planning activities that had formerly been carried out by governments. However, it is up to the government to specify the tasks transferred to private companies.

4. Critical Sociology

What is referred to here under the label of 'critical sociology' is a sociological perspective developed at the Frankfurt School on the basis of Marx's analysis of society. The representatives of this school (Adorno, Horkheimer, Habermas and Marcuse) elaborated on it in various ways; but they all remained faithful to the idea that society must be viewed as fundamentally split by two classes whose interests are in opposition. This model has also been used by non-Marxist sociologists who referred to a criterion different from Marx's 'property of the means of production'. They thought that a more relevant criterion would be that of control over the means of production (Dahrendorf) or of control over information sources (Touraine).

These types of analysis have proven to be fruitful in explaining the economic processes that determine the spatial distribution of production facilities. Their relevance has been increased by a more frequent use of the model at an international level. Urban policies may be seriously hindered by international economic developments that affect local industries. One should determine whether developments can be controlled or not. According to Touraine, the development of the "information industry" needs to be monitored if one wants to explain unequal developments in different areas.

A strong point of the Frankfurt School lies in their interdisciplinary approach and in their orientation towards social problems, although some of their writings are too academic to be read by practice-oriented laymen. One of the most promising types of collaboration between disciplines is that between sociology and psychoanalysis, as has been demonstrated by Berndt (1969). His main argument is that architects and planners are too willing to carry out the orders of the principals (developers, government, private companies). They are thus "functional" in a very restrictive sense: they adapt to the interests of their principals and neglect the fundamental needs of the users, e.g., the need of people to be able to identify with their built environment.

As Marx already said, what matters is not interpreting society, but changing it. Only action ("praxis") can lead to a better understanding of social processes. With its eschatological perspective, i.e. in that it postulates that, at the end, the revolution will improve the social situation of the deprived, Marxist literature has been - and still is - a source of inspiration for action groups struggling for the preservation of their living environment.

5. Interpretative Perspective

This perspective differs from the two preceding ones in that it is less deterministic. It does not see social reality as a product of forces external to the social actors, but views it as resulting from the process of social interaction. Social structures, organizations and networks are not considered "facts", but as a fragile result of social interaction. If there is any order, then it is a "negotiated order" which has to be negotiated again and again. Symbolic interactionism dominates this perspective and makes interactions between social actors relevant in so far as they are meaningful to others. People's behaviour manifests itself in symbols that have to be interpreted by others. In order to interpret an actor's behaviour (for example his or her discourse), one needs to know what the symbols mean, in other words, one needs to know the code (language) underlying the symbols. This approach is particularly relevant to communication processes between actors with a different social and cultural background. In can be used to clarify misunderstandings between architects - using their designs as a code - and resi-

dents - who cannot read potential spatial experiences in the drawings. It may also be used for research into the effects of the built environment on people's behaviour. In that situation a semiotic approach, in which users are expected to interpret the symbols of the built environment, is a relevant one. An interesting example of this approach has been shown by Hall (1966), who compared the meanings of spatial distances as given by different cultures.

6. Overcoming Fragmentation Processes

We have shown the relevance of some sociological perspectives for analyzing social processes that underlie fragmentation processes. In so doing we were not able to be very specific in dealing with concrete fragmentation processes, as our aim was to show which alternatives are available to analyze the processes in a sociological way.

We now come to the following question: How can these perspectives be used to overcome the fragmentation processes?

Functionalists, but also human ecologists such as Wirth, assume that urban society manifests a social unity. They seem surprised when they observe social disintegration or a lack of social bonds. Consequently, this 'disorder' can only be overcome by a rational-comprehensive urban planning (Smith, 1980, 27). Research that is done according to the theories of the human ecologists should show indicators of social problems, thus delivering the information that is needed to adjust urban policy. Since it focuses on disintegration processes at the city level, urban policy in Wirth's tradition should be concerned with developing overall plans for the city and the metropolitan region. On the other hand, the neighbourhood level that was considered to be a traditional form of social organization is bound to decrease in significance (Smith, 1980).

Information technology, i.e. the introduction of the computer into social sciences research methods, has led to more advanced types of statistical analysis while administrative potentials applied to solve urban problems have not evolved as much.

According to Marxism, the theoretical solution to the exploitation of the working class by the ruling class is revolution. *Critical sociologists* like Habermas have described the role of the government, interfering in the class struggle by taking responsibility for the unwanted consequences of the capitalist production system. Thus the system itself is not hindered and the dichotomy between the powerful and the powerless remains.

Along this perspective, social cohesiveness could be attained by an equal spatial distribution of the means of production and factories, but also of service industries and educational facilities. Political economists will draw attention to the global economic processes that are determining these spatial processes; these global processes can only be effected by supra-national policies and powers.

The *interpretative perspective* is not primarily concerned with society as a whole, as it focuses on the social interactions between individuals. However, on a smaller scale it might be more relevant. This approach presupposes a minimal common "definition of the situation" by the participants in social interaction processes. Thus, concrete research might show that the residents of a housing estate are not using the common areas because, for example, their definition of space - private versus public - varies according to their different cultural backgrounds.

Within this perspective the government's role can only be a restrictive one preventing the oppression of the individual by the collective (institutions). What should be strived for is a better understanding by - mostly middle-class, native - government officials of the cultural background of the residents living in the crisis areas.

7. Cities as Organizations

Various metaphors may serve as a means to gain new insights in social reality, as they compare (parts of) social reality with concrete objects. If with compare a university department and a mental home we see aspects of that community which are not the same as those evidenced by a comparison with a product-oriented factory. The same applies to comparisons when cities are concerned. These have often been compared to organisms: they were thought to depend for their growth on their ecological environment; the roads have been compared with arteries that could become blocked. A more recent metaphor is that of the company, or industrial organization. According to this view, cities have to be managed like industrial organizations ("urban management"). One may then benefit from the knowledge acquired by organizational sociology or by organizational studies, since they constitute a well developed discipline. The metaphor itself, however, does not add a new perspective to the existing sociological approaches. Here again, the same perspectives may be applied, their strong and their weak points remaining the same. Nevertheless, we shall discuss in the following paragraphs the effects of new developments in the physical sciences that potentially lead to new approaches in the field of organizational studies.

The notion of organization is still a relatively vague one. Some scholars define an organization by its main characteristic: having a common goal. But even that basic characteristic may be criticized as an ideological one, as manager's wishful thinking. In fact, organization may harbour as many conflicting interest groups as society itself.

Cities seen as organizations can, in turn, be studied using different metaphors (see for example Morgan, 1986). Familiar metaphors are the ones considering an organization as a machine or as an organism. The national and local planning agencies can be viewed as bureaucracies - a variation of the machine metaphor - although most of the planning agencies will find themselves in a process of transition. This bureaucratic character/origin of the planning agencies affects the way in which government officials interact with their clients. For example, as bureaucrats they will be more inclined to stick to the rules that to show innovative behaviour.

Viewing organizations as organisms, as open systems, particularly draws attention to their relationship with the environment, considered as the source of organizational change. Organizations operating as organisms are more receptive to new stimuli from the environment and thus more willing to change their organizational behaviour. In the city of Rotterdam, project teams have been set up that work on urban renewal projects with representatives of both the relevant administrative departments and of the residents. In this way, a part of the relevant "task environment" has been incorporated into the system.

Both the organism and the machine metaphors are derived from the physical sciences. The same applies to the brain metaphor. It is characteristic of this metaphor that it implies that, as with brain cells, individuals in an organization should be able to take over the function of others. This speaks well for an organization based on principles of holographic design, e.g. the principle of function redundancy. Instead of spare

parts being added to the system, extra functions are added to each of the elements, be they individuals or organizational units. This appeals less to specialization and to broader knowledge or skills on the part of the individuals working in such a context. Another consequence of using this metaphor might be both a centralization (in a "central processing unit") and a decentralization (re the terminals connected to form a network). Again we are close to another characteristic of the brain cells: the possibility for all cells to communicate with each other directly.

Based on new developments in the physical sciences, the notion of self-organization (Maturana & Varela, 1980) has been introduced into the social sciences (Morgan, 1986; Luhmann, 1984). Its characteristics are:

1) According to this view, systems should be considered autonomous, striving to maintain their identity by subordinating external changes to the maintenance of their own organization. To illustrate this idea: neighbourhoods will strive to maintain their own character by trying to force newcomers to adjust to the existing community instead of changing its specific character.

2) As a brain, a system does not have a point of reference outside itself; it organizes its environment so that it becomes part of itself (self-reference). City governments only observe those changes in the wider world that have some meaning within their own frame of reference. Thus, the city government of Rotterdam insisted, in the sixties, on expanding the biggest harbour in the world, although the number of discontented residents in the older residential districts was growing.

3) A third characteristic of the system is the kind of relationship between its elements. There is no causal chain, i.e. one element changing one single other element, but all the elements are affecting each other within a circular pattern; thus, a change in one element will affect all the others. Policy measures are often thought to affect one element of a social system, whereas generally policy makers discover to their own surprise that the measures have had other, unintended consequences. For example, the closing of a single factory will not only affect the workers' life, it will have effects on a whole community.

The notion of "dissipative structures", as used by Illya Prigonine to study chemical systems, refers to the possibility of random, non-linear changes in the system leading to new patterns of order and stability. The initiative of Frits Philips to start a lamp factory in a small village in the south of the Netherlands led to the fast growth of the city of Eindhoven. Given the density of social networks and the world-wide telecommunication facilities, the same results can be produced at an even faster speed and on a larger scale.

Another way of explaining changes on a large scale is derived from the insights of system dynamics (applied in the Club of Rome's report, *Limits to Growth).* It has been shown (Maruyama, 1982) that changes are not produced by any simple causal factor, but result from an initial "kick" or incident producing exponential changes leading to a new form of stabilization of the system. This means that random mutations and accidental events, given favourable circumstances, initiate open-ended processes of self-organization. An example of this kind is the "incredibly" fast growth of boom-cities in desert areas, e.g., the city of Phoenix, Arizona, in the U.S.

8. Conclusion

Both the functionalist and the critical, Marxist perspective are rather deterministic in their explanation of human behaviour; they both suggest that urban planning by the government's intervention may work against urban fragmentation processes. The interpretative perspective is rather voluntaristic. Its relevance lies in that it draws the authorities' attention to the cultural differences that need overcoming. Viewing cities as organizations is a helpful metaphor, especially when it is combined with other metaphors as, for instance, in organizational studies and when good use is made on the new insights gained by the physical sciences.

BIBLIOGRAPHY

BERNDT, H. (1969), Ist der Funktionalismus eine Funktionale Architektur?, *Architektur als Ideologie* (Berndt, H. & Lorenzer, A., Eds.)(Suhrkamp, Frankfurt am Main).

BLAUW, W. (1986), "Suburbanisatie en sociale contacten" (KNAG / Erasmus Universiteit, Amsterdam / Rotterdam).

BLAUW, W. (1991), Conclusion, *Urban Housing Segregation in Western Europe and the United States* (Huttman, E.D. & Blauw, W. & Saltman, J., Eds.)(Duke University Press, Durham, N.C.), 391-402.

HALL, E.T. (1966), "The Hidden Dimension" (Anchor Books, New York).

LUHMANN, N. (1984), "Sozial Systeme, Grundrisz einer algemeinen Theorie" (Suhrkamp, Frankfurt am Main).

MAYURAMA, M. (1982), Mindscapes, Management, Business Policy and Public Policy, *Academy of Management Review*, (1982) 7, 612-619.

MATURANA, H. & VARELA, F.C. (1980), "Autopoiesis and Recognition (Reidel, London).

MERTON, R.K. (1957), "Social Theory and Social Structure" (Free Press, New York).

MORGAN, G. (1986), "Images and Organization" (Sage, Beverly Hills).

MORRIS, R.N. (1974), "Urban Sociology" (Prager, New York, Washington).

SMITH. M.P. (1980), "The City and Social Theory" (Basil Blackwell, Oxford).

WIRTH, L. (1938), Urbanism as a Way of Life, *American Journal of Sociology*, **44** (1938) 7, 1-24.