

# Servitude and Inequality in Spatial Planning: Ideology and Methodology In Conflict

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In these notes I will draw attention to some curious problems we encounter when we use a family of well-known social science models as a basis for social, economic and regional planning. In this sense, I will deal with the problem of extending descriptive social science into prescriptive social engineering. In the process I will provide yet another illustration of the fascinating usefulness of the Hegelian concepts of self-consciousness, lordship and bondage.<sup>1</sup>

My main point will be that the mathematical and ideological foundations of the Pareto model — which includes such formulations as the gravity, rank-size and Clark models as special cases — make us suspect that whatever planning we base on it will be counter-productive. In fact, I have gradually and rather painfully come to the conclusion that if we continue along the methodological and manipulative path we have been following thus far, then we run the risk of increasing those social, economic and regional inequalities, which the planning initially was designed to decrease; our good-natured attempts to rectify current injustices will be self-defeating, not because some vicious bureaucrat designed them that way, but because we have failed to understand the deep structure of social research and action.

Most of my specific references will be to regional planning in Sweden, but my main point applies more generally. My emphasis of the Swedish experience is more due to my own background and to my self-conscious attempts at understanding myself and my own society than to the uniqueness of my examples. And yet I know of few countries where descriptive social science has been translated more literally and with less modifications into prescriptive social engineering.<sup>2</sup>

It is from the slavishness of this translation that my main argument stems. To appreciate this remark, it should be recalled that the stated purpose of regional planning in Sweden has been to achieve equality in the ideal sense that somebody who lives in the valleys of the socio-economic undulating surface should have the same opportunities as somebody who lives at its peaks. I am not, of course, arguing against this ideal, for how could one say that someone who happens to be born in a far away village in northern Sweden should not have the same rights as someone who was born in Stockholm. My only quarrel is that this laudable piece of welfare ideology has been put into practice by means of a scientific methodology which reflects just the opposite thinking. To be more specific, the planning has been based on a variant of the social gravity model, which has the same mathematical form as the Pareto function. In this sense, the descriptive social gravity model encapsulates exactly those relations of inequality that characterize both Pareto's optimality principle and his Machiavellian theory of the elites.<sup>3</sup> I feel rather strongly that this mismatch of ideology and methodology has contributed to discontent and alienation which is becoming more and more visible. The proof of the pudding is in the election results; under the heat of methodology, ideology lost its flavor.

To substantiate this argument, I will limit myself to only one of several examples. More specifically, I will draw attention to the far reaching revamping of administrative and political districts carried out during the last decade.

The reason why this reform was deemed necessary was that the old division reflected a society in which the horse was the main mode of transportation and the local church was the

prime purveyor of public service. With the advent of rapid technological change and with the widespread acceptance of welfare ideology, these administrative units became too small to afford the high level of education, health and social services which the population rightly was demanding. The purpose of the reform, then, was to create spatial units large enough to sustain the considerable burdens of the welfare state.

The ideology underlying the reform was a refined version of the classical ideal of human equality. The refinement lay in the argument that exactly as society guarantees that all people have the same rights regardless of whether they are rich or poor, so it must guarantee that everybody has the same rights regardless of where he or she happens to live. The goal was to abolish the spatial element of social and economic inequality.

This all sounds very good, until it is realized that the methodology through which the new degree of equality was to be implemented is of a rather different kind. Most importantly, the new and larger areas were designed to cause as little disturbance to the people as possible. As a consequence, the delimitation was made to reflect observed spatial interaction patterns as these revealed themselves through a variant of the gravity model. It was in fact data fitted to this particular version of the Pareto function that played a major role in the determination of the new boundaries. Essentially the same procedures were involved in the creation of the new educational system and in the reorganization of health care.

In summary, all these reforms were necessitated by technological and ideological changes, which in turn required adjustments of spatial boundaries. The purpose was to adjust society to change, but the analytical techniques by which the solutions were determined were more geared towards the preservation of status quo.

To be more specific, the spatial structure of the present Swedish welfare state has deliberately been built to reflect the structure of existing interactions patterns as these exerted themselves in a Pareto-type model. Thus, what happened was that a group of academicians — mainly geographers — went into the field of census taking, observed how people interacted over space, translated these observations into the positivistic language of a variant of the gravity model, determined from these fits where the boundaries between service areas actually fell, and then, finally, convinced the political decision makers that these boundaries were efficient boundaries to which the administrative and political areas ought to be adjusted. The approach clearly involves a reasoning from is to ought. In the process, the initial purpose of creating a just society became altered to that of finding a set of efficient solutions to a problem of geometric partitioning.

Unnoticed to spectators and performers, the play was changed in the middle of the act. The ought of justice disappears in the wings, invisibly stabbed by the is of methodology. Exit man with his precious visions, hopes and fears. Enter the Thiessen polygons with their crude distance minimizations and cost-benefit ratios.

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I have just described how a profound misunderstanding of scientific methodology contributed to the institutionalization of a spatial organization which is most likely not to increase the level of equality. Instead it will reinforce that particular conception of man which lies at the heart of virtually all aspects of Pareto's voluminous, ambitious and influential work. This is truly ironic, for the conception of man embedded in these writings is completely opposite to the conception of equal and dealienated man which the Swedish politicians, planners and social scientists presumably were trying to institutionalize. To illustrate the deep structure of this miscarriage I must now provide a critique of the method which forms the bedrock of Pareto's models.

The starting point of the critique is that both Pareto and those who performed the analytic studies in Sweden allegedly wrote on what people actually do and not on what they ought to do. Pareto himself argued that observed behavior of this kind falls into a class of activities which he named 'logical action'. Into this same kind of action, he classified the activities of economic profit maximization, Machiavellian politics and scientific work.

But to call observed behavior 'logical action' and to write about profit maximization and manipulative politics under the label of rational behavior is nothing less than a sophisticated technique for rationalizing status quo. The reason is of course that in the minds of modern man the concept of logic has assumed the position which once was occupied by God himself.

But this deified view of logic is as mistaken as any absolutist religion; like all other dogmas, it is designed for escapists and serfs and it serves the interests of manipulators and masters. Instead of perpetuating the belief that the reasoning rules by which we structure our thought and action represent objective and unassailable a priori principles, we must learn that they are neither ethically nor aesthetically neutral. If we perform this intellectual striptease, then the first secrets we will uncover is that grammar tells us what kind of object anything is. As a consequence, we will understand that our analytical languages do not only provide labels which we attach to the objects we are talking about, but that they serve also as instruments, through which we determine and influence the relations among the phenomena we are dealing with. Given this conception of reasoning, the role of any language is not to describe reality so much as to shape it. And that holds for all languages no matter whether they are verbal or mathematical, natural or artificial, poetry or sculpture, touch or glance.

It was these crucial aspects of the internal relations between thought, language and action that Pareto and his many followers overlooked. To call some empirically observed actions logical and others non-logical is therefore highly misleading, for it deifies the existing by giving the impression that the particular categorial frameworks of Aristotelian logic are eternal and God-given. What is lacking in this view is an acknowledgement that all concepts are man-made tools, which become intelligible only in the context of our own personal and social lives.

It seems that if we dare not admit that our analytical languages have these characteristics, then we run the risk of imposing on reality a strictness which it neither has nor ought to have. If we in our roles as social scientists, citizens, and social engineers do not recognize this hallmark of positivistic methodology for what it is, then we may well be left with a society which mirrors the techniques by which we measure it and echoes the language in which we talk about it. At the end lies a society of human puppets with no dreams to dream and nothing to be sorry for. Instead of implementing plans which will aid man in his striving for becoming, we are entangled in so-called descriptive, objective and analytic techniques, which will produce just the opposite. Instead of building a world for the constant groping of autonomous man, we are on the verge of confining ourselves within spatial and social prisons which will serve only to increase our sense of loss and futility.

Even though spatial planning of the type I have discussed in these notes contributes only a small share to the formation of our future, it nevertheless contributes. My reason for this assessment is that the descriptive gravity model reduces to the mathematical Pareto function and thereby to the notion of logical action. But at the bottom of the latter is nothing less than Pareto's famous optimality principle, which defines an efficient equilibrium solution as a solution in which no person can be made better off unless someone else at the same time is made worse off. For instance, a distribution in which one person receives all benefits is Pareto efficient, because there is no rearrangement that will increase the utility of other individuals without at the same time worsening the situation for the one who initially owned everything. This is a problem of distributive justice which will become even more pressing once we push ourselves deeper into a no-growth society in which only small amounts of surplus will be available for redistribution.

By suggesting that there is a close methodological and mathematical connection between the Pareto function and the social gravity model on the one hand and Pareto's optimality principle and his theory of the elites on the other, I may be pointing at something very important. This is that Pareto never spoke about the ends which the members of society distributively should pursue. Instead, he always equated society's end with the ends which the Machiavellian elite actually is pursuing, through its manipulation of things, money and, people.

Pareto's ought is therefore the is of the elite. This is crucial, because it means that the establishment of so-called empirical and logical relations is not limited to the manipulation of the symbols in a mathematical equation. Instead it represents relations between groups and classes of people. If we are not self-conscious about this deep structure of methodology, then man will end up as being doubly thingified, first by the producing-consuming forces of industrial technology, and then by the iron claws of scientific practice.

And so it is that Pareto and his influential followers came to equate the pursuance of logical reasoning and empirical truth with the advocacy of an elitist theory of society. To illustrate, the spatial and organizational set-up of the Swedish health, education and welfare system seems far more geared towards the growth and maintenance of its own bureaucracy than towards the interests of those sick and disadvantaged which it is supposed to serve. In this light, it is not surprising that one critic has labeled Pareto "the Karl Marx of the Bourgeoisie," while another has called him "the greatest rationalizer of authoritarian conservatism in our time."<sup>4</sup> How one should interpret the fact that Mussolini made him a senator is less clear, for at that time he might have been old enough not to see the difference between being honored and being used.

The irony is of course that it is a portion of Pareto's work—disguised from most people's recognition by its neat mathematical form—that lies at the heart of most spatial planning, no matter whether it is in Sweden or elsewhere. What is most remarkable of all is that the analysts have been so entrenched in their own social and professional relations that they never discovered that in the Pareto function, in the optimality principle, and in the theory of the elites is embedded exactly the system of inequality and servitude, which the plans were meant to alleviate.

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In retrospect, it appears that the majority of spatial analysts—among whom I certainly include myself—have confined ourselves so thoroughly within our inherited concepts, within our categorial frameworks, within our particular mathematical language, and within our artifacts that we thereby have helped to perpetuate the functional inequalities of the past. In fact what we seem not to have realized is that in order to acquire a new world, we must at the same time acquire a new analytical language, less dogmatic than the old, but no less abstract and no less difficult.

Perhaps we should be blamed for having spent so much energy on memorizing the Isards and the Garrisons and so little on trying to understand Hegel, Marx and Wittgenstein. But such a criticism would surely be misdirected, for if we had never learned from the former, we would never have understood the latter. It is in this context that I admire so much the profundity of that Hegelian argument which says that any development comes through the subordination of one self to another; "for in shaping the thing [the consciousness] only becomes aware of its own proper negativity, its existence on its own account, as an object, through the fact that it cancels the actual form confronting it... Thus precisely in labour where there seemed to be merely some outsider's mind and ideas involved, the bondsman becomes aware, through this rediscovery of himself by himself, of having and being a 'mind of his own'.<sup>5</sup>

What most of us failed to pursue in our previous studies was exactly that element of self-consciousness which leads to the recognition that to engage in any form of language—of which formal model building is only a special kind—is to engage in an activity that goes far beyond the mere labeling and categorizing of phenomena; to speak, to estimate statistical functions, and to build scientific models, is nothing less than to act. The essence is in action, for even the attempt to escape it is itself action.

Put somewhat differently, it now appears far from clear whether what the analysts and planners are telling us conveys more information about the world they are talking about or about the language and the value system they are talking in. The root of this problem lies in the inability of our standardized model languages to capture the dialectical concepts of indeterminacy and qualitative change. I would even suggest that if we can not find ways to

internalize these fleeting concepts into our thought and action, then we can neither hope to understand the deep structure of the past nor to form a freer, more dignified and less alienated future.<sup>6</sup>

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There is of course much to suggest that the vision of human freedom I have been painting in these notes is nothing but a romantic dream. Perhaps the most compelling of these pessimistic warnings is that in the coming years of increased stress and material shortages, anything resembling the concepts of freedom of thought and action will be luxuries limited to the class of charismatic leaders. Accompanying the recurring crises will almost certainly be demands for strong leadership, which can sustain itself only by resort to the higher principles of 'rigorous' thinking and absolute values, no matter how simplistic and dehumanizing they may be.

If this is the human prospect — and there are many who say it is — then it is with considerable anguish that I publish these notes. The reason for my agony is that what I have written here illustrates so well how scientific methodology can be made the handmaiden of authoritarian ideology. Thus, I have noted that what we initially may take as empirical generalizations and theoretical deductions are as much reflections of those notions of equality, which we may hope to implement through our planning. As I demonstrated, methodology overtook ideology and in the process it became ideology itself. And yet it is through the labor for his master that the slave comes to self-consciousness and thereby to the realization of his own existence and freedom.

It is in this manner, by employing analytical techniques and social engineering devices which are founded on rather peculiar assumptions about categorization and linearization, that we in effect have come close to creating a society for human beings who themselves are peculiarly categorial and linear. If regional planning in Sweden, the Soviet Union and the United States have nothing else in common, it is exactly this simplified and dehumanizing conception of man. Instead of creating a world for becoming, we are creating thingified man; by treating the relations between people as if they obediently followed the multiplication table, we are ridding ourselves of that challenging ambiguity, which alone makes life worthwhile.

And that is the kind of world I see evolving, not in a distant future, but already in the present. For as a consequence not only of material shortages, but also of our well meaning attempts at planning, increasing numbers of people now find it harder to live. As an example, I call it nothing less than a fearful tragedy that the values and organization of health care has made it a rare privilege to die with one's eyes open and in the company of the few whom one loves. What I am conjecturing from my own limited experiences is that one of man's most fundamental rights is under serious attack, not because anyone wanted it this way, but because our methodological blinkers have kept us from seeing the deep structure of human and social relations. This right is not the right to live as one chooses, but to die in peace and dignity. What technology once bestowed upon us by letting our children live, it is now on the verge of reclaiming by not letting our tired die.

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Since I see traces of all these prospects even in the best land I know, it is difficult to think of the rest, where freedom is just another word and where the issues of life and death, justice and decency, are of another magnitude. The best I can do may merely be to quote from Samuel Beckett's Krapp's Last Tape:

"Here I end this reel. Box 3. Spool 5. Perhaps my best years are gone. When there was a chance of happiness. But I wouldn't want them back. Not with the fire in me now. No, I wouldn't want them back."

how i wish it applied only to the holder of the secret tape

FOOTNOTES

<sup>1</sup>For other aspects of the descriptive-social-science-prescriptive-social-engineering problem see my paper "Some Notes on Geography and Social Engineering," Antipode, Vol. 4, No. 1, 1972, pp. 1-22. The best account of self-consciousness, lordship and bondage is in Hegel's The Phenomenology of Mind, pp. 228-240 of the Harper Torchbook edition, 1967. For an excellent treatment of the relations between Hegel's Geist and Marx's interpretation of it, see Bernstein, Richard J.: Praxis and Action. Philadelphia: University of Pennsylvania Press, 1971, esp. pp. 14-28 and pp. 84-43.

<sup>2</sup>The ideology and methodology of the Swedish reforms have been described in various publications such as Statens Offentliga Utredningar 1961:9: Principer för en ny kommunindelning. Stockholm, 1961; Jakobsson, Arne: "Revision der Gemeindeeinteilung in Schweden," Raumforschung und Raumordnung, Jahrgang 22, 1964, pp. 177-192; Godlund, Sven: "Population, Regional Hospitals, Transport Facilities, and Regions. Planning the Location of Regional Hospitals in Sweden," Lund Studies in Geography, Ser. B, No. 21, 1961; and Statens Offentliga Utredningar 1972:23: Högre utbildning - regional rekrytering och samhällsekonomiska kalkyler. Stockholm, 1972.

<sup>3</sup>Pareto's original ideas are translated and most readily available in Pareto, Vilfredo: The Mind and Society, 4 vols. New York: Harcourt, Brace and Co., 1935. The most important commentaries and positive extensions of Pareto's ideas were first presented by Talcott Parsons in The Structure of Social Action. New York: McGraw-Hill, 1937, esp. Part I. For criticisms of both Pareto and Parsons see e.g. Gouldner, Alvin W.: The Coming Crisis of Western Sociology. New York: Avon, 1971, esp. pp. 138-157. The broader setting within which the various brands of scientific naturalism developed is well presented in Purcell, Edward A. Jr.: The Crisis of Democratic Theory. Lexington: University Press of Kentucky, 1973.

The mathematical similarities between the gravity model and the Pareto function have been noted often, but usually not explored in any detail. For the best attempts see Goux, Jean-Michel: "Structure de l'espace et migration," in J. Sutter (ed.): Les déplacements humaines. Monaco: Entretiens de Monaco en Science Humaines, 1962; Morrill, Richard L.: "The Distribution of Migration Distances," Papers and Proceedings of the Regional Science Association, Vol. 11, 1963, pp. 75-84; and Taylor, Peter J.: "Distance Transformation and Distance Decay Functions," Geographical Analysis, Vol. 3, 1971, pp. 221-238.

<sup>4</sup>I have borrowed the catchy characterizations of Pareto from Heyl, Barbara S.: "The Harvard 'Pareto Circle'," Journal of the History of the Behavioral Sciences, Vol. 4, 1968, p. 317; and from Hughes, H. Stuart: Consciousness and Society. New York: Vintage, 1961, p. 82.

<sup>5</sup>Apart from reading Hegel's, Marx's and Wittgenstein's original works, I have benefitted greatly from the comments in Kaufmann, Walter: Hegel: A Reinterpretation. Garden City: Doubleday Anchor, 1966; Ollman, Bertell: Alienation: Marx's Conception of Man in Capitalist Society. Cambridge: Cambridge University Press, 1971; Pitkin, Hanna Fenichel: Wittgenstein and Justice. Berkeley: University of California Press, 1972; as well as from the book by Richard Bernstein listed above under footnote 1. The quotes from Hegel are from the mentioned edition of the Phenomenology, p. 239.

<sup>6</sup>There has of course been a continuing reevaluation and extension of the Swedish experiments, not the least by those geographers who themselves have played a decisive role in the shaping of the new society. However, none of them seem to have raised any of the fundamental issues I have dealt with in these notes. For some of the recent commentaries see e.g. articles by Bylund, Godlund, Hågerstrand and Törnqvist in Statens Offentliga Utredningar 1970:14: Urbaniseringen i Sverige. Stockholm, 1970; and ERU: Regioner att leva i. Stockholm: Allmänna Förlaget, 1972. Also see the detailed account provided by Allan R. Pred in his "Urbanization, Domestic Planning Problems, and Swedish Geographic Research," in C. Board et al (eds.): Progress in Geography, Vol. 5. London Edward Arnold, 1973.