The Chicago School of Sociology as a Point of Departure for Aldo Rossi

by Linn Mo

Linn Mo
NTH,
Trondheim, Norway

Aldo Rossi is known for basing his theory of urban design on academic knowledge, such as from certain French geographers, the Chicago School of sociology, and the perspective called "structuralism" from Sassure and Levi Strauss. This paper is to analyze his use of theory from the Chicago School, and to indicate how sociological knowledge might have been better used.

Rossi mentions the Chicago School of sociology twice in his text, *The Architecture of the City* (1982), first in Chapter 2 to buttress his explanation of the concept of "area", and later, briefly, in Chapter 3 in connection with his discussion of locus.

There is a certain danger in grounding one's theory in another discipline. Unless one knows the discipline well, it is easy to misinterpret theories or take them out of context. Of course, social scientists expect their theories to be used and applied by other disciplines, but they (not knowing these other disciplines) cannot always anticipate the misconceptions that may arise. Technically trained people, such as engineers, often seek a more exhaustive "truth" in social science than is intended, or indeed possible. They are used to scientific statements in the form of natural laws, understood (though falsely) as totally describing and predicting the phenomenon of interest. Up until the last generation or so, social scientists also claimed (in the spirit of Positivism) to be seeking such natural laws that would accurately describe and predict aspects of human behavior.

This effort is now largely abandoned, in the recognition that human beings, in contrast to the *objects* studied by natural scientists, have free will and are thus capable of resisting even some of the biological natural laws that influence our behavior. Social scientists are not really interested in describing determined behavior. In practice, it is too banal to describe biologically necessary behavior, or the way the direction of our steps between one room and another is determined by the built corridor between them.

What is interesting to social scientists is the less predictable, but hopefully partly predictable "patterns" of behavior, for example, episodic but frequent phenomena like conflicts, trends that may affect our future, or the unanticipated consequences of aggregates of individual decisions. With this more limited ambition, every social science theory must be understood as a metaphor at best. Writing theory is a creative act, like painting a picture. (See Nisbet, 1962.) A clear "figure" must be selected out of the total social reality and presented against a "ground" that makes sense of the figure, together communicating a distinct message. The point of the exercize is to give the reader an "aha-experience" of insight or enlightenment. What is explained, then, can only be a partial picture of social reality, and a malevolent critic can always point out that the theory is oversimplified. Besides, the "aha" is short-lived. Social enlightenment becomes banal truth (or worse, misconception) in the next generation.

Human Ecology as a Metaphor

"The Chicago School" was the urban research done at the University of Chicago between 1915 and 1940. The work was a combination of sociology, anthropology and geography, and textbooks in these fields still often begin by describing the theory and research of the Chicago School. It was a breakthrough for social science, as the field before this time had been divided between "theory" which was rather speculative social philosophy, and methodologically weak "research" which was unconnected to the theory.

William Isaac Thomas, in his work *The Polish Peasant in Europe and America* (with Florian Znanicki) was the first to combine systematic research and the development of concepts and theory. He brought Robert Ezra Park in as temporary lecturer at the University. Park had experience from journalism and the social issues of the time, and academically was much influenced by Simmel, Spengler, Durkheim, and Darwin. As it turned out, Thomas left the University and Park stayed on to draw up a research program that lasted until World War II and had effects long after that. Other productive members of the school were Ernest W. Burgess, Louis Wirth, and Robert Redfield. (Schiefloe 1985, Park and Burgess (1925/1967.)

The city of Chicago was in the midst of industrialization, urbanization, and rapid growth, and made a good laboratory for the study of these processes. There was great interest in sociological research among philanthropers, capitalists, planners, politicians, and "muckraking" novelists. The Chicago School sociologists were in turn inspired by Emile Zola, and interacted with novelists such as James T. Farrell, Richard Wright, and Saul Bellow. The Department of Sociology had a "field station" or community house, the Chicago Area Project, attempting practical social work in the inner city. This engaged, first-hand experience led to ideas about public participation in urban planning, but also to the more depressing idea of "the culture of poverty." The combination of direct action and academic study had great impact on issues of social and physical urban policy. (Introduction to Park and Burgess, 1967 edition.)

The Chicago School found a powerful metaphor in another field, the discipline of ecology, for describing urban development. The aggregate outcome of individual and corporate localization decisions, after economic competition or social or political conflict, can be likened to what happens in a forest over time. The processes of population invasion, succession, and segregation, seen from this perspective, resemble biological processes that seem to happen automatically.

This way of thinking fit in with the social darwinism of the time. The theory assumes competition for "attractive" areas, but is not concerned with the nature of that competition, only the result. The fittest survive, the strongest win. As an explanation, such theory is tautological – how do we know the winners

we see were the strongest/fittest? We know because they won! Alternative explanations of winning were not considered.

The theory was also meant to be a functionalistic and organic view of the city. Differentiation of functions, of economic activity, and social segregation were seen as products of "forces" described as if they were impersonal. These were divided into categories (geographical, economic, cultural/technical, and political) but each category was so broadly defined that anything happening in the city would fall into one of them. Each part of the city had its function in relation to the whole. The structure was determined by function, and the whole evolved along lines of increasing specialization of function about the way a living organism develops from a one-celled form to a more complicated structure with interdependent parts. (It should be noted that Rossi rejects this oversimplified organic way of thinking in architectural theory.)

> Urban growth may be even more fundamentally stated as the resultant of processes of organization and disorganization, like the anabolic and katabolic processes of metabolism in the human body. (Burgess, 1923 p. 85.)

> This differentiation into natural economic and cultural groupings gives form and character to the city... These areas tend to accentuate certain traits, to attract and develop their kind of individuals, and so to become further differentiated. (*Ibid* p. 92.)

It is important to remember that the metaphor is a very superficial borrowing from ecology. Natural science ecologists are not content with describing the processes. Most of the science of ecology is concerned with tracing the reasons *why*, in the original composition of the soil, and in the exhaustion of one resource and the buildup of another (A/S Hjemmet, 1974).

Rossi is most interested in the Chicago School's concentric circle model of typical "zones" of a city (see Figure 1).

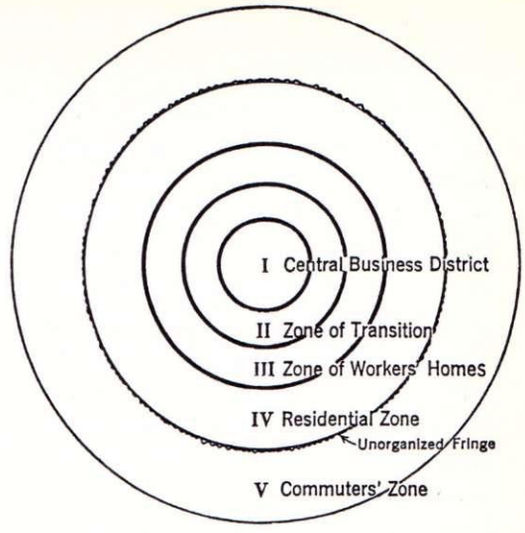

Figure 1. The theory of urban pattern as presented in a contemporary sociology textbook (Cooley, Angell and Carr, 1933, p. 234).

> The center of every city, or the point of dominance in urban growth, is the downtown business district; in Chicago, the loop. As business and light manufacturing expand into the residential district surrounding it, there appears a zone in transition, the so-called slum of every English and American city. The skilled worker and his family depart from this area as it deteriorates, and build up the zone of workingmen's homes, not too far away, of course, from the factories in which he works. The professional and clerical groups employed in the downtown offices live still further out, while those who can afford it and who prize suburban life escape to the commuters' zone. (Burgess, 1927 p. 178.)

It is easy to see how planners would be excited by the ideas of the Chicago School, and by the use of language in presenting the ideas. The sociologists *claimed* to be looking for natural laws – the effect was that the readers could believe that the simple descriptions *were* the natural laws. The sociologists *implied* a certain universality for their theories, which a super-

ficial look at other American and Canadian cities could "confirm".

> All American cities which I have observed or studied approximate in greater or less degree this ideal construction; no one, however, not even Columbus, Ohio, perfectly exemplifies it. To make the point concrete, the theory of concentric circles may be applied to Chicago. The lake front makes an important alteration in the pattern. In place of concentric circles are semicircles or belts. Other lake cities, like Cleveland and Detroit, exhibit this same variation. But with this difference the pattern holds. (*Ibid.*)

It is surprising how much deviation could be tolerated by obedient students of the theory. The sketch of Montreal in Figure 2 was seen as consistent enough with the theory, although today it might suggest some radial and some polynuclear development. Later theorists were able to break the spell and describe several other patterns (Agnew, et. al., 1984), and Rossi also recognizes these.

Apart from how the "zones" are described, the idea that "zoning" was a natural process was convenient, because it absolved politicians, speculators, planners and the architects who worked for them of personal responsibility for the consequences of their decisions. What was really going on in Chicago at the time?

Chicago at the Time of the Chicago School

In rebuilding after the Chicago fire in 1871, residents were forced out of the Loop area and moved outward to areas characterized by specific social and ethnic groups, so the pattern of segregation was established at least by then if not before. Earlier outlying country towns and immigrant colonies were socially distinct, but became economically integrated into Chicago and dominated by the central business district. Further urban renewal (with population removal) followed the City Beautiful movement and Burnham's plan for Chicago of 1909. These efforts were carried out by an alliance of planners and speculators, under an ideology of neutrality making it acceptable to all intellectual positions. The next quotation shows just how naive the academics could be, while coopted into this "elite" group:

> Interestingly enough, the high points in land values at business intersections appear to forecast residential deterioration of the neighborhood. (Burgess, 1927 p. 181.)

It was, of course, the threat of urban renewal and a corresponding refusal of bank loans for residential improvements ("red-lining": see Wessel, 1983) that started the deterioration! Tafuri and Dal Co (1976) describe bonds in the first years of the new century and in the "Roaring 20's" between cultural and political

16. Apply the urban pattern to your own community, indicating clearly the Zone of Transition and the Unorganized Fringe if possible.
17. What specific observations can you make concerning the Unorganized Fringe of some city with which you are familiar?

Figure 2. Exercizes proposed at the end of a chapter in Cooley, Angell & Carr (op.cit.), and a contemporary student's sketch (R. V. Chadwick).

groups, speculators and philanthropists, as an atmosphere of hypocrisy, corruption, and lack of public control.

The 1929 Great Depression caused a great deal of individual hardship. For the first time, the American middle class experienced what it was like to be unemployed and poor, through no fault of one's own. This was the beginning of the end of the "social darwinist" way of thinking. However, after only three years of crisis, local planning and much of the downtown development began to recover.

Zoning (in the sense of regulation) was initiated in 1913 with the Heights of Buildings Commission, but the intent was to "protect property values." European planning adressed the housing question, but in the USA there was no "question" of housing in cities. Suburbs were always the newest and best housing for the financially able, while the less advantaged moved outward chain-fashion into used housing cut up into smaller apartments. At the same time there were waves of immigration, each new ethnic group moving into the cheapest of slum housing and onto the lowest rung of the social ladder. For example, Harlem in New York was first a Dutch neighborhood, then Irish, then Jewish, then Negro. Zoning by-laws segregated housing on an economic basis, and real estate agents segregated people on an ethnic basis by showing their clients housing only in the areas where they "belonged." (This practice continued at least until the 1970's.) There was also a good deal of prejudice in the labor market, and the result was again explained away as "natural":

> Yet interesting occupational selection has taken place by nationality, explainable more by racial temperment or circumstance than by Old World economic background, as Irish policemen, Greek ice-cream parlors, Chinese laundries, negro porters, Belgian janitors, etc. (Burgess, 1923 p. 92.)

Housing areas for disadvantaged ethnic groups were usually overcrowded, and strategies of "block-busting" were used to make more housing available on the outer edges of ethnic neighborhoods. (One gets a white friend to pose as the buyer. Once the first "minority" family has moved in, most of the white residents on the block or street panic and sell to other minority families at lower prices. The prices rise to usual levels or higher after the neighborhood has changed hands.) The phenomenon of "changing neighborhoods" could also be seen within ethnic groups, as lower status people displaced by slum clearance moved outward and frightened away the leading citizens of the neighborhoods they invaded. (Schools declined with a lower neighborhood tax base, so one owed it to one's children to move outward if one could afford it.)

> Their invasion of the city has the effect of a tidal wave inundating first the immigrant colonies, the ports of first entry, dislodging thousands of inhabitants who overflow into the next zone, and so on and on until the momentum of the wave has spent its force on the last urban zone. (*Ibid.* p. 93.)

> Only in the commuters' zone of restricted neighborhood development does the American of our native traditions feel somewhat secure from the tidal wave of immigrant invasion. (Burgess, 1927 p. 178.)

(No social scientist would dare to write anything so ethnocentric today!)

The Regional Planning Association of America was established in 1923. Planning, influenced by Perry and Mumford, emphasized an anti-urban ideology and a return to the "community values" of a *good* neighborhood. The theory was that all this mobility caused personal confusion and demoralization, and thus crime and other social problems. The solution was to plan neighborhoods restricted in size and restricted to specific economic levels, protected from invasion or other threats to property values, so that group ties could develop and social control of the individual be reinstated.

This theory was well articulated in both social science and physical planning, but less was said about development in the 1920's and 30's in urban concentrations. The use of new building types was controlled by zoning, and architects were beginning to adopt the idiom of international rationalism, influenced by the European Avant Garde. Highlights in Chicago were the international competition for the Chicago Tribune Building (1922), the Saarinen project for Chicago's lakefront (1923), and Frank Lloyd Wright's National Life Insurance Building. (Tafuri and Dal Co, 1976, Ch. IV and XIII.)

Social scientists were not involved in the architecture of the city center. This could have been an interesting study, as cultural development or as the expression of power groups and policies, but it was not part of the field's research program at the time.

In retrospect it is easy to criticize the Chicago School's perspective as simplistic and naive. The phenomena they were trying to explain by universal "natural laws" were to a great degree the result of specific and intended policies and practices. It also became evident that some of the fundamental ideas (about social patterns caused by size, density, heterogenity) were wrong. However, it was the research itself, the practice of letting empirical evidence correct one's assumptions, that led to a change of perspective in the next generation.

What Happened to the Chicago School as an Approach?

The Chicago School posed questions about behavior in urban settings that provided an agenda for research for decades. However, the perspective changed radically. The beginning of the end was a brilliant summary article by Louis Wirth, "Urbanism as a way of life" in 1938. Although this is considered a classic, it was clear that his specific hypotheses were hardly supportable, and the theory was quietly abandoned. There is general agreement now that it is fruitless to try to relate patterns of social life to geographical area. Even the supposed fundamental differences between city and country life are refuted. The idea of cultural determination replaced geographical determination, as affluence, labor force mobility, and a way of life on wheels began to replace the cohesion of older working class neighborhoods. By the 1960's urban sociology had no focus, it was the "study of everything," all behavior in an industrialized, urbanized, capitalized society. Without an over-arching theory, urban sociology was no longer cumulative. It became divided and changeable, with much disagreement about objectives, methods, theoretical directions, and even the usefulness of studying the city at all. (Schiefloe, 1985.)

The concentric circle model of the city was first challenged by other models, such as radial "strip" development, the "star city", the complex polynuclear city. As the emphasis shifted to differences rather than similarities, and as cities were compared internationally (French & Hamilton, 1979, Agnew et.al., 1984), the hope of any general model had to be abandoned. Post-industrial society has also made room for a greater variety of life styles. Affluent groups have begun to choose urban housing, while the working class has become affluent and prizes suburban living. Enclaves for some groups (researchers, pensioners) have drawn population from whole continents. The poor settle in "new slums", trailer parks, and summer cottages as well as in the traditional slums. In the 1990's and the future, it appears that the shape of cities (Common Market "bananas"?) will be rapidly changing in response to international markets and international planning. Change is so rapid that urban development is almost a subject more appropriate for journalists.

Where the Chicago School had continuing influence was in the development of research methods and research on specific, though disparate, "urban" topics. One direction was their heroic program (given the resources of the time) of statistical data that proved immediately useful to planners and urban reformers.

This was one of several efforts to base planning on accurate predictions about population growth. The Bell Telephone Company, the Russel Sage Foundation, and groups of experts on location of retail business units, were also engaged in this quest. After World War II, sociologists such as Duncan and Schnore continued statistical "social area analysis". Other sociology departments copied the idea of continual data-gathering to watch the "pulse" of a city (e. g. University of Michigan's Detroit Area Study in the 1960's and 1970's). The next step was the "Level of Living Studies" of the 1970's and 1980's, which aimed at internationally comparative data on both urban and rural life.

However, the interests of sociologists and physical planners were no longer coordinated in theses studies. Sociologists expressed pious hopes that the material would be "useful" (in some unspecified way) to "planners" (of some unspecified kind), but basically they pursued their own interests in an academic study of social status and its cultural components. Physical planners, when they got their hands on the data, often used it in a naive and self-serving manner. All the way into the 1970's, there was a tendency among planners and politicians to believe that physical characteristics of areas had a causal connection to the social problems that were documented. Social statistics were used as "scientific proof" of the need for slum clearance. Poverty, health problems, prostitution and crime were supposed to disappear along with the run-down buildings, but of course they did not. Eviction, destruction of social networks, and removal of much low-rental housing from the market, caused more problems among the disadvantaged, and the displaced and dispersed slum population set off new "tidal waves" in previously stable neighborhoods.

The Chicago School also started a tradition of detailed anthropological "way of life" studies. The early choices of subject seem whimsical (the Hobo, the Taxi Dancer, etc. see Park, 1925/67 and Coser, 1980), but must have been eye-openers to a complacent middle class. Later, more serious studies of urban neighborhoods (Gans, Oscar Lewis, Young & Willmott) refuted some common beliefs about the impersonality of city life. "Social life" happens in small, closely knit groups in the city as in other places, and can be especially rich in so-called "disadvantaged" neighborhoods. The protest movements of the 1970's drew on such anthropological material to argue for the preservation of older neighborhoods.

Nor are sociologists any longer part of a coalition of elite interests responsible for urban policy. As the mainstream of sociology moved away from spatial considerations and toward analysis of consequences of urban policies, the discipline became a critic of physical planning rather than a servant.

"Social factors" in Rossi's Theory

The Use of the Chicago School Reference

Why Rossi referred to the Chicago School has as much to do with his style of writing (/lecturing) as with the content of what he incorporated.

The Chicago School reference was meant to help clarify the meaning of "area." Rossi brings up such concepts and explains them, but the reader looking for a *definition* of a concept will have trouble finding one "Area" is:

> the place in which urban artifacts are manifested
> the physical ground they occupy
> the projection of the city's form on a horizontal plane
> Geographers call this the *site*
> the surface that it actually occupies (Rossi, 1991, p. 63.)

This is a rather multiple definition that avoids the issue of drawing boundaries. However, this is just an introduction to the next concept. "Study area" is:

> the immediate urban context
> a minimum urban context

> a portion of the urban area that can be defined or described by comparison to other larger elements ...
> an abstraction with respect to the space of the city ... serves to define specific elements more clearly
> can also be defined by historical elements... (*Ibid.*)

Yet another concept is now woven in, "residential district" along with the first hint of the sociological reference,

> there is a relationship between the spatial idea of the study area and the sociological one of "natural area," and this leads us to the concept of residential district. (*Ibid.*)

From here on it becomes less and less useful to pick out pieces of Rossi's text as "definitions." The whole sequence of paragraphs must be read as explanation. Part of the problem is translation from the Italian, and the editor offers further explanation in a footnote on Page 65.

Rossi comes full circle on page 69:

> I propose to use the term *residential* or *dwelling area* (the term *area* once again being derived fram sociological literature).

It is clear that Rossi is not defining concepts the way it is done in a natural science like physics, where a definition is precise, concise and permanent (until the next "scientific revolution," see Kuhn, 1962). Nor is he defining concepts the way it is done in social science, where each author defines commonplace concepts in his or her own manner, but relatively concisely, and to be used that way throughout a particular text. Rossi's text is rather a struggle with words, or a collage of fragments that gives us a gut-level understanding of what "area" *can be* in an analysis of the architecture of a city.

One aspect of the Chicago School's body of theory is brought into this collage, the model of concentric zones. Rossi mentions it (page 65) to challenge it, as merely functionalist theory and therefore too narrow. Rossi seems aware of some of the criticism of the Chicago School model, for he mentions one critic by name as well as the competing radial and complex polynuclear models. He also points out that Baumeister's "zones" do not resemble the Chicago School model. However, this discussion is brief, Rossi appears to be "touching bases" rather than seriously using anything that might be gleaned from the Chicago School. The point of these few short paragraphs is simply to say that some sort of socially defined zones often *exist* and can be a part of what he is talking about as "area".

Perhaps Rossi can be excused for using this reference, since his theory was developed in the 1960's, just before Positivism was so heavily criticized in social science. Rossi must have been unaware of the change in pespective. Italian cities may also have had "Quartiers" or areas with distict social characteristics and life style variations coincident with types of physical form. However, Rossi says nothing about "way of life" as a concept. It is included as a possible criteria for the definition of areas, just as "morphology" might be, but it is not as self-explanatory as "morphology".

Rossi mentions the Chicago School just once more, in connection with "urban ecology" in the next chapter. Here too, it is only briefly mentioned and quite rightly rejected, as too simple and schematic a model, with "little to contribute." (op. cit. p. 122).

Rossi does not seem to be aware that half-ancient social science can be more dilapidated than thoroughly ancient philosophy! His argument about "area" would have been at least as good without the Chicago School references. However, this practice of dragging in whatever may be found is part of a particular way of writing theory in architecture, theory for a purpose quite different from the purpose of theory in other disciplines.

What is "Theory" in Rossi's Presentation?

What Rossi presents is not a metaphor, not a clear figure-ground explanation of a general

phenomenon, as academic theory (in the sense of "theory" contra "research" or empirical testing of the theory). Nor does he present a handbook of the right way to do things, as theory is intended in practical disciplines (in the sense of "theory" contra "practice"). He presents themes, such as "individuality, locus, design, memory" (p. 32) or "function, permanence, classification, typology" (p. 61). He does not define his concepts precisely and definitively, but gives multiple and interlocking definitions, often by relating the concepts to each other. Concrete examples are brought in, and also literature external to architecture where seemingly similar concepts or themes appear.

The collage confuses, and it is also incomplete. For example, the idea of typology is presented as a *possibility* of reduction to irreducable units, but Rossi does not actually do this or even indicate how it is to be done. "Laws of architecture" and "principles of architecture" are often mentioned, but not made explicit.

Rossi's theory becomes clear only when it is used, when he applies it in the analysis of specific places. In practice, Rossi only explains singular projects, and then he uses his own concepts loosely, defined for the moment each time in terms of the specific place he is describing. This is how the theory is intended to be used.

Interest in the singular, so characteristic for architecture, is not very amenable to academic theory, and explicit handbook theory would insult an architect's imagination. The purpose of architectural theory-writing is to *inspire*, and the way to stimulate imagination is to write with a certain vagueness or deliberate mystification that leaves it to the reader to "finish the sentence" or pull the ideas together into a system.

How Can Rossi's Theory Be Made Operative?
It is up to individual architects, or "schools", to translate Rossi into specific ways of doing things. Each is likely to select concepts from the rather broad range that Rossi offers.

Ellefsen and Tvilde's *Realistisk Byanalyse* (1991) is an example. Here the most objectively confirmable concepts are selected. It is partly a check list and partly a stepwise procedure, like a technical manual, but with an important difference – it must not insult the architect's imagination. The method stimulates systematic registration, along certain lines of investigation suggested by Rossi, but it does not lead logically to any specific architectural solution. The choice of what to do about the analysis, of what to build in relation to the context as presented, is left open as a political decision. Within the framework of that decision, the choice of design is left up to the architect's creativity, much as a "Transcendental Leap" is taken between data-gathering and conclusion in sociological or anthropological field work (Mo, 1981). The thinking process is *inductive*, not deductive as in rational natural science.

This method makes use of Rossi's loose concept of "area", but in practice one quickly runs into difficulties here. In a playful mood, it is easy to divide a city (or a given "study area") into subareas, but this is the schematic simplicity of the Chicago School. When we take the exercize seriously, we are likely to find that alternative criteria indicate somewhat different boundaries, or that some boundaries are unclear in relation to any criteria we choose. An overly conscientious student may end up with a boundary around almost every building, which defeats the purpose of the exercize. Ellefsen suggests an adjustment to the method, dropping the concept of area in favor of "architectural contexts". (Ellefsen, lecture Feb. 11, 1994.)

Defining areas is a compositional problem. There is no one right way to do it, it is a creative act both to choose the criteria and to apply them. One must relax and use the gut-level understanding Rossi offers. Some sort of "social" data could be relevant as one of the criteria, depending on what the analysis is to present about the particular area. For example, it may be important to take into account geo-

graphically based social networks (if present), or social uses of existing spaces, or functional importance of existing form, or emotional attachment to existing artifacts. Published statistics rarely give much insight into what is important to residents and users. One must investigate these questions first hand, and formal hearings or informal contact with residents are usually more appropriate than a "scientific" survey. One does not need the time-consuming, in-depth studies of social science in order to talk with people.

Making Social Science Operative in a Theory of Urban Design

Architects and planners tend to continue to expect the same of social scientists as in the Chicago School period, while social science might have a quite different range of possible contributions today. The range extends from a macro-level analysis of the place of architecture and planning in the structure of society, to a micro-level connection between architectural issues of form, function, and esthetics, and knowledge about human behavior.

The Macro-Level Contribution

A sociologist of the 1990's would be most interested in Rossi's chapter 4 on the urban dynamic. Rossi recognizes that it is speculation and power, in response to a market, that shapes the city. This is also the perspective of "post Chicago School" social science. There is the market, stimulating redevelopment in different directions at different times, according to what the interaction of various groups is currently making profitable (Clark, 1987). There are the speculators, "speculative redevelopment tends to be dominated by a handful of companies operating on a national scale" (Davies & Champion, 1983, p. 44). And there is the public. "Democracy", in practice, turns out to be the pressure of small but vocal interest groups, while the general public does not have the time to get involved in more than the choice of representatives. The laws are administered by "gatekeepers" who have considerable power to exercize their own prejudices. There is no guarantee in the short run of balance or fairness. (Pahl et. al., 1983.)

The problem with chapter 4 is that Rossi contradicts himself. On the one hand, he has a realistic picture, but on the other, he falls into ways of thinking that belie it, or that sweep some of the implications under the rug.

Rossi appears to suppose a kind of historical determinism, dismissing acts of power as reflecting underlying tendencies that would have found a similar expression anyway. (See his discussions of the expropriation of convents, p. 142–3, of destruction by bombing, p. 144, of suppression of Jesuits, p. 146.) The city changes every fifty years (p. 139), but it is the *winners* of the political struggle who get to build. When the losers complain about artifacts destroyed, this is "nostalgic lament". He calls it unscientific to blame "ruthless demolitions, grandiose plans, and so forth" (p. 146), forgetting in these moments the "arbitrary act of the czar" (p. 152).

If Rossi forgets arbitrary power, he remembers structural power a bit too well. His Marxist determinism says that nothing can be done about the problems of capitalist society before the fundamental power relations are changed. Thus he rejects the idea of spatial solutions to problems of living conditions, citing Engels (p. 155). Rossi ought to read the Marxist school of urban research, which shows spatial causes of problems, like reduction in life opportunities because of forced removal to poorer locations (Harvey, 1975, Castells, 1977, see also non-Marxist versions such as Rex & Moore, 1967 and Pahl et. al., 1983.) Making these power relations explicit informs and broadens political choice. In Norway at least, the publicity has contributed to a more careful and considerate approach to urban renewal.

In these two ways, Rossi is surprisingly uncritical, even while maintaining that "politics are of prime importance" (p. 162) and that politics is *moral choice.*

> I am convinced that the moralistic component cannot so easily be eliminated from our valuation of the works of theoreticians of the city and that it would be an arbitrary act to do so. (P. 161.)

In a third contradiction, Rossi criticizes the assumption of "naturalism" (developments seen as involuntary, p. 159), but falls into positivistic "natural science" determinism (like the Chicago School) by suggesting "laws" of human activity throughout the chapter. However, this may be only a word. The contradiction could easily be corrected by changing the word "laws" whenever it occurs to "trends".

There are no scientific laws describing human activity, not even economic laws. Although it is relatively predictable what people will do in response to a market, we must never forget that the market itself is an aggregate of intentional choices. Then there is always interaction between parts of the market, and between the market and planning. Each step in an interaction can be a logical response to the structure of the situation so far, yet the aggregate may add up to something irrational. (See Clark, 1987, for an explanation of how this applies to the urban dynamic.) Each sequence of interactions is unique, so history is always a study of the singular, whether or not it focusses on urban artifacts or a particular city.

Rossi's contradictions indicate unclear or unfinished thinking, and the book ends, not with a bang but with a whimper:

> Thus the complex structure of the city emerges from a discourse whose terms of reference are still somewhat fragmentary. (P. 163.)

In summary, form does not give birth to form without a human agent. The human agent is not a mystical "collective", but particular alliances of power cutting across the collage of private property decisions. In this holy or unholy alliance, the role of the architect is to serve the builder. Planners "defending the public interest" have professional interests in common with the builder's architect, or must at any rate serve politicians who are careful about offending economic power. These roles must be quite uncomfortable for a Marxist!

On the other hand, the architect has considerable power to do something arbitrary to the city's image, despite the battles with laymen about how things will look. There is always somebody *deciding* whether to follow a "primary element" or whether to destroy even that. The analysis, regardless of how rational and realistic, is never neutral.

The Micro-Level Contribution

> Even if the preoccupation with the beautification and aggrandizement of the capitals often masked powerful forces of speculation, the resultant embellishment could at least in part be enjoyed by all the citizens. (Rossi, op. cit. footnote 13 to ch. 3, p. 190.)

Rossi has a lot to say about "quality" and "the soul of the city" and aesthetics. When architects want to know about the effect of architecture on human behavior, this is often what they mean.

> ... certainly the man of Hellpach's metropolis could improve and refine his perceptions there, and the farmer of whom Bismarck spoke was able to walk under the lime trees on the wide streets and find a place to sit and "listen to a bit of music" and "down some beer". (*Ibid.*)

In his description of "urbanity", Rossi makes people part of the scene:

> People passed by without doing anything: it was like the modern city, where the man in the crowd, the idler, participates in the mechanism of the city without knowing it, sharing only in its image. (P. 120.)

This is something quite apart from functional behavior. It is a purely aesthetic experience

in response to an architectural environment. Architecture's *artistic* purpose, as any art form, is to refine, uplift, inspire. This is the reason why society supports the arts at all. It is our experience that something good comes of it, beyond material or functional "commodity" (Vitruvius). It should be possible to describe and document such effects, more objectively (or at least intersubjectively) than before, through confirmable empirical research.

Most social science efforts in this direction seem to slide off track into analysis of functional aspects. (This too is an interesting and useful direction, and one could go further with the fragmentary beginnings to be seen in Jan Gehl, Abraham Moles, David Canter, Hillier and Hansen, Oscar Newman, and probably many more in the field of environmental psychology. Such research should be better coordinated in programs, to mend some of the fragmentation.)

Work being done around human emotional, esthetic response is still rather philosophical and speculative. It should be possible to use survey or laboratory techniques, to observe subconcious reactions systematically, and to connect esthetic reactions to the more "rational" elements of Rossi's theory. But first, this would require intense cooperative work between humanistic researchers in esthetics, and perceptual or environmental psychologists, in order to formulate testable hypotheses interesting to both fields of study. This way, we could both extend our knowledge of human behavior and make more of Rossi's theory operative.

ᔓ • ᔓ

In conclusion, the Chicago School period was a golden age of cooperation between social science and physical planning, but it was based on a simplistic and naive model of the urban reality. Rossi's use of the Chicago School (where he did not simply reject it) was brief, superficial and has at any rate become inapproprate for the 1990's.

Rossi's theory is only suggestive, and must be made operative if it is to have practical implications for planning or design. Social science could contribute to Rossi's general perspective on the urban dynamic, and perhaps could give a firmer empirical base to both functional and more "subjective" aspects of a theory of urban design.

Linn Mo, Ph. D., is a førsteamanuensis (sociologist) at the Department of Town and Regional Planning, Faculty of Architecture, NTH, Trondheim, Norway. Her field is the application of social science in the discipline of physical planning, and research methods for architecture and planning.

References

A/S Hjemmet (1974), *Mennesket og naturen, økologiens ABC.* Oslo: Bokforlaget.

Agnew, J., Mercer, J. & Sopher, D. (eds.) (1984), *The City in Cultural Context.* Winchester, MA: Allen & Unwin, Inc.

Burgess, E. W. (1923), "The growth of the city." *Proceedings of the Americal Sociological Society* 18:85–97.

Burgess, E. W. (1927), "The determination of gradients in the growth of the city." *Proceedings of the American Sociological Society* 20: 178–84.

Castells, M. (1977), *The Urban Question: A Marxist Approach.* Bath: Edward Arnold.

Clark, E. (1987), *The Rent Gap and Urban Change.* Lund: Lund University Press.

Cooley, C. H., Angell, R. C. & Carr, L. J. (1933), *Introductory Sociology.* New York: Charles Scribner's Sons.

Coser, L. A. (ed.) (1980), *The Pleasures of Sociology.* New American Library, New York Land Scarboroug, Ontario & The New English Library Limited, London: A Mentor Book.

Davies, R. L. & Champion, A. G. (1983), *The Future for the City Center.* Institute of British Geographers Special Publication No. 14. London: Academic Press.

Ellefsen, K. O. & Tvilde, D. (1991), *Realistisk byanalyse.* Trondheim: Skrifter fra Arkitektavdelingen, NTH.

French, R. A. & Hamilton, F. E. I. (1979), *The Socialist City: Spatial Structure and Urban Policy.* New York: John Wiley & Sons.

Harvey, D. (1975), *Social Justice and the City.* Bath: Edward Arnold, Ltd.

Kuhn, T. S. (1962), *The Structure of Scientific Revolutions.* Chicago: University of Chicago Press.

Mo, L. (1981), "Is Field Work Scientific?" *The Journal of Mind and Behavior* 2(4): 407–417.

Nisbet, R. A. (1962), "Sociology as an Art Form." *The Pacific Sociological Review* 5(2): 67–74.

Pahl, R. E., Flynn, R. & Buck, N. H. (1983), *Structures and Processes of Urban Life* 2nd edition London: Longman Group Ltd.

Park, R. E. & Burgess, E. W. (1925/1967), *The City.* Chicago: University of Chicago Press.

Rex, J. & Moore, R. (1967), *Race, Community and Conflict.* London: Oxford University Press.

Rossi, A. (1991), *The Architecture of the City.* Cambridge: the MIT Press.

Schiefloe, P. M. (1985), *Nærmiljø i bysamfunn.* Oslo: Byforskningsprogrammet, Universitetsforlaget.

Tafuri, M & Dal Co, F. (1980), *Modern architecture* 1 & 2 London: Academy Editions.

Wessel, T (1983), *Teorier om byfornyelse* Oslo: NIBR-notat 1983:123.

Wirth, L (1938), "Urbanism as a way of life." *American Journal of Sociology* 44.