

Interview with Amos Rapoport

Professor Amos Rapoport was Invited Professor at the Department of Architecture of the Swiss Federal Institute of Technology, Lausanne, in May and June 1991. We had occasion to meet with him and also to talk about Architecture & Behaviour. He granted us the following interview.



Amos Rapoport was born in 1929 in Poland and graduated from the University of Melbourne in 1955 with a degree in architecture; he has a Postgraduate Diploma in Town and Regional Planning from the same university (1966). He is a registered architect in Australia and an associate of RIBA. In 1974 he became professor of architecture and anthropology at the University of Wisconsin in Milwaukee (USA).

Professor Rapoport has written and lectured in the field of environment behaviour research. His work in this field is widely known and represents a major contribution. His best known books are: "House Form and Culture" (Englewood Cliffs, NJ, Prentice-Hall, 1969); "Human Aspects of Urban Form" (Oxford, Pergamon, 1977); "The Meaning of the Built Environment" (Beverly Hills, CA, Sage, 1982); "History and Precedent in Environmental Design" (New York, Plenum, 1990). He is currently preparing a new book on theory.

KN: *If you consider the field of environmental psychology as related to architecture during the last twenty years, would you say that something has qualitatively changed or are we still at the same point as twenty years ago, only with more empirical data?*

AR: First of all, I'd like to call it environment behaviour research, because it goes well beyond psychology. Certainly, there have been changes but they have been for the worse rather than for the better, especially with respect to architecture.

KN: *Is this so in the United States?*

AR: Well, I believe that in the United States the field of environment behaviour research is better known than in Europe. In the States, architects do reject the field of environment behaviour research, but at least they know that it exists.

In the seventies, it looked for a while as though architects were really beginning to pay attention to this field, but today I think there is a complete rejection of the field. Architects have become very formalist, very esoteric and they are not concerned with users at all, they essentially just make their projects for themselves. It is interesting that in EDRA, for example, there is evidence that a lot of applied people in the field have decided, rather than try to work with architects, to work directly with the clients (and whenever possible, with users). They are trying to influence the clients, trying to identify the sorts of things needed and, if the client accepts, the architects will have to follow.

KN: *You seem to blame the architect. Can you not also look at it the other way round and say that it's the social scientist who hasn't been able to find a language that is acceptable or understandable for the architect?*

AR: First of all, I would prefer to say environment-behaviour researcher rather than 'social scientist'. Having said that, I would ask: why should not the architect change his ability to understand research? Personally I really do blame the architect. I am really very "anti-architect"; I always have been to some extent, but I have really become so more and more. Research will never be used unless architects change totally, in every way and become a totally different profession. At the same time it needs to be pointed out that environment-behaviour research has been on a *plateau* for about ten or more years. There has really been very little of interest coming up lately. I think that during the first ten years there was a lot of exciting, new stuff coming out: now you can go through a whole conference or Journal issue without getting a single interesting paper or new idea. So I would really blame researchers also by saying that lately we haven't been doing very much new in research.

KN: *Well, that sounds a little bit depressing...*

AR: Yes, I think it is a bit depressing, in fact I have been writing about it recently. I think that right now we are really doing a lot of empirical studies that are just coming up with the same things over and over - sort of re-inventing the wheel all the time and there is not enough development of theory, I mean real theory. For a while I also think that there has been too much of an attempt to do work that was, as they say, "relevant" for the architect. I think one should try to do good research work, and then, if it really is good work, then it will be used by someone, even if not architects. To sum up, I really think that lately there has not been very much development for all sorts of reasons. It is disappointing.

KN: *If we take your own "parcours", and I refer to your works from "House, Form and Culture" to "Meaning and the Built Environment" and the last history book, then, what would you say is the thread going through these different works? In other words, what is the continuity and what has changed for you during these years?*

AR: I see a lot of continuity. In fact I would even trace it back to my childhood when I got interested in science. In fact all my work is really intended to develop the scientific approach to the built environment through environment-behaviour research. But more specifically I think what's happened is the development of a programme of research going over this span. I began by trying to look at all kinds of environments: thus the book "House, Form and Culture" essentially said that we cannot just look at what architects do, we must look, for instance, at vernacular design, spontaneous settlements and so on. The next stage in my work was to argue that we have to look at the whole environment, not just buildings, at what the geographers call the cultural landscape also usefully conceptualized as a system of settings. In other words the built environment that includes fields and forests and roadside strips and suburban houses and people and everything. The third stage was really to look not only at the whole environment but at all environments, while adopting this global perspective, and thus it became necessary to do

cross cultural research. So I spent many years working on cross cultural issues. The final stage was to say that the evidence we use must also include history, so this is how my latest book.¹ I take a very different approach to history than all other people do and I think that I propose a whole new way of looking at history which is useful for environment-behaviour research. Now, all of that was done with one purpose in mind and this is what I am working on right now. I needed to develop the analysis of all this kind of evidence before I could begin developing theory. Always at the back of my mind was the realization that what we need more than anything is a real explanatory theory, a scientific theory. So what I have done so far are sets of preliminary steps and now finally this year I have started writing a book on theory, provisionally titled "Theory in Environmental Design", on which I have been doing research for about ten years.

KN: *So this will be the climax of your work?*

AR: The climax? Yes, I hope. The history book took me five and a half years to write and this is a more difficult book, so it will still take quite some time. To sum up, I think there is incredible continuity in my work and that is probably why some people do sometimes accuse me of quoting my own work too much. But that is really because I see this continuity - each piece adds to the others, each piece is a brick, as it were, in an ongoing construction project.

KN: *If we take the vernacular, would you say that such studies are particularly relevant for architecture, or are such studies more relevant in terms of other disciplines such as anthropology, human geography etc.?*

AR: Well, it depends on how you approach it. If the purpose of environment behaviour research is to understand the fundamental relationships between people and the physical environment, then we have to examine the whole body of available evidence and most of the world's environments are vernacular environments. We must not forget that architects design at most something like four or five percent of all buildings. So, if you are a researcher you must understand the different relationships with respect to vernacular design, since it is most of the environment, and even modern design can only be understood in relation to the vernacular fabric. If you are a designer, you might want to apply some of this knowledge, but not directly, I mean you cannot take vernacular environments and apply them directly. But if you analyse the full range of environments then lessons can be derived that can be relevant. All depends on the questions that you ask.

For instance, anthropologists have generally neglected vernacular design, because they do not look at the physical environment, they look at kinship, they look at social structure. If you ask most anthropologists where do these social relations take place they have no idea, because they have never looked at the physical environment. I remember when I was writing "House, Form and Culture", I had a discussion with an anthro-

¹ "History and Precedent in Environmental Design".

pologist who had just come back from West Africa. I said "wonderful, you can tell me about the West African settlements"; he looked at me with terrible disdain and answered "I only look at kinship". But we can still use anthropological research because we are not only looking at buildings, we are looking at behaviour in buildings and settlements and cultural landscapes and anthropologists do have things to tell us. But I think that many people originally looked at the vernacular for its own sake; either because they like it, or because they found it beautiful and, as a result, because they feel that it is important to preserve it. I look at vernacular design, as at all environments, as a means of answering certain questions in environment behaviour research. In fact for me, it was a point of entry into the environment behaviour field. Vernacular environments provide a much easier point of entry as do also third world environments, when compared with things that architects do.

KN: *Why do you say so?*

AR: Firstly, many of the relationships are more directly present in vernacular design. People are designing for themselves and the design is the result of selection over long periods of time, bringing mutual congruence between environment and behaviour.

Secondly, particularly in developing countries, you see things that are very extreme; it is much easier to see black and white than different shades of grey. I think it makes a lot of tactical sense to do research with extreme situations and then move to more subtle situations. The fundamental questions that vernacular and third world environments allow you to enter, can then be approached in more complex and more difficult situations.

KN: *When you think interculturally about design, are you more struck by universal or by specific aspects?*

AR: Well, I think that what is striking at first sight is the incredible variety of environments. You have hundreds, if not thousands, of kinds of houses and you have hundreds of kinds of settlements and cultural landscapes although people do the same kind of things in them. So, you begin to ask: why this variety? However, I am convinced that there are also universals, because we are all one species, we have one evolutionary history, we all have a certain kind of brain. But how important these universals are, as opposed to the specifics, is to me an empirical question not to be decided *a priori*.

KN: *According to you, do such universals also relate to housing?*

AR: They do, at the level of mechanisms but they receive specific expressions in different cultures. For example, I think it is universal that people look for meaning in the built environment; the human mind looks for meaning or imposes meaning, but the kind of meanings you impose and how you organize them are culturally specific. It is very important to know that there will always be meanings. You can assume that they will be there. The question is to find them. This is very different from

saying that in some cases there is meaning and in some cases there is not. Another example of universal would be perception. I think that perception is pretty well the same everywhere and therefore things that are related to perceptual qualities are pretty well universal. But then, when you get either to their meaning, or preference for them, this is much more culturally dependent. A preference is really much more culturally variable. Then again, that people will always have preferences is a universal and that they will try to choose according to these preferences is also a universal, but the specifics of choice are culturally variable. In doing crosscultural research most people have really looked at the differences because that is what is striking, but I really believe that you must also look at similarities.

KN: *Now a question about meaning - You have discussed the term 'symbolic' particularly in the epilogue to the second edition of your meaning book. There you make a difference between different types of meaning - could you expand a little bit on that point?*

AR: In the first edition of that book I looked at symbolic approaches as a method of study, and together with semiotic approaches I rejected them. I said that non-verbal communication is the method to use, and semiotic approaches and symbolic approaches are wrong. Later I had an argument for about three months with a student in one of my classes. This student felt that symbols were different in kind compared with the type of meanings that I discussed in terms of non-verbal communication. When I talked about this, it occurred to me that if you analyse the literature then there are actually three different kinds of meanings that are being discussed. I admittedly mixed them up somewhat in the first edition of the book. There are, what I call high level meanings, which are themes like cosmologies, cultural schemata, world views, reflections of philosophical systems, the kind of stuff we find in traditional architecture - both vernacular and the sacred high style. These are the "symbols" usually discussed. Secondly there are middle level meanings concerned with things like identity, power, status, wealth, etc., that we communicate. Finally there are low level everyday and instrumental meanings; these tell you where to walk in, where to sit down, etc. These two latter types are best studied using non-verbal communication models. Then, I also realized that you can begin to understand under which conditions, historically and culturally, these different types of meanings will have differential importance. Their importance is partly related to the development of other symbolic systems like writing, printing, television, and so on. For instance, lately the high level meanings in buildings have become less important because we can express them much more effectively through other symbolic systems. In pre-literate societies the only permanent place for high level meanings was the built environment.

KN: *So what would you say is architecture involved with today in terms of these different meaning levels?*

AR: I believe that middle level meanings are terribly important today and low level meanings are obviously always important. They have to be com-

municated in a much clearer way today because they have to communicate to so many different people. Earlier there were subtle cues that were immediately understandable to the users. I give an example in the book about Aborigine Australians and Bedouin; for them, just a small change in the texture of the ground, or an ash-heap, would immediately communicate the message. Now, this would obviously not work today in a city. Low level meanings in a city today have to be communicated with very much clarity, with high redundancy. Middle level meanings are also terribly important and not only in housing but also, for instance, in office buildings where they communicate about corporate identity, status etc. Government buildings and university buildings do this also. On the other hand, high level meanings are very unimportant and if you try to communicate them, it doesn't work. I think that someone who really knows how to address the middle level meanings are the advertising people. One of the best ways for understanding housing is, for instance, to study advertisements for housing. If you see the kind of things that they emphasize, you really get to the important things and that is very interesting to me. I tell students in my course to use such materials as refer to advertising, as well as novels, newspapers, TV and films. I think that advertisers understand psychology better than almost everyone else; they really study psychology. But I have always thought about their message in terms of middle level meanings and not in terms of high level meanings. High-level meanings, "symbols", which in the past were in the cities, landscapes and buildings, are now in books, movies, archives, documents etc. And that is a fundamental change.

KN: *I must admit that I believe that some kind of high level meaning is still looked for in architecture. For instance, by creating settings that touch something deeply rooted in the user or dweller and that he or she will equate with high level meaning: respectfulness for a higher force, communion with nature or other present people, spirituality, something sacred.*

AR: Today even religious architecture is not really trying to convey the sacred. Such buildings are often more concerned, for instance, with good visibility and good acoustics, places for children to avoid noise, attracting people, provisions for counseling sessions, meetings etc.. The sacred has become very unimportant in the architecture of modern American (and, I suspect, other) churches. They are not even concerned with the sacred any more - and at most it is communicated through semi-fixed elements. In the traditional societies, the sacred was the most important thing, but in modern society it is quite unimportant. For instance, what struck me during a recent visit to Japan, was that the environment has lost all its traditional symbolism. You really have to seek out environments that have these particular traditional qualities. Some of my students have suggested to me that it might be the case not that high level meanings have disappeared, but that there are new forms of high level meanings. But then I have a slight problem, and that is, that once you have brought the term to include other things then you have lost the

value of the term. If I am trying to compare traditional environments and contemporary environments in terms of meaning, then my students suggest that perhaps the new type of high level meaning in our society is equality or health. You know that in the U.S.A. everyone is concerned very much today about health issues, but then health is not the same as the sacred. So, I would rather restrict the terms to their traditional, so to speak, meanings. I think that strong emotions and high level meanings are, in fact, two different issues.

KN: *If the high level meaning is absent today from the built environment, does that mean that we have lost something?*

AR: In fact I don't think that we have lost high level meanings. We just express and communicate them today through different media, not through buildings or settlements any more. Let us take a very simple example: in classical Athens, you communicated democracy by building the agora. In the U.S. today, democracy is communicated through the constitution, the legislative and legal systems etc. You cannot communicate it any more physically, you cannot get three hundred million people to meet face to face and have a debate. That was still possible in Athens when the citizen population was small. Or consider the White House; it doesn't say anything in terms of high level meanings. It just says this is an important building; that is middle level meaning. It does not communicate 'democracy' as a building and, if at all, only through associations. I think this is a real watershed. I think literacy was the beginning of the end of high level meanings in the built environment and I quote Goody's book, which made me aware of this point. Jack Goody is an anthropologist in Cambridge and his point is precisely that after literacy everything is different.

KN: *Let us revert to contemporary architects - Your thoughts about them?*

AR: Well, I am just not interested in architects and what they do any more. As far as I am concerned architects as they are and work can just disappear - and I think they will disappear, since they are not needed. I think architecture is a completely decadent profession. The sooner they disappear, the better, and unless they change completely they will disappear. In fact, I am more concerned today with the state of the environment-behaviour field, because I have given up on architects. I think they must change completely, change their education, their values and what they do and become a science based profession like medicine, engineering, materials science and the like. This involves developing, first of all, a scientific, theoretical base and thus become a discipline which can then address practical problems and issues. The field of environment-behaviour research needs to be developed as the base for a totally new profession which, as applied EBS might use this knowledge base to identify what the problems are and then solve them. In other fields people test their intuitions rigorously before they use them or make them public, whereas architects just build their intuitions; in addition, in these other fields these intuitions are based on knowledge. That knowledge base should involve not only social science but many other disciplines,

including cognitive science, artificial intelligence, evolutionary science, scientific methods, logic and mathematics. The emphasis must be on things other than drawing - in fact I have for years now called for closing studios as the first step in saving the field.

KN: *Back to you. I think that we can say that you bring together empirical work from different sources. Your own concern has not been empirical studies. Now, if you only refer to conclusions of empirical studies by others, don't you think that there is a risk of getting too far from evidence when you build on such studies?*

AR: I typically do not refer to a single study. I will try to refer to all studies that I can locate or a subset of them and so to all evidence that exists, according to my knowledge, on a single topic. And obviously, scientifically, I am prepared to give up, if evidence shows something different to be true. Also I think that we need more people to do what I am doing, I mean to build theory. I am one of the few people to do this kind of work. It was for me a conscious decision that I would synthesize because there are a lot of people doing empirical work, but then it's often lost. Someone has to get to synthesize such work and to develop theory. However you also need many people to work on theory. They might build different theories from the same data and then on a higher level of synthesis we can again have different views and then do a meta-synthesis. On this level you can examine to which extent the different interpretations of the same data are valid or non-valid. As you know, there is today a development of a whole new field, called meta-analysis. It's very quantitative which makes it very difficult for me to understand, and there is controversy about its value, but it is about how do you go about rigorously synthesizing hundreds or thousands of studies.

It has developed very sophisticated mathematical techniques meta-synthesizing mainly psychology and sociology rather than doing a review article which, as you know, is useless. Whereas review-articles are essentially just lists of references, meta-analysis is an attempt to synthesize all evidence by doing formal analyses.

KN: *Whom would you say you are addressing through your work; who is your ideal reader?*

AR: I don't think I have an ideal reader. I work for myself in order to understand and explain environment-behaviour relations. I do it because I like doing it. I also find increasingly that people don't understand what they read. For instance, I get people quoting me exactly in the opposite sense of what I intended. That, by the way, is another problem with architects, they are not taught to read, to understand, to abstract and to generalize. I am lucky enough to be paid to do what I like to do. I am very selfish about these things, and I also think and know from the literature that all real researchers work for themselves; they might pretend that they do it for the good of society or whatever, but basically I think they do it for themselves to satisfy their need to know and to understand.

I have recently tried to simplify my writing a little bit, because I realized that some people don't understand me, but when even the simple things are still misunderstood, I have also given up on that. The problem is not the writing, but the level of abstraction, the conceptual approach used, which is either not understood or rejected. The purpose of synthesis to me is to develop theory. I believe firmly that you cannot utilize a lot of empirical studies. For instance, if you are an architect in an office and you are doing housing, you cannot sit down and look at, let's say, the thousands of research studies that exist on housing. And that is where theory comes in, because if you have theory you don't have to read all those empirical studies, because they are boiled down to a relatively few principles. Therefore I believe that if we develop theory, research will really become more applicable. If I can tell people: 'Well, look, if you are dealing with housing with a particular sub-population and you are asking a set of questions about the characteristics to be considered, then I know how these different characteristics interact in any housing'. Then it's much easier; you can immediately look for the relevant information and if it's correctly organized, then it's not too difficult to retrieve the appropriate data. By the way, that is also what doctors do; a doctor does not remember every single clinical study that has been done but a set of steps for identifying a problem. Once you have diagnosed the illness then you have a theoretical background and then you look up the clinical literature and then you can also begin to solve the problem. You see, in environment behaviour studies with each generation of students, we start from scratch. Now, to avoid it, that is where you really need theory, synthesis. That is what other fields are doing. Discussions on data that before were huge are now synthesized to one or two paragraphs in text books. Why can we not do that in our field? That is what I am trying to do and whoever reads it, can understand it and is prepared to use it, or criticize and hence develop it, will be my reader.

KN: *So, once you have developed that theory, we can limit ourselves to reading only Rapoport?*

AR: No, because theory in any scientific field is the product of thousands of people who have been working on building that theory over long periods of time, building on each others' work. Also, I am not trying to develop a theory, but discuss what theory might be, how it might be developed, etc. I am trying to promote guiding principles. That is also why I think you need a lot more people to do this kind of theory building in environment behaviour research. That is why I think the field today is on a *plateau*. We have not been putting enough effort into theory, we just keep on repeating little empirical studies that are very often exactly the same ones that were done twenty years ago. They are just done by researchers who don't even know the empirical literature any more. That, for instance, was a problem with *Architecture & Behaviour's* special issue on sound, a wonderful idea, since it is an important and neglected topic, where the authors were hardly quoting any relevant empirical literature, small as that is, that exists in the field - and that in some cases has been in existence for many years.

KN: *Thank you very much for this interview. I think that our readers will appreciate your openness and your directness. Let us open a debate with our readers.*