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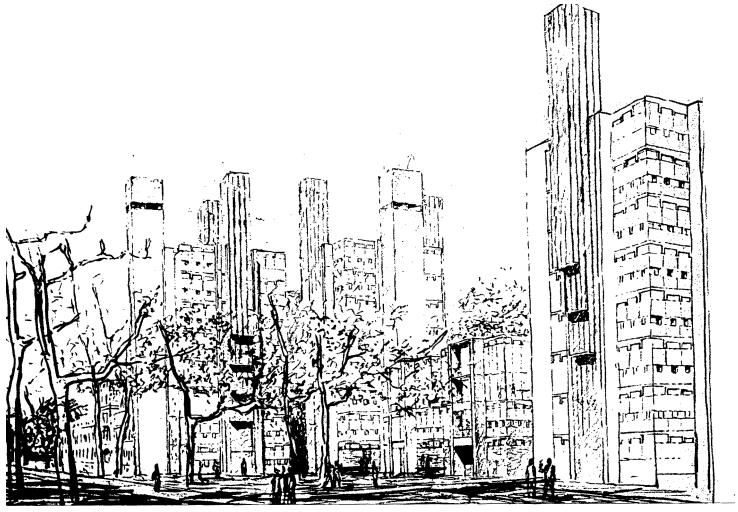
Right
Louis I. Kahn, Richards Medical Research Building & Biology Building, University of Pennsylvania, Philadelphia, Pa. 1957 – 65, perspective ca. October 1957



The sixth theory and, as far as I am concerned, the most satisfactory, gives very considerable emphasis to the role of *models*, to the critical choice of some precedent. The theory owes its roots to the work of Sir Karl Popper in the philosophy of science and especially to that part dealing with the nature of scientific procedure. It had a subsequent extension to the philosophical foundations of social reform in such books as *The Open Society & Its Enemies* (1945). I have tried (Brawne, 1992) to discuss at some length the relevance of these wide ranging theories to architecture in *From Idea to Building*.

Crucial to Sir Karl's work is the supposition that what distinguishes scientific theories is that they are always potentially falsifiable. Our inability to falsify a theory at any particular time only means that it is the best corroborated theory at that time; it does not mean that it is true. Equally significant is the notion of conjecture and refutation which is the title of one of his books; namely that we put forward hypotheses and that these have to be tested and criticised as rigorously as possible. The sequence which Popper proposes as explaining the way in which scientific theories come into being is that we start with

the recognition of a problem, then put forward a hypothesis, a kind of tentative theory which needs to be tested in order to eliminate errors and end with a corroborated theory which is, however, the start of a new sequence in which it becomes the initial problem.

Although clearly architecture is not a scientific pursuit since a building as a totality cannot be falsified. I nevertheless believe that the problem, tentative solution, error elimination, problem sequence is the most accurate description of the design process. I believe it has both a short and long term validity. When we design a building we tend to sketch and iterate our probing for a solution until we are satisfied (or time has run out). The built outcome, however, enters the stock of existing buildings and influences our perception of the next problem. That stock consists, of course, not only of recent architecture but equally of the architecture of the past of which we are aware.

It needs also to be remembered that we are not innocent problem-solvers; we come to the recognition that there is a problem influenced by a host of forces: architectural, social, economic. Powerful among these is the question of style, of what is visually desirable and acceptable at a particular period. It tends to limit the range of possible models. Our expectant eye is in operation.

My preference for the explanation offered by the $P_1 \Rightarrow TS \Rightarrow EE \Rightarrow P_2$ sequence (Problem recognition, Tentative Solution, Error Elimination, best corroborated solution which becomes the problem to the next sequence) is not meant to suggest that other theories are invalid or unhelpful. It is only to state that the Popperian sequence represents, in my view, the closest approximation to the way I know a great many architects design and have in fact stated that they do so. Different theories may also apply under different circumstances.

When Le Corbusier, for example, designed the monastery at La Tourette built near Lyon in 1960 he created a