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OPINION

A VERY BRIEF NOTE ON ARCHITECTURAL REALITY

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The more I think about it the more I am convinced that the British system of apprenticeship that held until the early 20th century was superior to the French system of a structured education. The way one teaches writing is to write something, then read, edit, etc. The problem with teaching architecture is that while you can draw something, it is not practical to build it, so it all ends up on paper (as if you could talk about writing without writing, just talking). Pretty soon architecture teachers and students convince themselves that what is on paper is real — if not actually superior to what is built.

Editor's Note: *The well-known writer Witold Rybczynski was kind enough to send me this one paragraph, which contains more useful wisdom than many books pretending to discuss architectural theory. It also gives me the opportunity to refer to two of his earlier essays mentioning the work of Christopher Alexander. The first one (Rybczynski, 2009) is essential reading for students. I have reprinted a relevant extract of the second essay (Rybczynski, 2013) below. — Nikos Salingaros.*

Complexity was precisely the concern of Christopher Alexander, an architect who that same year published *Notes on the Synthesis of Form* (Alexander, 1964), a small book with an ambitious message. "My main task has been to show that there is a deep and important underlying structural correspondence between the pattern of a problem and the process of designing a physical form which answers that problem", Alexander proclaimed. His thesis was that any design problem could be rationally broken down into overlapping subsets of functional requirements, and that these sets had a hierarchical relationship. He gave a kettle as an example, and listed 21 specific patterns that governed its design: "It must not be hard to pick up when it is hot", "It must not corrode in steamy kitchens", "It must not be hard to fill with water", and so on.

Alexander didn't want simply to create more complex forms; he wanted to unravel the complexity of design problems. In an appendix to the book, Alexander outlined a mathematical model that mapped the requirements of design problems. It was natural that he would turn to computation, since his dual degree from Cambridge was in mathematics as well as architecture.

Oddly enough, Alexander himself had serious reservations about the use of computers in architecture. He was unable to attend the Boston meeting [the 1964 Conference on "Architecture and the Computer" held at the Boston Architectural Center], but he did contribute an iconoclastic essay to the proceedings. "In the present state of architectural and environmental design, almost no problem has yet been made to exhibit complexity

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in such a well-defined way that it actually requires the use of a computer", he wrote. Alexander saw a real danger in architects' fascination with computing. "The effort to state a problem in such a way that a computer can be used to solve it will distort your view of the problem. It will allow you to consider only those aspects of the problem which can be encoded — and in many cases these are the most trivial and the least relevant aspects." This could still serve as a warning to the eager parametricists of today.

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