## Models by Carsten Juel-Christiansen

Within the culture of scholarship and research, the written language is predominant. This is primarily because the potential to eliminate misunderstandings in the communication situation – intersubjectivity – is strongest in the written technical language. There is hardly anybody who would dare to assail this rule, which applies to the domain of science. However, it cannot be taken as a given that items of information are structured in the very same way in all lines of work. And in keeping with the fact that the standards of scientific research are being disseminated through society to other areas, there is good reason to assign prominence to other forms of communication that have exhibited their carrying capacity in the course of time, as we can see in an analysis of the architectural profession's evolution.

Critical analysis is necessary in the development of any practice. However, within the artistically creative line of work, which means to say the language-generating praxes, there is also the gesture of pointing out. "The pointing act" – the critical glance – is an indispensable element in artistic training and within the practice or inquisitive investigation that constitutes the basis of education.

Specific instances of "the pointing act" stand as distinctive bright spots in the minds of many practitioners when they think back on their days as students: occurrences where a more experienced colleague could point toward a certain region inside a complex totality, in the world, within a work or in a particular representation – a precise indication, possibly designated in an unexpected fashion, which opened up a space of understanding and a depth around the phenomenon that had hitherto seemed uninteresting, inaccessible or merely a part of an undifferentiated surrounding environment. It is rare that one recalls exactly what was said, but one remembers very clearly the kind of door that was opened within the space of the understanding.

Examples of this kind of communication are legion. Let me cite just one example of current interest, where Rafael Moneo tells about what Aldo Rossi's photographs have meant to him. In *A Scientific Autobiography*, Rossi shows a series of photographs of places, buildings and details which do not immediately appear to belong together and which Rossi, in different ways and often only sporadically, refers to in the text<sup>1</sup>. Nonetheless, what becomes clear is that for Rossi, the photographs refer to points of impact in the development of his architecture. In their arrayed objectivity, the photographs reproduce Rossi's architectural understanding on a deep-seated and open plane, that serves as a permeating substructure for all of his own projects. In mentioning two of these photographs, one from a courtyard in Seville and one illustrating houses on the delta of the Po River, Rafael Moneo refers to how he received Rossi's gesture of pointing out:

Rossi's true love was anonymous architecture, the architecture that belongs to collective knowledge. He contaminated us with an enthusiasm and respect for it, for which we should be grateful. Painting a plinth olive-green on a narrow Seville street is an architectural gesture par excellence. It speaks of the decorum desired for a public space that is to be a venue of much social life. As for the houses on stilts connected by nets, they suggest the collective colonization of the waterway. Through the communal fishing activity that the architecture foments, they address the desire to transform nature into a source of production. The ability of architecture to participate in the reinforcement of community life was, for Rossi, its most valuable attribute. Here the feel of the unfinished, of the fragment, has little to do with the work concept discussed by Eco<sup>2</sup>, or with the satisfaction that the establishing of unexpected connections produces, as in collages by Schwitters. What amazes Rossi is the contemplation of the moment at which the work as a whole is interrupted in time, giving rise to a fragment that renders itself visible.<sup>3</sup>

In a hyper-succinct way what Rafael Moneo is describing here is that Aldo Rossi, with his specific and concrete manner of pointing out, managed to open up an understanding of values in architecture that influenced an entire generation. Moneo is also recounting that the unremitting inspiration which Rossi's contemplations exert on him has everything to do with the intensity with which Rossi *sees:*  the visible in the sharply trained glance can stand out as a fragment of an unseen whole, which materializes itself as a driving incentive for the creative enterprise.

Pictures, drawings and visual notations are highlighted fields in more comprehensive cognitive areas and experiential worlds. They draw on their properties as fragments, insofar as they act as couplings in between worlds that remain discontinuous as of yet. This mode of operation is familiar to everyone who is absorbed with the artistic enterprise. Once again, a specific example can illuminate the elementary process.

The Salk Institute for Biological Studies, in California. Louis Kahn is looking for the architectonic expression for one of the impending structure's fundamental ambitions: to serve as a forum for an interchange between the sciences and the humanities, which were being torn asunder into two different epistemological cultures after the Second World War. No longer did these two areas of knowledge appear to have reciprocal connections.

The intention was to furnish this interchange with a spatial expression in a place of convergence that occupied an outstanding placement on an irregular plateau in the landscape. No actual program existed for the convergence's establishment; there was only a notion that it was supposed to happen. However, in the customary way, partial-programs in the form of auditoriums, a library, guest apartments, sports facilities and so on were registered.

Louis Kahn commissions his staff to fit the many partialfunctions into a building structure that has to manifest itself as a unit by subordinating the constituent elements into one single rectangular grid. The attempt appears to be logical enough, but the result is nonetheless unsatisfying. Then, in a combination of frustration and intuition, one of his assistants makes a tracing of a fragment of a plan of Hadrian's Villa onto the irregular plateau. "That's it!", as Kahn can see. After this, the whole plan falls into place<sup>4</sup>.

The program finds its expression in an assembly of multiuse spaces in different sizes: architectonic form is imparted to the meeting place as an ensemble of individually shaped rooms and series of rooms that make their appearance independently as concentrated forms while simultaneously establishing intermediate spaces among themselves, which provide openings and unifying connections.

Hadrian's Villa outside of Rome is a comprehensive archive of architectonic spatial types and form elements<sup>5</sup>. An enigmatic assemblage. In Kahn's architectonic consciousness, the experience of Hadrian's Villa was an evocation of what he understood as "the unmeasurable" in architecture. There was a transference of the memory with the tracing's representation of the specific architectonic attributes that were immanent in Hadrian's Villa: its architectonic machinery of formal and spatial connections within the individual bodies' axes and couplings. Through the vehicle of transferring these attributes from Hadrian's layout to the meeting place's irregular plateau, a deeply rooted architectonic memory came to be prolifically generative for the Salk Institute project.

Drawings are ideas. Drawn ideas are models. Models are virtuality. In 1935, a propeller-driven aircraft carrying Le Corbusier flies directly into a storm in the air space over South America. The air mass's electrical charge ignites sparks and the heavens' floodgates open up. For a daylong airplane voyage, Le Corbusier has been a fascinated witness to the storm: how it arose from the dew's evaporation in the early morning hours, how the clouds are formed and how the drama is rounded off by the rain's way of gathering into the undulating river, which leads the water back to the sea. Le Corbusier made notes of what he was observing and passed on his observations of the visible meteorological phenomena as a reflection of fundamental elements in his cosmology: day and night as being the world's basic rhythm, created by the sun's movement. Water and light as opposites, which generate dynamics and fusion into a transformation of the space. Verticality and horizontality brought about in a cycle of movement and rest<sup>6</sup>.

He reproduced the drama as the visible part of the invisible world he perceived with his whole sensing intelligence – and he rendered this habitable in his architecture. The house positioned between heaven and earth. The house that reflects the world's respiration. The cyclical interchange of light and darkness and time's formation of space. His entire architectonic archive of symbolic forms and technical innovations is deduced from this universe. And it was this that he brought with him on the plane to Brazil, where Lúcio Costa, as head of the School of Fine Arts in Rio, had opened a door for this universal architectonic program.

What the collaboration between Le Corbusier and Lúcio Costa around the Ministry of Education in Rio entailed was that Corbusier's characteristic architectonic elements: *pilotis, toit-jardin, brise-soleil,* and so on – each of which was developed as fragments of a vision – were grafted on to a South American culture. And the result was that these purist European elements were transformed into a highly sensous native expression which in its plastic exuberance echoed the eighteenth century Brazilian Baroque, according to Kenneth Frampton<sup>7</sup>.

Shortly thereafter, Costa's assistant, Oscar Niemeyer, adapts yet another element from Corbusier's architectonic archive: *le promenade architecturale*, the architectonic promenade, which he investigates and makes his own in executing the design for the Brazilian Pavilion at the New York World's Fair in 1939. And three years later, he continues to unfold this feature further in a willfully designed and spatially organizing element inside the Casino in Pampulha, which stands as a monument in the context of South American modernism.

A decade later, in 1953, when he builds his own house in the suburb of Canoas, Niemeyer releases the architectonic promenade from its fixed frame and spreads it out across the ground's plan in a principle that manifests itself as a preliminary sketch for a topological conception of the architectonic space<sup>8</sup>: a conception of space which in the present day is propagating itself as a new foundation for establishing architectonic coherence.

How is a school established? How does a style propagate itself in articulating the cultural space? When addressing ourselves to an architectonic praxis which sees no promise in the banality of individualism and which aspires to refrain from falling into the indifferent imitation, these question are not unimportant.

What was it, for example, that created the "Chicago school" and how did the Baroque's form idiom come to propagate itself across the entire Western cultural sphere? Of course, these questions cannot be answered exhaustively. But it is clear that Louis H. Sullivan's slogan, "Form must follow function", was an idea that opened new perspectives and demonstrated its carrying capacity in many of the architects' solutions for the technically demanding skyscraper construction going on in the Chicago area at the end of the twentieth century<sup>9</sup>.

Presumably, it was also the case around the year 1538, when Michelangelo gave form to the Capitol Plaza in Rome, that he pointed out – in a specific adaptation of columns, pilasters, cornices, floors and stairways – how a plastic corporeality could be woven into an abstract geometry characterized by spatial tension, with the resulting effect that the corporeal coherent space extended itself visually and mentally beyond its own borders<sup>10</sup>.

The folding of corporeal and spiritual dimensions, which stands forward as a prominent possibility in Michelangelo's work, would come to reveal itself as a crystallization point for the major currents in European culture in the following centuries, which became the Baroque era.

In other words, a school, a style, a navigable architectonic path is opened up with the solution of an architectonic problem – with the solution to a general problem, which we didn't even know was a problem for architecture up until that time or furthermore, which, until the solution presented itself, had not even been formulated as a possibility in the culture.

The broad inter-subjective exposition of the elements of content in an architectonic question is communicated by pointing toward the answer. Along the way, in this process, experimentation plays a central role. And throughout the course of the architectural profession's history, experimentation as a bearing element in a persevering praxis has shown itself to be one of the fruitful paths forward.

translated by DAN A. MARMORSTEIN.

## Notes

- I. Aldo Rossi, *A Scientific Autobiography*, Oppositions Books, The MIT Press 1981
- 2. Umberto Eco: "The Poetics of the Open Work", pp. 1–23 in *The Open Work*, translated by Anna Cancogni, with an introduction by David Robey. Hutchinson, Radius (UK), President and Fellows of Harvard College (USA) 1989.
- 3. Rafael Moneo, *Theoretical Anxiety and Design Strategies*, The MIT Press 2004, p. 129
- 4. Louis I. Kahn, *In the Realm of Architecture*, Rizzoli 1997, p. 443
- See, for example, Edmund N. Bacon, *Design of Cities*, Thames & Hudson 1974, pp. 88–91
- 6. W. Boesiger and Ĥ. Girsberger, *Le Corbusier 1910–65*, Verlag für Architektur 1967, p. 350
- 7. Kenneth Frampton, *Modern architecture, a critical history*, Thames & Hudson 2002, pp. 254–55
- See, for example, Josep Ma. Botey, Oscar Niemeyer, Editorial Gustavo Gili, 1996, pp. 28–31
- 9. *Kay Fiskers forelæsninger*, Formprincipper, Arkitektens Forlag 1999, pp. 45–52
- 10. Lars Marcussen, *Rummets arkitektur Arkitekturens rum*, Arkitektens Forlag 2002, pp. 312–18