STRUCTURALISM
in Architecture and Urban Planning
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Symposium
20-21 November 2009

Munich University of Applied Sciences
Department of Architecture
Karlstrasse 6
80333 Munich

Call for Papers

Originally developed in linguistics, the structuralist approach was introduced as a scientific method in anthropology and other human sciences in the 1950s and later. In the 1960s and 70s the double category of primary and secondary structure (langue and parole) that is essential to Structuralism, in which the primary structure's system of rules determines how the secondary elements are placed in relation to one another, also advanced to a leading ideology in the field of architecture and urban planning. From its development in Holland and within the Team 10 circle of architects, Structuralism in architecture quickly spread worldwide. Almost all the utopian movements of the 1960s can be related to Structuralism, and in retrospect many research projects and theoretical approaches from this period can be characterized as structuralist. Although initially aimed at developing more humane environmental structures for mass society, Structuralism in architecture was never able to liberate itself from the taint of seriality and monotony. The built examples were perceived as inhumane, as they often failed in terms of practical use. The lack of individuality and the determinism of the primary structure brought Structuralism the reproach of anti-humanism. In the late 1970s it lost its appeal as a leading ideology in architecture.

Since the early 1990s we have been witnessing a revival of structuralist tendencies in architecture. In a parallel development, interest in the utopian aspects of the structuralist currents of the 1960s has also increased. Whereas the Structuralism of the 1970s encountered limits in complexity that were insurmountable at the time, today there is much to suggest that the return to this apparently unfinished project is causally connected to information technology, which has opened up new possibilities for dealing with complexity. There is talk of Neo-Structuralism with a digital imprint. This differs in several critical points from the precursor of the 1960s. The new, computer-aided tools lead logically to new approaches and different results. We are confronted with an enormous increase of complexity in the primary structures: away from simple grids to complex, irregular structures, with algorithmic design far exceeding the horizons of the old Structuralism. The question arises as to whether primary and secondary structures should be understood today as being in a state of complex interactions with one another which could be described through algorithms.

Today's digital Structuralism will probably only be able to bring us closer to the solution of the still unresolved issue of housing a mass society while simultaneously respecting man's individuality if there is also a utopian synthesis of all relevant aspects, including psychological, social and socio-political. The question of the

sustainability of the structuralist approach in the future will probably boil down to whether its humanization (its individuation) will be sought within the system (i.e., in the course of perfecting the numerical-technological mastery of the complexities), or whether system-independent, individual or even irrational elements can be drawn upon for solving the problem.

In order to do justice to the broad spectrum and the heterogeneity of the problem, the symposium will be organized into five thematic sections. We invite you to submit contributions to the following or similar themes from the perspective of Structuralism:

1. **Review, Context, Outlook**
   Origin, definition and perspectives of Structuralism in architecture
   - Why Holland in particular?
   - Cross references and (reciprocal) effects of Structuralism in the humanities and in architecture and urban planning
   - Developments in Structuralism in other fields with relevance to architecture
   - Definitions of Structuralism in architecture and urban planning
   - Post-Structuralism and/or the Postmodern in architecture and the humanities
   - Structuralism in crisis or superseded?
   - Approaches for "humanizing" Structuralism
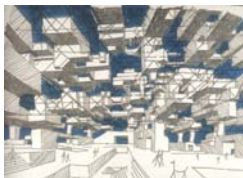
2. **Structuralism and Utopia**
   Structuralist phenomena and tendencies in the 1960s
   - Structuralist approaches in the utopias of the 1960s
   - 3-D cities, 3-D tree structures, terraced apartment blocks
   - Mega-structures
   - Modularity as design and construction principle
   - Industrial prefabrication, *Plattenbau*
   - Normative systems, numerical objectification of the design process
   - Typologies, designing with patterns
   - Individuation, user participation, participatory building
   - Flexibility, neutrality of use, growing and shrinking
   - Self-generating structures

3. **Carpet developments, etc.**
   Old and new structuralist variations in urban planning
   - Carpet developments, mat buildings
   - "Flying carpets," elevated carpet developments
   - Layers, superimpositions
   - 2-D tree structures, stem buildings
   - Pixel urban planning

4. Structuralism Reloaded
Neo-Structuralism with a digital imprint since the 1990s
- "Constructing the town upon the town," 1995 Europan 4 competition
- New / old Structuralism in Holland – continuity or new beginning?
- What have we learned since the 1960s?
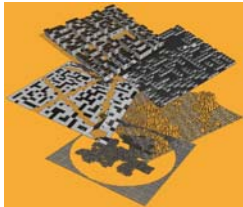
5. Algorithmic Designing
and self-organizing structural systems
- Modeling and simulation in architecture and urban planning (designing of algorithms)
- Structuralism and self-generative design (e.g., cellular automata)
- Structures of architectonic languages (shape grammars)
- Non-linear, evolutionary processes in architecture and urban planning (evolutionary algorithms)
- Performance simulation (e.g., agent-based systems) for the evaluation of structures

Please propose contributions via e-mail (see address below) by 31 May 2009 and include abstract (2000 characters and spaces maximum) and a curriculum vita in German or English. Recipients of this announcement are asked to pass this call for papers on to colleagues and interested researchers and architects.

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