

The Tools of the Architect

EAHN Conference, TU DELFT and HNI



22-24 November 2017

The Tools of the Architect

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"The Tools of the Architect" by the Chair of Methods and Analysis
at the Faculty of Architecture and the Built Environment
of the Technical University in Delft, in collaboration with Het Nieuwe Instituut.
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Programme

Wednesday 22 November 2017

- 12:00 Registration | Orange Room
- 12:45 Opening words by Tom Avermaete, Merlijn Hurx | Orange Room
- 13:00 Keynote lecture by Mari Lending | Orange Room
- 14:00 Paper Sessions | Room K, Room E, Berlage Room
- 16:00 Coffee | Orange Room
- 16:30 Paper Sessions | Room K, Room E, Berlage Room
- 18:30 Reception | Orange Room

Thursday 23 November 2017

- 08:30 Registration | Orange Room
- 09:00 Paper Sessions | Room K, Room E, Berlage Room
- 11:00 Paper Sessions | Room K, Room E, Berlage Room
- 13:00 Bus transport to HNI, Rotterdam | Zuidplantsoen
- 13:45 Lunch at HNI | Het Nieuwe Café NHI
- 14:15 Paper sessions at HNI & Round Table | Auditorium, Room 1, Vijf Midden
- 16:15 Coffee and Visit to exhibitions at HNI
- 17:00 Keynote lecture at HNI by Michiel Riedijk
- 18:30 Conference dinner | Het Nieuwe Café NHI

Friday 24 November 2017

- 08:30 Registration | Orange Room
- 09:00 Paper Sessions | Room K, Room E, Berlage Room
- 11:00 Coffee | Orange Room
- 11:15 Paper Sessions | Room K, Room E, Berlage Room
- 13:15 Lunch | Berlage Room
- 14:00 Keynote lecture by Anthony Gerbino | Orange Room
- 15:00 Paper Sessions | Room K, Room E, Berlage Room
- 17:00 Plenary Concluding Session | Orange Room

The Tools of the Architect

Tom Avermaete, Merlijn Hurx

Architects have for their activities of drawing, writing and building always depended upon the potential of particular tools – ranging from practical instruments such as straight edges, French curves, compasses, rulers and pencils to conceptual apparatus such as working drawings, collages, photographic surveys, infographics, diagrams, casts and mass models. As technologies advanced the toolbox of architects has changed and expanded. Today architects have an extraordinary array of sophisticated tools at their disposal, nevertheless they still rely on many of the same tools as their 18th and 19th century peers. Working drawings, pencils and tracing paper continue to appear in the designer's studio while their role and potential is being redefined.

Time and time again, architects have engaged with new tools. The quest to find the most appropriate and adequate tools to articulate, test and communicate design ideas has never ended, and in this pursuit architects have appropriated tools from other disciplines, such as art, historiography, sociology, philosophy, computer sciences and engineering. Out of this perspective the tools of the architect have become a field of intense exploration of the encounter of architecture with other disciplinary perspectives.

Inventions and innovations of tools throughout history have not only provided better answers to questions of analysing and representing the built environment, but they have also pointed to new ways of conceiving and intervening in the built environment. Ellipsographs made it possible to precisely draw an elliptical space in the 19th century and computer-aided drafting software has allowed for a new conception and construction of complex geometries in the 20th and 21st century, while augmented reality tools and BIM are likely to redefine communication between architect, builders, and client. New tools have continuously affected the imagination, character and qualities of architectural projects.

Generally the realm of architecture has held overly positive understandings of the roles that tools can fulfil. The architect's tools have been often understood as harbingers of change and transformation. They have been conceived as the very loci of innovation in the architectural field. The strong belief in the performativity of software programmes at the end of the 20th century and the enthusiasm about various forms of virtual and augmented reality at the beginning of the 21st century, are just the latest expressions of this firmly rooted belief into the inherent progressive qualities of the tools. At the same time the tools of the architect have also been perceived as pacifiers of new developments or even as obstructions to innovation. Many architects have been casted as retrograde because they did not, or not sufficiently rapidly, engage with revised or new tools.

The tools of the architect have also functioned as main elements for the definition of discriminative architectural positions. Architects have acted as early adopters of certain tools and thereby claimed an avant-garde position in architectural culture. At the same time some designers have persistently refuted the newest developments of

tools and thereby defined themselves as an exceptional *arrière-garde*. The choice of architects to work consistently with a particular tool has been looked upon as a marker of certain architectural sensibilities, linking for instance the use of pencils to a more phenomenological conception of architecture and the use of computer software to a more rational understanding, and vice-versa. Tools have also acted as discriminators with other professional groups. Hence, the watercolour pencils of the architect have distanced him from the engineer, who shared the knowledge of the technical pen with the architect but not that of the artistic painting tool.

Tools have also functioned as discriminative elements that not only differentiate between various architectural practices, but also regulate the access to the profession. Knowing how to operate a particular box of instruments or conceptual tools has been a main prerequisite to be part of the profession. To be able to handle the pencil or to steer the curve, was as much a requirement to enter the world of practice in former times, as the practical knowledge of particular drawing software programmes is in the present. Until recently, it was self-evident that an important architect also fully mastered the tools of the trade and that this capacity was one of the main distinguishing factors between the master and the apprentice. In the course of the 20th century an important transformation seems to have taken place, where some master architects –wholeheartedly or bitterly– came to strongly rely on younger generations of collaborators to handle some of the newest tools.

Against the background of the various functions of the tools of the architect, it comes as a surprise that only a small amount of studies exist that have profoundly engaged with their characteristics and role. Moreover, in the historiography of architecture there has to often been an understanding of tools as purely instrumental devices. Studies have identified the relation between a specific task and the use of a particular tool, but far less investigations have tried to understand the cultural dimension of the instruments and conceptual apparatus of the architect.

This conference wants to make a contribution to a more profound cultural investigation of the tools of the architect, understanding both their capacities and limits. Our ambition is to cast new scholarly light on the concrete and conceptual instruments of the architect, not only to nuance our architectural historiographies but also to reveal the importance of tools –in the past and the present– as central actors in architectural culture.

Wednesday 22 November 2017

16:30-18:30

Paper session 3

Treatises and manuals

Location: Berlage Room

Session Chair: Merlijn Hurx

Utrecht University

Planning Manuals as Tools for Modernization and Nation Building: The circulation of ideas through German-speaking architects and urban planners in Turkey, 1923-1950

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In the early 20th century, the modern movement triggered the international circulation of knowledge through architects and urban planners. One mode of this dissemination was the invitation of French- and German-speaking architects and urban planners to build modern cities in foreign countries. A notable example was the case of Turkey. Between 1923 and 1950, a number of German-speaking architects and urban planners had considerable impact on the country's built environment. During this period, German building manuals became tools for the dissemination of architectural ideas and consequently played a crucial role in modernization of the Turkish nation, founded in 1923. This paper investigates the function of the building manual in the process of nation building in the early republican period in Turkey. Through an analysis of key publications, including Camillo Sitte's *Der Städte-Bau nach seinen künstlerischen Grundsätzen*; Reinhard Baumeister's *Stadt-Erweiterungen in technischer, baupolizeilicher und wirtschaftlicher Beziehung*, Theodor Fischer's *Sechs Vorträge über Stadtbaukunst*, the paper offers an analysis of the key figures and ideas involved in this process, and the relationship between architectural and political ideals that emerged through the manuals.

The new Turkish Republic sought to establish itself as a modern nation that was distanced from the Ottoman Empire. The invitation of foreign experts to advise on the design and planning of Turkish cities was part of this modernization process: for example, Carl Christoph Lörcher was assigned to work on Ankara's plan in 1924, Herman Jansen's plan for Ankara came into effect in 1928. In addition to working directly with the government, these practitioners were also involved in the development of the Turkish architectural education system. Ernst Egli, for example, was assigned as a professor to Istanbul Fine Arts University in order to reshape the architecture programme. The influence of German architects continued during the Second World War. When the Nazis took power in 1933, a number of German professors began to work at the Turkish universities. German speaking professors also worked as practicing architects, such as Clemens Holzmeister, Martin Wagner, Hans Poelzig, Bruno Taut, Paul Bonatz, etc. These figures introduced key European ideas, including the *Siedlung* and the "Garden City", in written and built form which subsequently influenced the production of Turkish manuals, and thus influenced the construction of the modern nation.

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The circulation of the ideas during this construction has been seen in several directions. The architects and urban planners were invited by the government, so that they carried their knowledge which is under influence of Sitte, Baumeister, Howard etc. Sitte's 1889 dated book *Der Städtebau nach seinen Künstlerischen Grundsätzen* was translated in Turkish by Celal Esat Arseven in 1926; Kemali Soylemezoglu translated the lectures of Theodor Fischer *Sechs Vorträge über Stadtbaukunst* (1919) in 1941, 1942 and 1945 in the Turkish magazine called "Arkitekt".

Acknowledgements

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EAHN

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