10 snapshots of Architectural Education

Architecture at the Swiss federal institute of Technology from 1855 to 1987

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Abstract

Architecture is an inherent part of every society. It is an indicator of political, economic, technological and cultural conditions, as well as their changes. The built environment is constantly changing, generating new paradoxes, and the role of the architect, too, is subject to continuous re-formation. Along ten photographic snapshots found in institutional and private archives, and with the support of extended captions, this visual essay aims to provide an incomplete overview of the multifaceted teaching environment at the Swiss Federal Institute of Technology (ETH) in Zurich, from the mid nineteenth to the late twentieth century. The presented snapshots of architectural educators and their respective design studios reveal a variety of design methodologies and didactic structures that shaped the school over the course of more than a century.

1855

Throughout his teaching career, Gottfried Semper (1803–1879) was involved in the development of curricula. In Dresden, London, and finally at the newly founded "Polytechnikum" in Zurich, he obtained a leading role in the reorganization and formation of the respective architecture schools. Not only was Semper ETH's first dean of the architecture faculty, he was also its first and only professor with a student body of nine pupils in 1855. At the time, the course of studies was limited to three years, the first two of which were mainly dedicated to mathematical-technical matters, while only the last year was dedicated to architectural design. Semper, wished to extend the studies in order to give design a more dominant role. He consequently structured the curriculum so that propaedeutic subjects would be taught in the morning, and lectures on architectural history would take place in the evenings, liberating the core of the day for actual studio work including perspectival drawing, figuration, landscape design, and the creation of ornamentation. The projects developed in Semper's atelier were mostly based on current architectural competitions or on actual commissions, taking advantage of the student work force. During Semper's tenure, the architecture faculty developed to a school of more than fifty students, and with his design for the main building of the ETH, he managed to impose what he considered the ideal plan for an architecture school to the entire institution. The picture shows the class on one of the yearly field trips within Switzerland, Semper's preference being the south, bordering Italy.

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Note: Martin Tschanz is currently working on a detailed history of the Architecture Faculty at ETH Zurich.

IMAGE CREDIT: gta Archives / ETH Zürich

1915

When Karl Moser (1860–1936) was appointed to ETH Zurich in 1915, he could look back to a successful career as a practicing architect. From 1888 to 1915, he collaborated with Robert Curjel in Karlsruhe, Germany, building a great number of churches, a train station, and, most notably, the main building of Zurich's University, as well as the Zurich Kunsthaus [Museum of Fine Arts]. Trained in Semper's tradition, Moser was about to form a whole generation of Swiss architects, when he began to teach during a time of national isolation due to the First World War. Interested in the fundamental principals of architecture, independent of a given formal vocabulary, the architect tried to introduce his pupils to the roots of architectural culture. The study of treatises of the Renaissance, and their further development in a classicist style was a central aspect of his curriculum. Next to the humanistic studies and design, construction processes and the actual structure and materialization of buildings were fundamental parts of Moser's curriculum. Already in his lifetime, Moser was considered to be part of the "fathers of modern architecture," an attribution he reached through his abstract, but never fundamental teaching pedagogy, which provided the foundation for the Swiss contribution to the architecture culture of the 1920s. In this role, Karl Moser served as the first President of the Congrès Internationaux d'Architecture Moderne (CIAM).

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Ernst Strebel, "Die Architekten Curjel & Moser und die offizielle Schweizer Architekturlehre um 1900," in: Uri Robert Kaufmann (ed.), Die Schweiz und der Deutsche Südwesten, Ostfildern: Jan Thorbecke Verlag, 2006, p. 123–139. There is an ongoing research project at the Institute for the History and Theory of Architecture at ETH Zèrich, dealing with the oeuvre of Karl Moser.

IMAGE CREDIT:

gta Archives / ETH Zürich

1929

When the call of ETH Zurich reached Otto Rudolf Salvisberg (1882–1940) in 1928, he was successfully practicing in Berlin. It took some effort from the president of the school to convince the well-known practitioner to give up his office in order to teach. Salvisberg was among the first to argue that young architects needed to be prepared to enter architectural practice and thus demanded the school to assure him commissions, so theory and practice could further each other. His lectures were organized according to building typologies, such as apartment buildings, banks, hotels, cinemas, or larger residential compounds. Even though Salvisberg was critical about the most recent achievements of Le Corbusier or Frank Lloyd Wright a sharp dialectic was not part of his approach to teaching. Rather than disseminating ideologies, demanding students to copy particular building styles, he practiced tolerance and believed in the didactic system of trial and error. The openness of Salvisberg's approach was expressed through his presence in the design studio, where he engaged with the design problem of every single student during extended desk critiques. Next to his intense teaching activities, Salvisberg became the corporate architect of the pharmaceutical company Hoffmann-La Roche with commissions both in Switzerland and abroad. An excursion to Belgium and the United Kingdom in order to visit his construction sites, and to study recent buildings was a positive synergy of this dual appointment. The photograph shows Salvisberg and his students from the ETH with Henry van de Velde, their local guide.

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IMAGE CREDIT:

gta Archives / ETH Zürich

1941

The architect Hans Hofmann (1897–1957) reached national fame through his central role as chief architect of the Swiss National Exhibition in 1939. This proved a decisive moment in the country's architectural development negotiating between the radicalism of the vanguard and a popular appeal to tradition. When Salvisberg unexpectedly passed away, the appointment of Hofmann seemed like an obvious step, given that he had received an honorary doctorate from the University of Zurich, and that he was extremely recognized throughout Switzerland. Beginning in 1941, Hofmann taught for sixteen years within the architecture faculty, mainly advanced students and thesis students. Together with William Dunkel and Friedrich Hess, he formed the core of a rather conservative architecture school, and eventually acted as its dean. The group around Hans Hofmann was tied to the tradition of the master class and focused on a studio-based exchange between professors and students. The architect hardly structured his classes with a systematic program or a particular methodological framework, nor did he encourage a critical discourse, as Werner Moser later observed. Structure, material, and the "aesthetic laws of harmony and proportion" were the guiding principles of Hofmann's teaching. He repeatedly stressed the importance of the individual student's "talent and passion," and his belief that architecture was a form of art—hence the German "Bau-Kunst"—that could not be taught like other subjects. Hofmann also continued the school's tradition of excursions, even if at first restricted to the borders of Switzerland due to the geopolitical situation.

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IMAGE CREDIT:

gta Archives / ETH Zürich

1954

The Swiss art historian and architecture critic Sigfried Giedion (1888–1968) was surprisingly never fully tenured at ETH Zurich. After returning from his successful stay in the United States as Harvard's Charles Eliot Norton Professor in Poetry and the subsequent publication of Space, Time and Architecture (1941), Giedion blatantly suggested to the President of the ETH to be hired as a professor at the polytechnic's architecture faculty in 1946. While there was hardly doubt about his qualifications—even if he never obtained a venia legendi [right to teach], which was still a precondition in Europe at the time—both the

architecture faculty and the department of humanities were unwilling to grant him a position. After long and grueling negotiations with the board of the ETH, Giedion was eventually allowed to teach a weekly one-hour seminar at the architecture school, against the will of the other faculty. When CIAM's president Josep Lluís Sert was appointed as dean of Harvard's Graduate School of Design in 1954, another door opened for Giedion. The secretary general of the organization was called to reintroduce a history course, and to participate in the creation of an Urban Design program in collaboration with Jaqueline Tyrwhitt, Eduard Sekler and Sert himself. From this moment on, Giedion was alternately teaching in the United States and in Switzerland. While close colleagues surrounded him at Harvard, the environment at ETH was less supportive. Marginalized within the faculty, he eventually turned into the spirtus rector of a selected group of students, which he considered rather as colleagues and equal interlocutors than pupils. Giedion's seminars on architecture and urbanism had a clear international focus, and many of the themes discussed were also on the agenda of the postwar conferences of the Congrès Internationaux d'Architecture Moderne (CIAM).

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The author is currently finalizing a dissertation on cultural exchange in the work of Sigfried Giedion between 1938 and 1968.

IMAGE CREDIT:

Courtesy of the Frances Loeb Library, Harvard Graduate School of Design

1958

Before engaging with the education of architects, Werner M. Moser (1896–1970) aimed to reform the didactic structure on a high-school level, propagating "Action Teaching," a practice oriented methodology that would foster the esthetic education of the general public. In 1951, Moser was called in by the president of the board of ETH, Hans Pallmann, to consult him in his intentions to restructure the department of architecture. The school was in desperate need for an educational reform when Hans Hofmann, William Dunkel, and Friedrich Hess, the triumvirate that had dominated the faculty for more than a decade, eventually retired. Moser was concerned with three major aspects related to architectural education: the position of Swiss architecture worldwide, the relationship between professors and students, and the qualifications of the faculty. The issues outlined by Karl Moser's son set the basis for the changes that were long awaited not only by a small circle within the architecture faculty, but also by the two leading associations of Swiss architects. Moser was eventually hired as a professor, together with a group of other younger faculty that practically doubled the number of design studios at the school. As Moser suggested in his negotiations with the president, the course of studies was extended to eight semesters, beginning with a foundational course, and concluding with a semester of planning. From visiting professorships, to an institute for urban and regional planning to the first postgraduate studies, many of the institutions that seem so self-evident today were introduced at the time. Moser, a dedicated educator, had to realize that it increasingly became more difficult to stretch between his duties in the academy and his collaborative practice with Max Ernst Haefeli and Rudolf Steiger (known as HMS) and eventually resigned from teaching in 1963.

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IMAGE CREDIT:

gta Archives / ETH Zürich

1960

Bernhard Hoesli (1923–1984) was appointed to ETH in 1960 to teach the foundational design course [Grundkurs], when the department of architecture was about to witness a significant generational change. Hoesli's journey as an architectural educator began in 1954, when he joined the young and energetic faculty at the University of Texas at Austin. The group that eventually became known as the "Texas Rangers" included the architectural historian and theorist Colin Rowe, the painters Robert Slutzky and Lee Hirsche, and the architect John Hejduk. Over the course of only five years, they managed to establish a didactic experiment guided by the principles of transparency and collage. It was on the one hand a profound reaction to the Bauhaus approach that had become a widespread model in the American academy due to its success at Harvard's GSD, on the other hand it aimed to abolish the last decadent remnants of the long-lasting Beaux-Arts tradition. At the end of the

1950s, Hoesli returned to Switzerland equipped with the methodological and didactic tools that would also shape his teaching at the ETH. In his design studio, Hoesli assigned daily exercises that clearly outlined a design problem, defined particular requirements, stated the learning objectives, and provided the methods and principles to be applied. The critical analysis and notation of masterworks of modern architecture based on diagrams, interpretative drawings, and conceptual models were Hoesli's preferred method to teach the interrelation of spatial, organizational, and formal aspects of architecture. Based on his American experiences, and in opposition to a majority of his colleagues, Hoesli fostered a studio atmosphere that diffused hierarchic structures, encouraged a more personal exchange between faculty and students, and by means of frequent informal pin-ups and reviews, he facilitated a healthy level of critique and an intensified discourse.

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IMAGE CREDIT:

Courtesy of Luca Maraini, Baden

1971

Just a month after, and most likely triggered by the 1968 student riots in Paris, students and lecturers at ETH Zurich got together to discuss overdue changes in the curriculum and the future role of the architect. A consequence of these developments, sociologist Lucius Burckhardt (1925–2003), editor-in-chief of the Swiss architecture journal Das Werk from 1962 to 1972, established an experimental studio called "Lehrcanapé" [teaching couch] in 1970 with the aim to foster cross-disciplinary collaborations. This three-year experiment, co-taught between the sociologist and two colleagues from architecture, Rolf Gutmann (1926–2002) and Rainer Senn (1932–), placed a strong emphasis on the socio-political and cultural dimensions of architecture and urbanism. Very much in the spirit of the time, students were asked to frame their own design problem, which was tackled according to a given methodology. From a thorough socioeconomic analysis, to the absorption of political realities of planning, to the enhancement of cognition, to methods of communication and documentation, Burckhardt encouraged his students to capture the challenges of contemporary society—and thus architecture—in a larger coherence. Through his sharp observations and critical analyses, Burckhardt not only offered an alternative to the predominant studios offered at the ETH, but fundamentally influenced the teaching practice of planning, and has offered a new understanding of the architect's role in the contemporary urban environment.

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IMAGE CREDIT:

Courtesy of Annemarie Burckhardt, Basel

1972

Bringing Aldo Rossi (1931–1997) to the ETH was not an easy task. Not that he was disinterested, but the board of the school was skeptical about Rossi's role during the student riots in Milan, where he taught at the time. As opposed to the apprehensions of the board of the school, who considered Rossi to be a communist, the architect taught "solid architecture," based on an archaic practice of drawing. Rossi's design studio at ETH, which he taught from 1972 to 1974 encouraged his students—among them Jacques Herzog, Pierre de Meuron, and Marcel Meili—to engage with contemporary society and culture in relation to the city.
This led to Rossi introducing the study and design of housing as a vessel to study these contextual factors. The architect confronted his students with a threefold design methodology based on analysis, idea, and the actual design process, steps that he considered a logical development of architectural design. The systematic analysis of the city—also described as the "reading of the city"—which became a central aspect of Rossi's design pedagogy, providing students with a rational foundation for the design process, was introduced in the 1950s in Venice by Italian architect Saverio Muratori. Based on typo-morphological principles, Rossi and his students prepared a meticulously detailed drawing of the street level of Zurich's core town, negotiating the scales of an individual building and that of the city.

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Pia Simmendinger is currently preparing a dissertation on Aldo Rossi's teaching activities at ETH.

IMAGE CREDIT:

gta Archives / ETH Zürich

1987

An exhibition entitled "Analoge Architekur" [analogous architecture] held at a small architecture gallery in Zurich officially launched a new architectural tendency that had emerged four years previously under the auspices of Miroslav Sik (1953–) at the chair of Fabio Reinhart (1942) at ETH Zurich. It was the first serious consolidation of forces, the first "school" within the architecture department since Aldo Rossi's departure in the mid 1970s. A counter reaction to the radical experiment of modernist abstraction, "analogous architecture" was meant to synthesize common realities. Longing for "architectural realities," this confirmed group aimed to create atmospheres, celebrating and intensifying existing structures by means of large-scale hand colored renderings, dominated by dull, yet soft shades, depicting organic materials such as wood and stone instead of synthetic materials like concrete and steel. A reaction to the predominant tendencies of the time, the "analogous group" rejected the citation of particular building styles, skillfully reassembling and synthesizing intelligible and ostensive forms of existing structures to new "atmospheric," and quite often rather monumental designs. As the show, based on meticulously detailed models, over size renderings, and a prosaic set of drawings, suggests, students were encouraged to work in an environment that would approach the reality of architectural practice as close as possible. m

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IMAGE CREDIT:

Reto Geiser