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## BUILDINGS AS EDUCATORS. FROM KARL FRIEDRICH SCHINKEL TO REM KOOLHAAS

→ MARCO BIRAGHI, ORSINA SIMONA PIERINI

Both a functional and a symbolic intent can be seen in the project for the Bauakademie of Berlin developed by Karl Friedrich Schinkel in 1831: a dual message aimed in particular at the students and teachers of the Academy of Architecture, which they were supposed to read on the four identical facades of the building. First, the clear reticular structure with pillars and horizontal cornices, with brick infill, permitting the creation of large three-part windows, ideal for the placement of the drawing rooms, the library and the model collections; second, a detailed iconographic program (in bas relief and sculpted) with unabashedly pedagogical aims: an «illustrated Bible of the architect» as Friedrich Adler, a student of Schinkel called it. A program in which the portraits (among others) of Vitruvius, Erwin von Steinbach, Filippo Brunelleschi, Leon Battista Alberti, Donato Bramante, Andrea Palladio are placed alongside allegorical figures representing virtues connected with the practice of architecture (including Daring, Calculation, Success), the tools of the trade and building techniques, as well as a very condensed history of architecture, from the decadence of classical antiquity to the rise of the Gothic. In both cases, what Schinkel feels he should offer to the users of the Bauakademie is an understanding of architecture through direct observation of the building: a lesson that is simultaneously constructive and narrative, conveyed by the building itself.

Furthermore, the Bauakademie was the last building made by Schinkel in the center of Berlin, the last segment of a system of visual relations between independent urban blocks composed of his previous buildings, the Neue Wache, the Schauspielhaus and the Altes Museum, all marked by compact volumes. The architecture lesson is thus completed with the modernity of the urban design by parts of his "Acropolis" on the Spree, where the cube without a main facade and by now without orders opens the history of construction to a new language.

While architecture often has an explicitly educational intent, this would seem to be even more pertinent in the case of buildings for the teaching of architecture. Actually, among the many architecture schools designed and built over the course of about two centuries, only a limited number seem to embody a stated, conscious will to assert pedagogical principles; principles that when they are present, take on increasingly three-dimensional, rather than simply figurative, form over time.

Thus if the Eidgenössische
Technische Hochschule (previously
Eidgenössisches Polytechnikum)
in Zurich, built from 1858 to
1868 with a design by Gottfried
Semper, while also displaying a
humanistic program of decorations
on the northern facade, shifts the
second "focus" of its teaching action
inside, in the structuring of the
educational spaces (responding to

Semper's conception of integration between technical-scientific, practical-artistic and theoreticalhumanist disciplines, and culminating in the role assigned to the ateliers, composed of students of all ages), with the Bauhaus Hochschule für Gestaltung of Dessau the process of spatialization of architectural pedagogy is fully accomplished. The building speaks with extraordinary efficacy and clarity of the fundamental concept formulated by Walter Gropius on a theoretical level in the Program of 1919 («The Bauhaus sets out to gather in unity every form of artistic creation, to reunite in a new architecture, as its inseparable parts, all the practical-artistic disciplines: sculpture, painting, applied art, crafts») and visually expressed in the woodcut by Lyonel Feininger, Kathedrale, which accompanies it: it is the idea of "unity in diversity," of "active collaboration" between the various components of the school that give the building its form, just as the students would be "formed" during the three years of theoretical and practical teachings. The difference between the purposes of the building, from this standpoint, finds precise correspondence in the treatment of the facades (entirely glazed, horizontally crossed by long ribbon windows, or cut by vertical openings), though the internal spaces are the most important point of its application. The workshops, the auditorium, the rooms of the students are produced

by the cooperation between «forces of different directions» and, at the same time, the experience of that cooperation, which students and teachers could have directly in each moment of the time they spent in the building.

Regarding the Bauhaus, Giulio Carlo Argan spoke of «formal pedagogy,» which should be seen in the wider sense, as the attempt by Gropius and the other teachers to give each object, whatever its size or function, a "demonstrative" character in the perspective of correct education; and this is even more true in the case of the building in Dessau, designed by the director of the school in collaboration with the young students Carl Fieger and Ernst Neufert. Here - as Argan points out - the space is «constructive»: i.e., it is not simply a constructed space, but one with intention, a space possessed in the deepest sense of the term: desired space. It is the same design, though expressed in different forms and materials, that can be seen in the Pädagogisches Skizzenbuch of Paul Klee, developed inside the course he taught on Theory of Form, and in the exercises suggested by Josef Albers for the preliminary course on structures of folded paper. The teaching of the Bauhaus, summed up in the famous program of concentric circles, thus seems to have a tangible counterpart though different in terms of form and organization - in the "pinwheel" layout of the building at Dessau.

★ K. F. Schinkel, Sammlung Architektonischer Entwürfe, Bauakademie, Berlin, 1831, facade.
 → G. Semper, Main building, ETH Zürich, c. 1859, view from Southwest @ gta Archiv, ETH Zürich.









→ W. Gropius, Bauhaus, Dessau, 1925–26, exterior view @ Erich Consemüller.

M. Bill, Hochschule für Gestaltung, Ulm, 1953-55, exterior view @ Georg Aerni.

1

As we know, the Bauhaus - and in particular its research on form and materials - had and still has great influence in the teaching of architecture; its overseas interpretation, consolidated with the emigration to America of key figures like Gropius, Mies van de Rohe and Albers, led to various takes on its principles at Harvard or in Chicago; just as Josef Albers, first a student and then a teacher in Weimar and Dessau, with his preparatory course on materials, opened the way for exchanges between very different artistic disciplines, like the music of John Cage, first at Black Mountain College and later at Yale. In Europe, in postwar Germany, the Bauhaus found continuity with Max Bill, founder of the Hochschule für Gestaltung in Ulm, a school that already in its name alludes to education that ranges wider than construction, an education on form. The building Bill designed and built in 1955, with his usual architectural understatement, has the objective of moral training, whose ultimate goal is "life as a work of art." No longer the artist as an exceptional figure, but a widespread, rigorous pursuit of formal consistency transmitted through an educational project for which the building is the metaphor. The diagram of the teaching program differs from the hierarchical figure of the concentric circles of the Bauhaus, aligning the alternation of technical and manual pursuits with the humanistic disciplines like philosophy, sociology or psychology,

introduced in this type of school for the first time.

At the opening of the building, with Walter Gropius on hand, Bill clearly stated: «It is decisive that the external form of the School correspond to its spirit and help to train the students.» And in fact the building is a concatenation of different modular, simple facilities, adapting to — rather than imposing themselves on — the terrain.

The "demonstration" of pure space conceived as unity is at the center of the pedagogical mission Ludwig Mies van der Rohe assigns to the S. R. Crown Hall (1950-56), the building originally made to house the College of Architecture, that of Urban and Regional Planning and the Institute of Design in the wider context of the design of the campus of the Illinois Institute of Technology in Chicago, a project that began in 1939. As a school of architecture, S. R. Crown Hall had to convey a message of particular clarity, which the German architect nevertheless brings out through a skillful crossing of ambiguity and refinement. To create a single large space inside, completely free of obstacles, 67 meters wide and 37 deep, Mies makes use of a steel exoskeleton already developed for previous projects but never before constructed: four trusses arranged as a bridge that have the function of supporting the flat roof. The clarity of the architectural "statement" of Mies is the reflection of the approach he believes the school should take in didactic

terms, while at the same time contributing to bring that approach into being. This correspondence is clearly evident in Mies's words: «Because we believe in a structural architecture, our program of studies is based on the structural aspect.» In like manner, his statement that «our buildings are suited to the educational program» should not be seen as a mere observation, but instead as a notation filled with meaning. In this "suitability" there is more than mere "adequacy": there is the sign of an educational intent expressed through design. In fact, Mies himself reveals his thinking in this regard: «If the students are surrounded by a building, or a group of buildings, that expresses the simple elements and basic principles of design, this environmental influence should be reflected in the research on basic principles conducted by the students.» The interior spaces of S. R. Crown Hall and the way Mies describes them are based on the same simplicity: «The structure has a single floor in steel and a basement. [...] The level of the hall is raised 6 feet above the ground, and this permits light and natural ventilation to enter the underground workshops. [...] The main hall [...] contains two large drawing areas on both sides of a central nucleus defined by low independent birch panels, which border the areas of the administration offices, a library and an exhibition space. In the basement there are studios and workshops of the Institute of Design,

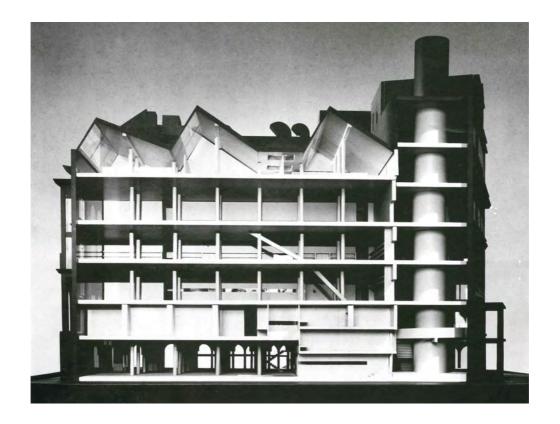
as well as a recreation area for students, restrooms and the machine room.» The terse character of this apparently only "informative" sequence contains the essence of the school of architecture of IIT in Chicago: an essence that cannot help but be displayed in the precise and almost "natural" concatenation of the spaces and functions, making it an elementary mechanism, an articulated but unitary complex. Nothing remains to be added, nothing is left to demonstrate.

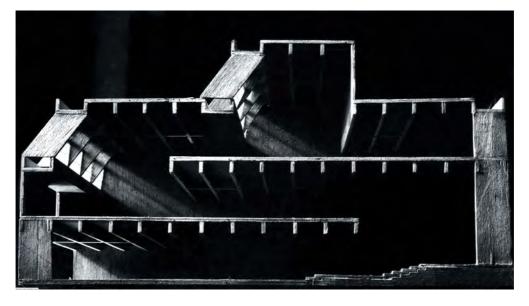
The School of Architecture (1958-64) of Yale University in New Haven is organized around a central courtyard, with different uses at different levels, bordered by four vigorous pillars with a rectangular base. In keeping with the architectural principles pursued by Paul Rudolph, the facility (formerly the Art and Architecture Building) is conceived as a single spatially complex block, where the interlocking, layering and interaction of the spaces corresponds to his idea of three-dimensional design, which not by chance finds its best illustration in the perspective section. An intense dialectic between material (massive, rugged, brutal, "rusticated," obtained by hammering the surface of the concrete in slim vertical lines) and space (continuous, expanded, horizontal, but also a medium of connection between outside and inside, above and below) dominates, generating an unpredictable alternation of density and emptiness. The result is a three-dimensional labyrinth with an

P. Rudolph, Art and Architecture Building, Yale University, New Haven, 1958-64, the design studios @ Ezra Stoller. L. Mies van der Rohe, S. R. Crown Hall, Chicago, IIT, 1950–56, interior view @ Tom Harris @ Hedrich Blessing. 1 1









→ J. Hejduk, Renovation of the Foundation Building, Cooper Union, New York, c. 1971, model.

B. V. Doshi, Faculty of Architecture, Cept University, Ahmedabad, 1972-77, model @ Vastu Shilpa Foundation. 1

almost Piranesian tone, inside which to position not only the collective functions like the auditorium, the library and the exhibition space, but also the spatial and didactic units — open yet clearly identified — of the design studios.

But there is another teaching that at least in the view of his contemporaries, at the start of the 1960s, was supposed to emerge with physical clarity from the School of Architecture of Yale University, bordering on provocation or even on scandal: its proud rejection of the "neutralization" of form in much of modern architecture, in favor of its "brutal" reassertion. Against the regularity, transparency and "clarity" of the International Style, the informality of Rudolph Hall presents itself as a new urban value: the three-dimensional image of a dynamic centrality, an "organized chaos" that avoids any facile correspondence, any immediate legibility.

The two schools — that of Mies and that of Rudolph — clearly represent two very different positions of a shared pursuit, that of architectural space: the large unified space of S. R. Crown Hall corresponds to one of the few synthetic points on which Mies relies for the educational program of IIT in 1944: «the structure as an architectural factor: its possibilities and limitations; space as an architectural problem; proportion as a means of architectural expression; the expression value of materials;

painting and sculpture in their relationship to architecture.» While Mies's research on materials is well known, like his focus on proportions and his figurative background, what is striking in this project is actually the word space. The large unified void of S. R. Crown Hall as opposed to the plurality and transverse character of the spaces Rudolph deploys in many of his buildings, and particularly in the School of Architecture of Yale, where they are forcefully accentuated, also through the famous perspective section.

Observing these works today, one might have doubts regarding the results of the brusquely "unitary" approach of Mies, and understand better what happened, by reaction, in smaller schools outside the main circuits, such as that of Austin, Texas. Here Colin Rowe, Robert Slutkzy and John Hejduk - the Texas Rangers - had an opportunity to reinterpret certain avant-garde themes, setting up the well known exercise on the Nine Square Grid, but above all initiating that precious refinement of thinking that attempted to recover the historical continuity of forms. It is no coincidence that the analysis of the works of the past, modern or ancient, is still one of the main characteristics of the working method of Cooper Union in New York, examined in a recent exhibition, Analysis as Design.

Hejduk taught at Cooper Union from 1964 to 2000, also preparing the project for the renovation of the existing building on Cooper Square.

The model and the photographs published in the book Mask of Medusa narrate a project that takes over the building with a few meaningful gestures: the "mask" of the double skin, certain rifts opened between spaces, but above all the assertion of an educational program that is embodied by the vertical section: on the ground floor there is an urban passage, a sort of covered street that brings the city into the building; this public space is faced by the library. Connecting a usually "internal" function of the school at street level brings out the meaning of teaching, for Hejduk: «Nothing is transmissible but thought.» Continuing to think in terms of section, we can also understand the didactic role of the placement between the school of architecture and that of art of a level devoted to materials workshops and another set aside for the work of the students, without separating different majors or years. It is in this "big studio" that the idea of exchange of knowledge as a pedagogical foundation finds fullest expression.

The Faculdade de Arquitetura e Urbanismo of the University of São Paulo, Brazil, built by João Batista Vilanova Artigas from 1961 to 1969, is again organized around a "unity of space" seen and offered as an ideal model of an architecture school, in terms of layout, perception and teaching. Conceived during the wave of progressive and reformist thinking connected to the presidency of Juscelino Kubitschek,

father of the great operation of Brasilia, the project for the FAU is the expression of the intention of Vilanova Artigas to make the school a place of complete integration of all its components, while making the students inside it into a true "social body." A fully "communist" idea of the school (or even Trotskyist), corresponding to Vilanova Artigas' position in the ranks of the Communist Party of Brazil, a position that was to lead, under the military regime that took over the country in 1964, to his removal from teaching posts and exile in Uruguay. The character of the FAU as a "manifesto" seems evident right from its external appearance: an imposing parallelepiped of 120 x70 m in brutally exposed reinforced concrete, supported by 14 perimeter pillars with a double-trapezium profile (which Artigas initially wanted to be painted gold) and four rows of 9 pillars each inside. But it is above all the organization of the interior space that gives the school its clearly recognizable character: starting from the fact that Vilanova Artigas programmatically excludes the use of any elements of separation or closure (partitions, doors) between the outside and the inside. The school is thus - emblematically and in practice - always open, with the added effect of causing free interchange of climate and environment. The architect (who took an active part in the curriculum planning of the FAU) associates this complete openness with fluid paths and spaces: through the sequence

of ramps placed at one of the ends, in fact, it is possible to reach all the parts of the building, visually embracing them. And while the conceptual and spatial focal point of the school is the large covered plaza faced by the two upper levels, lit by a skylight composed of a grid of truncated pyramids in reinforced concrete - a political space par excellence, which permits those belonging to the school to conduct a sort of auto-reconnaissance of their own collective identity - the spaces on the upper level are no less important, containing both traditional classrooms and an entirely open, continuous workshop space, free of interruptions. In the words of Vilanova Artigas regarding the FAU of São Paulo we can sense all the idealism and concreteness he wanted the building to convey: «This building reflects the sacred ideals of today: I have though of it as a spatial translation of democracy, in dignified spaces, without entrance doors, because I like to think of it as a temple in which all the activities are transparent.»

On many occasions, as we have seen, the designer of a school building has also played the fundamental role of preparing the institution's educational program, at times also acting as its director. The case of the school built by Balkrishna Doshi in Ahmedabad is a good example of this. The designer had worked with Le Corbusier and Kahn for their projects in India, always focusing

on the correct introduction of the ideas of the modern in continuity with local forms. Consistent with this, the building made by Doshi for the School of Architecture of the Centre for Environmental Planning and Technology of the University of Ahmedabad interprets certain stylemes of modernity in relation to natural elements of local origin. The construction is placed on the land leaving the relationship with the landscape open, in many places, which shapes its image. The system of the classrooms is crossed by the horizontal circulation: no classroom is completely closed, so there is ongoing indoor-outdoor exchange, between serving and served spaces, as Louis Kahn would have said.

In the case of the Faculdade de Arquitectura of the University of Porto, to define the main educational task of which the set of buildings is the expression, we can turn to the words written by Álvaro Siza, creator of the project built from 1985 to 1995, regarding architectural pedagogy in general: «No idea of opposition between landscape perception and construction of the land - and object - fragment of the land - has any place in the teaching of Architecture.» Placed on a lot in a raised position, parallel to the bank of the Douro River, the FAUP "constructs" - besides the one just mentioned - other didactic principles that are fundamental for Siza: first of all that of «putting into relation by designing.» The first case is that of the pavilion

named for Carlos Ramos (1985-86), on the eastern part of the campus, next to the old building of the rector's offices and a long, narrow construction, previously restored by Siza, used for drafting workshops. Designing the new pavilion, Siza's primary concern seems to have been the insertion of his building in the network of existing features: not from a formal standpoint, but in typological and topological terms. The distortions of the volume bent around an open courtyard on one side, in this sense, can be seen as "responses" to the situation of the terrain and the surrounding buildings, combined with the internal pressures of the program. The result is a simple and at the same time elaborate work of architecture, in which white plaster walls and glass walls form an irregular sequence, in a free citation of the purist language that has, however, abandoned orthogonal arrangements and unpredictably incorporates diagonal volumes and skewed clusters.

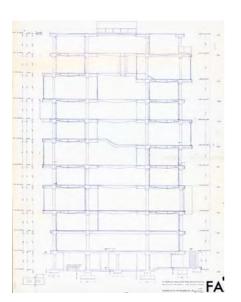
This attitude of correlating distinct and distant elements is further confirmed — and in the most silently striking of ways — in the buildings that starting in 1986 constitute the school of architecture itself. Starting from the opposite end of the triangular lot of the campus, after having crossed a small entrance pavilion with an eminently symbolic meaning, one enters a slightly graded circulation axis flanked by buildings that are separated from each other yet also closely connected:

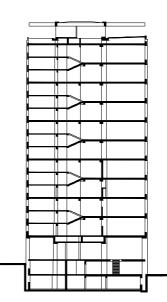
on the left, the cafeteria and the main building (in turn composed of "pieces" with different layouts and plans: the auditorium, the drafting rooms, the computer and seminar rooms, and the administrative offices in the first block, the semicircular exhibition space in the second, the library in the third); on the right, four box volumes connected by underground corridors, containing faculty offices on the ground floors, and rooms for drafting and teaching on the upper levels. Each block has similar characteristics, but resolved with different forms. In spite of the almost exclusive use of longitudinal windows, the closest reference might be the Moller and Müller houses by Adolf Loos, though here the lesson of the Viennese master takes an unexpected "turn": asymmetrical protrusions, declining volumes, encrustations of canopies, awnings and other overhangs. The "order" of the modern seems to be on the point of breakdown, but though it is put into crisis, it resists. In the space of the library a large "knife" of light cuts longitudinally across the space, updating the excellent exempla of Asplund in Stockholm and Aalto at Viipuri.

But it is above all in the open space surrounded by the buildings — a sort of plaza paved with porphyry blocks, with an oblong, irregular form — that Siza's project fully displays its didactic nature: it is precisely in this "void," in fact, that the FAUP encourages us to "stay," to take place; and it is likewise that "void" that is indicated as the school's

H. Scharoun and B. Hermkes, Faculty of Architecture, Berlin, 1963, section @ Architekturmuseum, Technische Universität.

- R. Gutbier, C. Siegel and G. Wilhelm, Kollegiengebäude 1, Universität Stuttgart, 1956–60, section. 1
- J. van den Broek and J. Bakema, Faculty of Architecture, TU, Delft ,1956-70, interior way © TU Delft, Collections and Productions. 1









→ J. B. Vilanova Artigas, FAU, São Paulo, 1961-69, view of the big court during a meeting of students © Raul Garcez

© Acervo João Batista Vilanova Artigas / FAUUSP.

"true center": a space from which to learn the eminently architectural art of composition of distinct elements, and unification of the multiple.

While the Brazilian and Portuguese buildings establish a relationship with the natural landscape, by contrast the universities built in Germany in the 1960s, especially in Stuttgart and Berlin, work on the vertical section of the urban block, developing upward. In continuity with the parallel experience of the residential "scissor" typology, these buildings are based on experimentation on vertical access spaces that widen to contain the real public space of the school, offering zones of exhibition and interaction between the various design workshops. These complex sections tend to create a close relationship, with an alternating system of slabs, also between different spaces and functions that are usually separate from one another. The building in Stuttgart develops a section in which a smaller vertical body, containing the departments, faces the two-story body of the classrooms, allowing the staircases to move between the different exhibition spaces of the levels. The building designed by Bernhard Hermkes in 1963 for the TU in Berlin is more complex: the classrooms face one side of the building or the other, achieving also in the plan that mingling of spaces to which the section alludes. The didactic character of the architectural design can be gleaned from the legend of the various

plans, from the role of the plastic arts and drafting to the theory of construction. The sharing triggered by the exhibitions and the reviews held in the communal spaces facing the staircases is consistent with the educational approach, calling for programming by year, with substantial interaction between teachers and research.

The same type of vertically developed complex section is found in the case of the building created for the TU in Delft by Van der Broek and Bakema, with a different groundlevel solution featuring a series of low buildings that contain the collective functions. The ideas of the residential city and that of public spaces these two building types represent are combined in the notion of the large "street" that formed the heart of the building, but are also the theoretical synthesis of the experimentation of the designers, active in those years inside Team X and in the debates on the critique of the modern city.

In 2008, after the destruction of the building by fire, and faced with the necessity of relocating the school in a nearby industrial building, the nucleus of the collective spaces was revised, and conceived like an urban street. In this sense, the two most significant interventions in the new facility, located in the spaces of an old factory faced in clinker, made forcefully explicit by a decisive change of the materials, are the conference room and a very large model workshop, placed symbolically

at the center of the building. While in the tradition of Italian architecture schools theoretical courses are taught by professors of architectural design, in the Dutch experience - comparable in this aspect to that of Spain - the separation between theory and design workshops is permitted by the importance assigned to the discipline of Composition, seen as a combination of theory and critique. The institutional character of the Escuela Técnica Superior de Arquitectura in Madrid, built during the years of the Republic, is still underlined today by the strongly hierarchical structure of the so-called faculty units of the design courses, which gather the activities of the various professors under a single chair, sharing collective theoretical lectures. The large corridors of the school occupied by students for their activities consolidate the thinking of Francisco Sáenz de Oiza, the wellknown teacher and architect who directed the school for many years: «This is the key to a good school: to prepare people, to continue to make them work on things, and in the end you know what a staircase or another element is, and you talk about it in the corridors, coming into contact with other students, with the atmosphere of the school, and a moment arrives in which you say: "this is a good building, this is Architecture, and this is not." Then you know how to distinguish, and you can go and build things! Because the corridors teach more

than anything else. Good students come out of a good school. Do you think integral calculus can teach something? No, what teaches is that sort of everyday battle, between what one student gives to another.»

In more recent years, architecture schools seem to have entered a new phase: with the "heroic" period of the foundations having ended for some time, and also the most innovative thrust - in both educational and architectural terms - that had characterized architectural education for a large portion of the 20th century, the architecture schools - like those of other disciplines - become primary a resource, to use with caution but at the same time to exploit. Thus a building like the Jockey Club Innovation Tower, home of the School of Design and of the Jockey Club Design Institute for Social Innovation at Hong Kong Polytechnic University, designed by Zaha Hadid Architects and built from 2007 to 2014, has the clear value of a three-dimensional "calling card" - outfitted with the usual curves and counter-curves - to attract students from every part of the world; while in other cases, more than "events" in themselves, university buildings become "event generators." As Bernard Tschumi writes regarding the École Nationale Supérieure d'Architecture de la Ville et des Territoires of Marne-la-Vallée (1994-99), «these structures are often condensers of the city. Through their programs, and through their

spatial qualities, they accelerate or intensify a cultural and social transformation that is already in progress.» In this sense the fulcrum of the École he designed is a vast sheltered central space conceived to host ceremonies and parties, encounters and debates, screenings and installations, but also exhibitions and serious academic congresses. In this way, the school becomes a plaza faced by the design ateliers, conveying an image of the school as «a place of communication and discussion.»

Ever more rarely, then, architecture schools choose the path of the mute example - seen as eloquent silence - to communicate their message. Among the few recent cases, there is the École Nationale Supérieure d'Architecture of Nancy (1993-95) by Livio Vacchini. The choice of prefabricated parts in reinforced concrete for the infill of the facades, and in general of standardized prefabrication for the entire construction, should not be seen only in terms of economy of timing and resources: the force and authority of the building have the value of a true architectural "program." More often, however, today's architecture schools represent a clever "mediation" between ideals and marketing. This is the case of Milstein Hall, the addition to the College for Architecture, Art and Planning of Cornell University, Ithaca, New York, created by Rem Koolhaas and Shohei Shigematsu for OMA from 2006 to 2011. Acting as an element of

connection between two of the four existing structures of the AAP of Cornell, the new building sets out to play a strategically emblematic role: not an iconic, isolated object, to be read as a mere "image," but a complex, programmatically "inbetween" object that projecting in an overhang connects the older buildings and becomes part of a system with them.

But perhaps more than any other it is the Strelka Institute for Media, Architecture and Design of Moscow that embodies the contemporary evolution of schools of architecture. Based on an educational and architectural project coordinated by Rem Koolhaas and Reinier de Graaf for AMO/OMA starting in 2009, the Strelka takes its cue from awareness of the fact that over the last thirty years architectural education has had trouble keeping the pace that globalization and the market economy have imposed on nearly all sector of society. Its didactic program, as a result, calls for the introduction of research as the essential foundation for architectural pedagogy. Guided by the principle of "thinking and doing," five groups of 40 students (with a stipend and lodging supplied by the school) are guided in their research by tutors with different backgrounds, from different disciplines (architects, sociologists, historians, theorists, art critics, political scientists, etc.). In the first year of its existence the school selected five themes of research, regarding questions of general

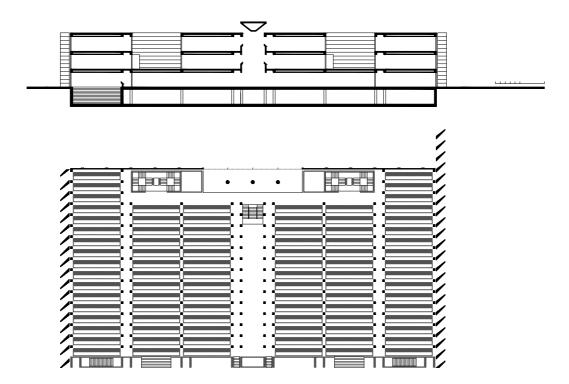
importance that at the same time are particularly urgent in Russia (design, energy, preservation, public space and "thinning"), each conducted by a tutor. Among the jobs of the tutors, they are asked to stimulate students to get in touch with specialists, academics from other institutes, directors of museums, but also people of various kinds, in Moscow or other cities in Russia, to track down materials and information on their assigned research topics.

The architecture school thus tends to intertwine with reality, more than ever before. Rather than theories or books, reality becomes the "basic text" from which to learn. And it is not without pertinence that in the heart of the Strelka Institute, located in the garage of the former Krasny Oktyabr (Red October) chocolate factory on Bolotny Island, on the banks of the Moskva, there is an open public space, a concrete courtyard faced by wooden stands, like a temporary theater: a gathering place for theater, lectures, events, workshops, recreation. A place from which a school of architecture can resemble the world that surrounds it.

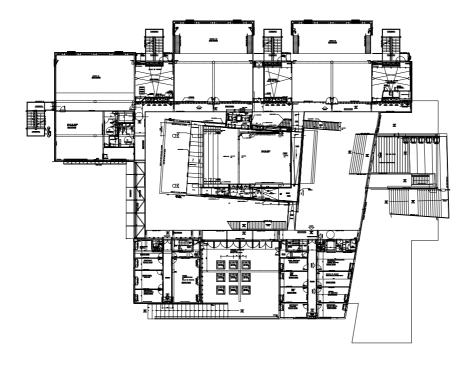
#### Note

The perspective sections shown in the exhibition were made by the architect Caterina Marra, who recently completed her doctoral thesis on the section as a tool of interpretation of relations between spaces. We have considered sections as the most meaningful representation to grasp the complexity of architecture schools, above all in those cases where the exchange of knowledge and expertise, and the communication between faculty and students, constitute the effective foundations of the school.

→ L. Vacchini, École Nationale Supérieure d'Architecture, Nancy, 1994-95, plan and section © Studio Vacchini architetti. Á. Siza, FAUP, Porto, 1985-95, view of the court between the buildings © Orsina Simona Pierini. 1









B. Tschumi, École Nationale Supérieure d'Architecture de la Ville et des Territoires,

Marne-la-Vallée, 1994-99, plan of the 1st floor © Bernard Tschumi Architects.

OMA, Strelka Institute for Media, Architecture and Design, Moscow, 2010-13, view of the court @ Sergey Leontiev.

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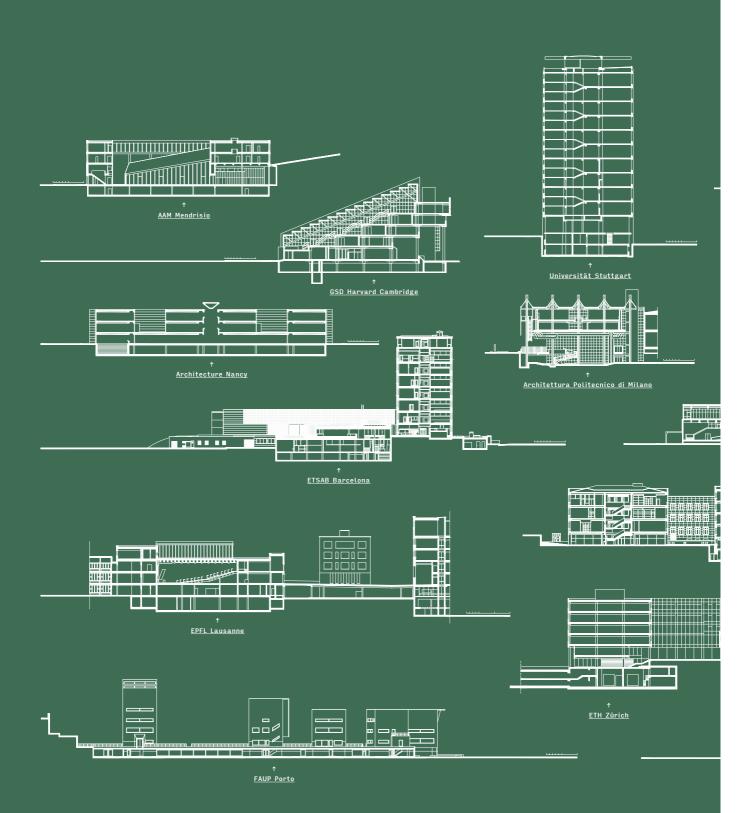
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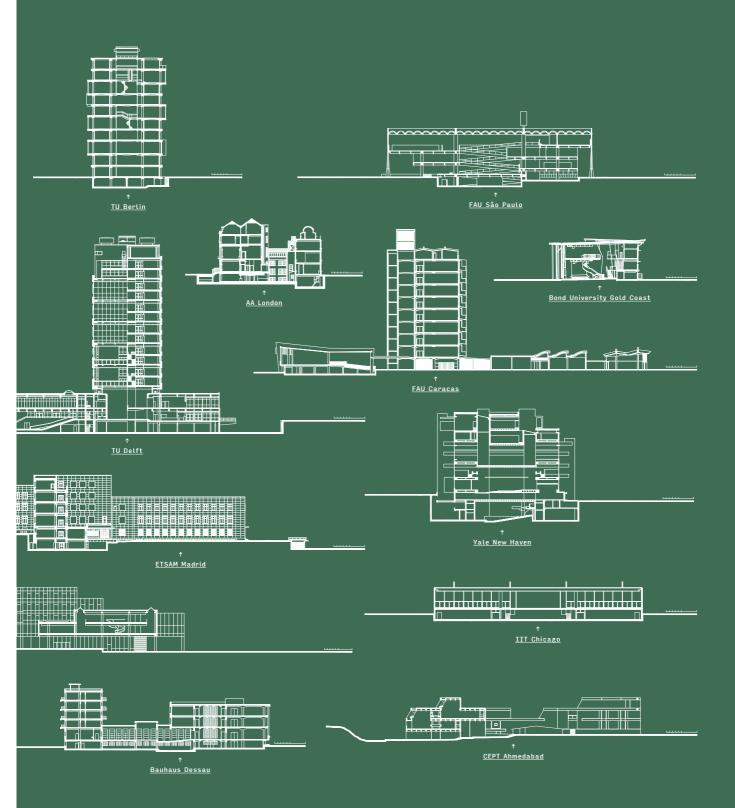
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