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Is it possible to teach how to design? What is the paradigm that encloses the theoretical and applicational-experiential spheres of the architectural discipline?

Architecture is a heteronomous discipline that finds its reasons in the hybridisation and contamination of different forms of knowledge. The training of the architect, as an intellectual and a technical professional, requires a deep and radical meditation on the foundations of educational programmes, the relevance of teaching models and learning tools. The Schools of Architecture represent the realm in which the student, in Louis I. Kahn's words, is called to meditate on whatever is exchanged and on its utility. As a place for the learning, experimentation and testing of the most advanced techniques and tools of a discipline, the institutions must necessarily open their cultural and educational project to a critical dialogue, with the prospect of expanding their horizons and international exchanges. The School, as the ultimate seat for the production and transformation of knowledge, aims at training skilled graduates in the conception, design, construction and management of architecture, who are capable of handling the complexity of design understood as a synthesis of skills. The polytechnic approach is the key for shaping recognisable and specific professional competences, at the same time complementary and synergic, within an evolving professional and production scene that requires skills and tools aimed at networking, flexibility and dealing with change in the contemporary world. The dialogue between two brilliant institutions in the European context, sharing a polytechnic approach, the School of Architecture Urban Planning Construction Engineering of the Politecnico di Milano (AUIC) and the Escuela Técnica Superior de Arquitectura of the Universidad Politécnica de Madrid (ETSAM) provides an opportunity for meditation aimed at triggering an active and productive discussion about the methods and tools of teaching architecture.

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milio Faroldi | Maria Pilar \

TEACHING ARCHITECTURE
TWO SCHOOLS IN DIALOGUE

edited by Emilio Faroldi Maria Pilar Vettori

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IGNACIO VICENS Y HUALDE





«The process is mutual; for men learn while they teach».

Seneca

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TEACHING DESIGN: TRAINING, THEORY AND RESEARCH

Gennaro Postiglione, Alessandro Rocca

Master's Degree is an educational programme basically founded on the integration of two training goals. One is the completion and enhancement of the basic knowledge acquired during the Bachelor's Degree. Indeed, we should not forget that the programme targets architecture graduate students and that a graduate in other, albeit related, disciplines is hardly likely to possess an adequate technical and cultural background. In fact, the Programme requires that all the basic competences – and here we mainly refer to design tools – are in place and available in order to address more complex issues with an increasing level of cultural and technical awareness.

Such goal is basically the full command of design skills and, therefore, preparing the student to enter the labour market. On the other hand, although we consider the professional practice of architectural design as the preferential achievement for our students, the Programme should not address professional requirements exclusively and additionally develop a dialectic relationship with the labour market even by accepting conflicts and differing views. The labour market has its own logics and rules – it also relies on field-proven expertise and develops its own top-quality standards and all those clichés, beliefs, habits, fetishes and simplifications that are required for the construction of an understandable and socially shared cultural palimpsest. The cultural background offered in an academic context should undoubtedly address the requirements of the market but, at the same time, develop renewed professional profiles equipped with the skills and sensibility required by the changes and challenges of our time and, if possible, even prepared to address the unknown factors of the near future.

In this sense, – this is the second goal – master-level university teaching should propose, in terms of design tools and goals, a new, avant-garde experience based on

experimentation, meditation and theoretical and practical critique. In other words, the priority we pursue, through the structure and spirit of the Programme, is the renewal of the architect's profile. An architect should be more than a responsible technical professional, and rather act as an intellectual who critically and creatively interprets the stimuli and constraints of the world he works in. This is a typical, as well as important and controversial heritage of Italian culture that, over the last decades, produced both a number of international-level personalities and sometimes fruitless and hopelessly marginal intellectualistic and academic deviations.

Therefore, our aspiration is preserving and updating the most positive aspects of such heritage, namely the tendency towards a complex and theoretically articulated approach to the design activity. In this way, we will be able to keep on exercising and producing a specific quality that is widely recognised abroad as a peculiar contribution and that we consider as a strategic asset of Italian university education that should keep on growing and developing.

Therefore, if the Bachelor's Degree addresses the grammar and syntax of architectural composition, the Master's Degree implies a further development of such skills and, at the same time, represents a fundamentally different phase when "research through design" comes into play. Indeed the dimension of research intervenes in the activity of the Design Workshop as an essential component of the learning-by-doing process.

Similarly, the typically professional dimension of problem-solving – understandably at the core of most design experiences during the Bachelor's Degree – is complemented by the questioning of problems, the unfolding and reformulation of programmes, the multi-scalar and multi-disciplinary reading of contexts, thereby making original choices, in a technical and culture sense, and by expressing consciously oriented points of view towards the complexity of reality.



Architectural and Urban Design Workshop, Prof. Alessandro Rocca, AUIC School, Politecnico di Milano 2019.

The introduction of the "research" factor in certain ways also refers to our hybrid position compared to the educational systems adopted in other countries. For example, in the Anglo-Saxon world, there are two different types of Master's Degrees – the *Master of Architecture*, which targets professional training, and the *Master of Science*, which focuses, instead, on the cultural and academic dimension. Following an established tradition in Italy, our Master's Degree combines these two options and relies on the merging and mutual interaction of the cultural and professional orientations, with a coexistence that aims at training a

complete architect who can pursue a career in a range of different contexts or, even better, combine professional activity and study, research and theoretical and critical meditation.

The expansion of the design horizon, through the above-mentioned "research" approach, coincides with a phase in the career of the student of deeply changed environmental conditions. Indeed, attending a Programme with a remarkable percentage of foreign students and professors results in dialogues, frictions and conflicts among different cultures, among people who, while not always equipped and ready for mutual recognition, are required to learn such skills through a collective work. Although challenging, such experience inevitably results, for students and professors alike, in a remarkably improved ability to interact with everyone. The high rate of international subjects intervenes in a long-standing condition, for Italian and Milanese Schools of Architecture, of high attendance rates. In itself, the high number of registered and attending students - about 440 students attend our Programme only every year - defines some specific approaches for a teaching activity that cannot rely on a personal, close and deep dialogue between professors and students, and should instead count on shared and repeatable practices and, additionally, allow the student a relative operational autonomy. Therefore, this is a wide, dynamic and highly international and crowded community, with a constant turnover of students - this being a strictly two-year programme - and with a faculty equally constantly changing thanks to the remarkable presence of visiting and contract professors. A fascinating and stimulating, albeit challenging world that offers a multitude of alternatives and where the student is required to conceive and develop the entire curriculum, including the dissertation project, on his own. A further degree of freedom results from the relative independence of six-month terms, as it is possible to enroll in a Master's Degree Programme either in September on in February - the two semesters are entirely equivalent and the sequences are not rigidly pre-established any longer. Therefore, the student is required to organise a logic relationship between the different educational experiences. Such modular organisation of relatively interchangeable semesters is equally justified in light of other considerations. One is the currently very high and constantly increasing mobility of students, both inbound and outbound. A second consideration is that continuity between Bachelor's and Master's Degree Programmes represents an increasingly less significant element, both in terms of quantity, with the constant increase of students coming from other Italian and foreign universities, and in educational terms, due to the presence of programmes that, even in the Bachelor's Degree, become increasingly differentiated and subject to customisation.

The rapidly expanding range of Erasmus exchange programmes, both within and beyond Europe, and Double-Degree Programmes result in highly customised *curricula* that, from one semester to the next, may undergo unexpected changes of course due to the discovery of new themes, places and interests. Conversely, the remarkable presence of guest students, within six-month or annual exchange programmes, represents an element of marked unpredictability, especially in the case of workshops where students with highly differentiated profiles, attitudes, interests and design abilities share the same class.

In order to clarify the high level of customisation and the potentials of our *curriculum*, one should consider that a student attending our Master's Degree Programme, for example, has the opportunity to spend two semesters at a joint seat, attend a thematic workshop with a foreign visiting professor and prepare his dissertation abroad. Therefore, a student might theoretically go through the entire programme by attending only two workshops with our professors and only one semester in Milan. The same condition is observable in several other Schools in Europe, and highlights the profile of a new way of teaching (and learning) architecture. A less dogmatic and more open teaching approach, readier to capture the various opportunities for dialogue and interaction, and more trusting of the student's ability to choose and undertake initiatives, as he develops his own educational trajectory with his professors' help. In such context, the dialogue with different interlocutors becomes a very relevant element for growth. Besides the readiness to engage in an open dialogue, both professors and students are required to manage and solve conflictual situations that may question previously acquired knowledge, as well as – and this may be even more difficult – opinions, ideas, habits that belong to one's cultural and social identity.

Therefore, the legitimisation of teaching can no longer result from the repetition of shared models, the so-called "schools" or "cultural heritages", however you may name them, which are only passed down and understood in a local context. Instead, it is necessary to establish flexible and changeable rules and commit to a work, shared in practice, that relies on the composition of

diversities and actively engaged in specific agreements, and pursue, every time, a balance among often shifting and unpredictable dynamics. In this situation, professors become cultural mediators rather than masters, and their main commitment lies in the preparation of a common ground, between professors and students, for the development of shared learning and knowledge processes, in order to express an equally free and aware design ability.

Educational goals

The plurality of involved cultures, a characterising and enhancing feature of our Programme, finds an opportunity for assessment in the central role of the design activity conducted within the workshops that, through different themes and disciplines, promotes theoretical and practical research, teamwork, the refinement and development of compositional skills. For this reason, the Study Programme recognises a full design dimension to other disciplines besides Architecture - namely Restoration, Technology, Urban Planning and Interiors. This implies the definition of a multiplicity of professional profiles that successfully mediate between individual aspirations and requirements of the labour market that – it is worth emphasising – is unable to absorb the yearly flow of new graduates in our country. Indeed, in the European context, Italy is the country with the highest number of architecture graduates in the face of a weak and contradictory design culture. On one side, public competitions are rare occurrences, and on the other side, multiple professionals (from surveyors to civil engineers) effectively replace architects.

In such a difficult national scenario, the offer of an education organised into highly characterised thematic paths has become one of the main goals of our Programme that, starting with its very title, declares the range of its interests.

The title *Architettura – Ambiente Costruito – Interni* [Architecture – Built Environment – Interiors] clearly reflects the richness of perspectives and approaches to design, according to differentiated scales and focuses, which are practiced within the educational offer through a programme organised into monographic courses and disciplinary and thematic workshops that represent its main framework. Following such premises, the Programme, articulated into two symmetrical Study Plans, one in Italian (ACI: *Architettura – Ambiente Costruito – Interni*) and one in English (BEI: *Architecture – Built Environment – Interiors*), interprets architectural design with reference to some specific issues

related to the modification and regeneration of established urban and settlement fabrics, grafting and transformation, rehabilitation, restoration and enhancement of the existing heritage. The educational project focuses precisely on the European city as it has been developing over the last millennium, and has selected it as its prevailing operational horizon and as the privileged ground for the acquisition of a specific knowledge – architectural and urban design – applied through different disciplinary approaches.

Italian architectural culture views the city as an obligatory passage with relevant implications. Such choice is not merely dictated by the fact that the city, in our country more than in others, has always been the main theatre and workshop for every aspect of the civil life, from economy to politics. It also, and more importantly, represents a strong connection of continuity with late twentieth century theoretical elaborations, which, through the writings and designs of Saverio Muratori, Carlo Aymonino, Aldo Rossi and others, developed architectural thought according to the two closely interrelated parameters of building typology and urban morphology. As the heirs of such typically Italian and European tradition, we decided to preserve the idea that the relationship between the design of the architectural object and its context represents a key element, all while replacing the term city with that of "built environment". This is a momentous phase for our culture that reflects deep changes in the actual territory, in the way it develops, is planned and built, and that intends to express a new approach based on strategies that are not necessarily resulting from the architecture/city dichotomy. Indeed, the built environment represents for us the existing architectural heritage, now subject to constant adaptations and transformations that, in the near future, will probably be affected in an even more significant form by requirements dictated by various kinds of issues, from energy and performance to the new concepts of domestic and production spaces. However, the built environment is also something else. It is the public space of historical centres and suburbs, to remain in the urban contest, as well as the neglected space of decommissioned industrial areas, infrastructures, tourist facilities and of the suburban condition, of the "rurban" that, as a new settlement model, mixes rural and urban features in wide sections of our territory.

The Programme anticipates some elements that characterise the professional practice, such as, for example, the cooperation within workshops among different disciplinary realms, in a way



that facilitates a synergy among research, education and issues expressed not only by local subjects. Work opportunities result from the intersection between the critical focus of the academic world and the requirements of stakeholders and various both public and private social players involved without the trivialisation of a mere question-and-answer dynamic.

At the same time, the hands-on approach and the fieldwork performed by several design workshops should be interpreted in a diametrically opposed direction, as places of study and discussion that enhance the understanding of reality by defining goals and experiencing trajectories without necessarily offering solutions. This is a specific declination of "research through design" that emphasises the definition and formulation of latent questions in the intervention contexts rather than the pursuit of answers. The "workshop" dimension, inspired by and interested in the complexity of real-life processes, justifies such articulation into different and complementary disciplinary modules by highlighting its strong methodological spirit, shifting the focus from the acquisition of specific forms of knowledge to the processes that underlie the design decisions, starting with the approaches that lead to the definition of the theme and of the very goals of the work.

Educational offer

Interior Design
Workshop, Prof.
Gennaro
Postiglione, AUIC
School, Politecnico di
Milano 2019.
Photo by
Michele Nastasi.

Design workshops are organised as semesters and understood as the main seats for the teaching of architecture.

They are part of all four study semesters and feature different thematic and disciplinary articulations, based on the assumption that students come from a solid three-year education path during which the foundations of design have been thoroughly addressed.

For this reason, the four workshops of the first two semesters feature an integration aimed at recognising some fundamental forms of cooperation within the professional practice (Architectural Design/Urban Planning, Technological Design/Technique of Constructions, Restoration/Drawing, Interiors/Plant Engineering).

Moreover, each workshop is responsible for the development of a project in relation with its disciplinary realm (architectural design, urban design, technological-environmental planning, restoration and interior design), in order to develop the educational offer according to a multiplicity of thematic and disciplinary approaches.

The third-semester workshops, instead, have a strictly thematic characterisation mainly developed by visiting professors – hired through an international call – so that all the students may benefit from an educational experience in an international context, which is considered as fundamental as any other educational elements within the Degree Programme. The five thematic workshops (Architecture, Interiors, Restoration, Technology, Urban Planning) – substitute to each other – represent the central core of the structure of the educational offer. Indeed, third-semester students are required to choose their course of study on their own by selecting the direction of their training in order to recognise a final profile that involves the issue closest to their interests.

Design work at the various scales, and according to the different foci, represents one of the most characterising elements of the Degree Programme, compared to the offer provided by other Architecture Master's Degree Programmes, both at the Politecnico di Milano and in the wider context of the national offer. Not only does it reflect the arguments provided in the introduction – it also offers multiple opportunities for experimentation and application of the disciplinary forms of knowledge of architectural design within diversified and challenging application contexts, rather than a mere academic exercise, although

this does not imply a belittling of the fundamental role of design meditation about architecture, which represents the central issue of research "through design". In architecture, as in other art practices, one may argue that the advancement of practice almost exclusively relies on such operational approach, in a way that greatly reduces the prospective role of research "about" design, which is confined to dealing mainly with historical and critical issues. For this reason, one may also argue that research "through" design belongs to the realm of applied research, the domain in which one undertakes an original survey aimed at a practical result rather than only at the acquisition of new knowledge.

Such realm suffers from one of the most serious problems of the current educational offer resulting from an excessively rigid regulatory system. Indeed, it was not possible to create a second *Laboratorio Tematico Opzionale* [Architectural Design Workshop] alongside the *Laboratorio Progettazione Architettonica* [Architectural Design Workshop] that would have allowed students to acquire further skills in the wider realm of architectural design, thereby leaving thematic exploration as a further phase of educational refinement. In the next few years, we will assess the feasibility of such programme by pursuing the solutions to meet all the requirements and regulatory obligations.

Finally, during the last semester, the Laboratorio Finale di Tesi [Final Dissertation Workshop] offers a marked cross-disciplinary characterisation (three different disciplines concur to the configuration and development of the issue) in order to strengthen the connections among educational activity, research and professional situation, as we are aware that the freedom of university research represents a unique opportunity also to develop and address the actual problems the real world constantly presents. To this end, students will have no other educational commitment except for the curricular internship, which is almost a module of the final workshop. In this way, they will have an entire semester for the development of their dissertation under the guidance of a supervisor and at least two assistant supervisors. Indeed, the workshop itself has been conceived as a think-thank with the two-fold goal of presenting students with issues researched by some professors and of bringing academics and researchers with different disciplinary profiles to contribute to such issues in order to activate an actual research community through design.

In this case, there is still work to be done in order to achieve

the goals included in the structure of the study programme. At present, the missing elements include the facilities required to provide each workshop class with a classroom for every day of the semester, even though the transformations and expansions currently underway in the Leonardo campus bode well for a different situation in the near future when students are going to work in the classroom and be able to develop all the potentials contained in the educational form of design workshops.

A Community of Learners

The goal of the Degree Programme is promoting the extended proximity between learners and teachers as a key element of learning and a distinctive feature of architecture studies.

Tacit knowledge – the set of disciplinary notions and forms of knowledge that are difficult to transfer by means of verbalisation and that recur in the design practice as a tool of formalisation – is developed and shared precisely through practice – a practice that is as necessary for students as for the involved teachers. For this reason, in line with the most advanced researches about architectural education, the structure of our Master's Degree promotes the establishment of a Community of Learners in which all the subjects are required to learn – both from each other and, more importantly, through the very practice of design that becomes, at the same time, means and goal of teaching architecture.

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Manuel Blanco Lage (1955) graduated in Architecture and is Dean of the Escuela Técnica Superior de Arquitectura (ETSAM) [Higher Technical School of Architecture] of the Universidad Politécnica de Madrid, where he is full professor of Architectural Composition and professor of Análisis de la Arquitectura [Architecture Analysis] and Análisis de la Imagen de la Ciudad [Analysis of the Image of the City]. He is PhD in Architectural Composition (1987 - ETSAM). From 2013 to 2017, he was Director of the CSDMM-UPM (Centro Superior de Diseño de Moda de Madrid [Madrid Superior Center of Fashion Design]) and is currently its CEO, and is the Director of the Research Group and the PhD Programme in Arquitectura, Diseño, Moda & Sociedad [Architecture, Design, Fashion and Society]. He was the Curator of the Spanish Pavilion at the X Venice Architecture Biennale, and became the Director of the Museo Nacional de Arquitectura y Urbanismo de España in 2007. He designed several exhibitions and currently oversees the museographic project of the Museo de las Colecciones Reales of Madrid. He is the Commissioner of the DIMAD (Association of Designers of Madrid), a Member of the ICAM (International Confederation of Architectural Museums), the Director of the First International Congress on Architectural Archives, a founding member of the SAR (Section of Architectural Archives) of the ICA (International Council on Archives) and was a member of its Executive Committee (2004-2008). He authored several publications and contributed to a number of media for the architectural and cultural section.

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He teaches and carries out research work about the effects of technological and technical innovation of design culture in architecture and industrial design, with a focus on the processes aimed at environmental sustainability in the lifecycle of buildings. He authored several essays and articles about

these issues for national and international magazines. He chaired the Degree Programme in *Scienze dell'architettura* [Sciences of Architecture] of the *Scuola di Architettura e Società* [School of Architecture and Society] and was a member of the Assessment Committee of the Politecnico di Milano. Currently he supervises the Degree Programme in *Progettazione dell'architettura* [Architectural Design] of the *Scuola di Architettura Urbanistica Ingegneria delle Costruzioni* [School of Architecture Urban Planning Construction Engineering] of the same university.

Alberto Campo Baeza (1946), architect, is Emeritus Professor at the *Escuela Técnica Superior de Arquitectura* (ETSAM) [Higher Technical School of Architecture] of the Universidad Politécnica de Madrid. He taught at several international-level Schools of Architecture including ETH in Zurich, EPFL in Lausanne and the University of Pennsylvania in Philadelphia. He combines professional and academic activity. In 2019 he has been elected Honorary Fellow by the American Institute of Architects and has been awarded the Gold Medal of Architecture by the Higher Council of Colleges of Architects of Spain. Also in 2019 has been named honorary doctorate by the Pablo CEU University in Madrid, and also by the University Lusiada of Lisbon in 2020. His designs for cultural, institutional and housing buildings received a number of international-level awards. Among the most recent: the Bigmat Grand Prize in Berlin in 2015, the Architizer A + Awards Prize, in 2017; and the Piranesi Prize in 2018.

Jesús Donaire García de Mora (1974) graduated in Architecture from ETSAM, the School of Architecture of the Universidad Politécnica de Madrid. He obtained a Master of Science Degree at the Columbia University, New York, with an Honour Award for Excellence in design. He developed his research activity thanks to Fulbright and William Kinne (Columbia) scholarships, as well as to scholarships from the Consejo Social of UPM and the Academy of Spain in Rome.

Since 2009, he has been Full Professor of Architectural Design at ETSAM and since 2016, visiting professor at the Politecnico di Milano. He was Associate Professor at the University Nebrija, a visiting professor at Suffolk University (Boston) and at the Barnard and Columbia College of Architecture, New York. He was invited as speaker, tutor of seminars and jury member at various universities and cultural institutions in Europe, the US and Canada. He authored several publications, was the editor of the architectural culture blog "BMIAA" and the secretary of the Big-Mat International Architecture Award. He worked with David Chipperfield in London and with Jesús Aparicio and Alberto Campo Baeza in Madrid. He currently heads his own architecture practice and develops internationally recognised designs.

Emilio Faroldi (1961), architect and PhD, is Full Professor at the Politecnico di Milano, where his research activity addresses architectural design-related issues with a special focus on the relationships among concept, design and construction of the architectural phenomenon.

He organised meetings, training courses and international design seminars.

For over a decade, he chaired and coordinated the Degree Programmes in *Architectural Sciences* and *Architectural Design* at the *Scuola di Architettura Urbanistica Ingegneria delle Costruzioni* [School of Architecture Urban Planning Construction Engineering] of the Politecnico di Milano, where he teaches. He authored several publications and is currently Editor in Chief of the "TECHNE Journal of Technology for Architecture and Environment" and Director of the 1st and 2nd level Master's Degree in *Sport Architecture* (MSA), formerly *Progettazione Costruzione Gestione delle Infrastrutture Sportive* [Design Construction Management of the Sport Infrastructures]. He teaches at the *International Academy of Architecture*, and since January 2017, has been Vice-Rector of the Politecnico di Milano.

Gennaro Postiglione (1961) is Full Professor of Interior Architecture at the Politecnico di Milano where he is Supervisor of the Master's Degree in *Architettura – Ambiente Costruito – Interni* [Architecture – Built Environment – Interiors]. His researches focus on domestic interiors, museography and the preservation and dissemination of collective memory. In addition, his research activity targets the reuse and adaptive enhancement of minor heritage and the exploration of the new building typologies better equipped to meet the new housing requirements emerged over the last decade in a way that puts architectural resources

at the service of public interest. He is a member of the editorial board of the magazine "AREA" and of the editorial committee of the "Journal Interiors". His recent publications include *Exhibiting architecture* in "Domés", nr. 2/2018; L'intervento sull'esistente come "ri-scrittura" dello spazio, in: F. Lanz (ed.), *Patrimoni Inattesi*, Siracusa 2018; *The Atlantic Wall Linear Museum*, in "Turris Babel", nr. 108/2017.

Alessandro Rocca (1959), architect, graduated from La Sapienza University in Rome, and is a PhD in "Methodological Questions in Architectural Design" at the University of Genoa. He is Full Professor of Architectural and Urban Design at the Department of *Architettura e Studi Urbani* (DAStU) [Architecture and Urban Studies] of the Politecnico di Milano, head of the AUID (*Architectural Urban Interior Design*) PhD Programme, a member of the Board of the Politecnico di Milano School of Doctoral Programmes, a member of the scientific committee of the CA2RE European doctoral network, vice-coordinator of the Master's Degree in *Architettura – Ambiente Costruito – Interni* [Architecture – Built Environment – Interiors]. As a professor, he is involved in the Design Workshops of the Architecture Master's Degree and AUID Doctoral Programme, within which he pursues a higher integration between research activity and theoretical and practical meditation about architectural design.

Ilaria Valente (1958) is Full Professor in Architectural and Urban Design at the Department of *Architettura e Studi Urbani* [Architecture and Urban Studies] of the Politecnico di Milano, where she has worked as a professor and researcher since 1984. She is PhD in Architectural Composition (1992–I.U.A.V.). Since 2013, she has been Dean of the *Scuola di Architettura e Società* [School of Architecture and Society], and since 2016, she has been Dean of the Scuola di Architettura Urbanistica Ingegneria delle Costruzioni; since 2017 she has been vice-president of the EAAE (European Association for Architectural Education). In 2020, she became President of the Italian University Conference of Architecture.

Emilio Tuñón Álvarez (1958) is full professor at ETSAM in Madrid. He taught at the Princeton School of Architecture (2008-2010), at the Harvard Graduate School of Design (2006) and at the École Polytechnique Fédérale de Lausanne (2005).

In 1993, he co-founded the research cooperative CIRCO with Luis Moreno and Luis Rojo, and obtained the FAD Award (2007) and 3rd BIAU Award (2002).

In 1992, he established Mansilla + Tuñón Arquitectos with Luis M. Mansilla. Their main works include the Museo de las Colecciones Reales (Madrid, 2016), the Relais & Château Atrio (Cáceres, 2012), the MUSAC (León, 2007), the documentary centre "El Águila" (Madrid, 2003), the auditorium Ciudad de León (León, 2003), the Museo de Bellas Artes de Castellón (Castellón de la Plana, 2000) and the Museo de Zamora (Zamora, 1996).

His work has obtained several acknowledgments including the RIBA International Fellow (2019), Premio Eduardo Torroja (2018), Premio Arquitectura Española (2017), Premio Arquitetura Española Internacional (2017), Premio FAD (2017), Premio COAM (2016), Medalla de oro al Mérito de las Bellas Artes (2014) and the Mies van der Rohe Award (2007).

Ignacio Vicens y Hualde (1945) graduated in architecture from ETSAM where he later obtained a PhD with an "extraordinary award".

Since 1997, he has been Full Professor of Architectural Design at the *Escuela Técnica Superior de Arquitectura de Madrid* [Higher Technical School of Architecture of Madrid]. At the same School, he chairs the Cátedra Blanca CEMEX and the "CULTURA DEL HABITAT" research group. He was visiting professor and held courses and lectures at some of the most prestigious international universities. His work has been featured in several architectural magazines across the world and received several acknowledgements. Besides his activity in the teaching and professional realms, he has tried to maintain an active presence in the cultural world. He is a member of the editorial board of "NUEVA REVISTA" and was a member of the editorial board of the magazine "ARQUITECTURA". He was a member of the management committee of several foundations including Fundación Real Toledo, Fundación Camilo José Cela, Fundación Félix Granda and Fundación MARCC.

He received the gold medals of the Universidad Politécnica de Madrid and of the *Escuela Técnica Superior de Arquitectura de Madrid*. Recently he became an international member of RIBA (Royal Institute of British Architects).

Maria Pilar Vettori (1968), architect and PhD, is Associate Professor at the Politecnico di Milano. She teaches at the *Scuola di Architettura Urbanistica Ingegneria delle Costruzioni* [School of Architecture Urban Planning Construction Engineering] of the Politecnico di Milano in the area of Technological Design of Architecture. She contributed to research and consulting projects concerning processes, methods and tools for programming, construction and management of architecture, with a particular focus on innovation in design and production processes for the structures and infrastructures for healthcare, wellness and sports, research and production. She has participated in and organised conferences, seminars and workshops, and has worked consistently on studies and publications.

Cino Zucchi (1955) obtained a BSAD at the MIT and graduated in Architecture from the Politecnico di Milano where he is currently Full Professor of Architectural and Urban Design.

He was visiting professor at the Harvard Graduate School of Design and contributed to a number of Architectural and Urban Design seminars at several international universities.

He authored several books and was curator of the Italian Pavilion at the Venice Biennale in 2014. He also contributed to the organisation and design of the XV, XVI, XVIII and XIX editions of the Triennale of Milan. He is a member of the scientific committees of the XXI Triennale 2016, of MAXXI in Roma and of the Enciclopedia Treccani.

With his firm CZA, he designed and built several works that obtained awards and mentions, and participated in a number of national and international competitions.



Aldo Rossi, Interior with print, 1991. Etching with watercolour on paper. PdA. © Eredi Aldo Rossi, courtesy Fondazione Aldo Rossi.