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Editorial

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As announced in the editorial of the previous issue, the 19th issue of ArchiDOCT presents a second collection of papers that explore the theme of ‘temporality’ in architecture and the built environment from a theoretical or an applied standpoint. Once more, a variety of approaches, insights, and opportunities for research that arise from considering time in its heterogeneous dimensions and manifestations such as time, speed, rhythm, sequence or horizon have been handled.

The concept of temporality is, undoubtedly, an inexhaustible source of suggestive lines of research ranging from the more theoretical to the more applied and linked to contemporary problems. One of the most relevant current problems is the climate crisis caused by an excess of carbon dioxide in the atmosphere, as well as the incipient shortage of certain raw materials. Both realities can no longer be ignored and the way we inhabit the planet and satisfy our needs must necessarily be based on responsible and sustainable production and consumption. This is precisely

the wording of Sustainable Development Goal 12 of the United Nations. Producing and consuming responsibly is a need that can be addressed through multiple approaches and proposals. One of them is to provide greater durability to those means that we require for an adequate and comfortable day-to-day life, and herein architecture plays a fundamental role. If the buildings, public spaces, and infrastructures that we design and materialize have greater durability, they will not need to be updated, repaired or replaced so frequently and, therefore, we will save significant amounts of materials and energy, reducing the pollution often necessary to produce it.

Durable buildings and works have often been related to heavy, robust solutions, with an important massive character, since these features presumed them to be better able to withstand the effects of the passage of time. This type of materiality has allowed many buildings to reach our days in more than acceptable conditions, being this circumstance especially convenient when they are relevant pieces in the

^a Ivan Cabrera i Fausto (Borriana, 1974) graduated in Architecture in 1998 at Universitat Politècnica de València (Polytechnic University of Valencia) and earned his PhD in Advanced Analysis of Design of Structures and Foundations in the same institution in 2016.

In 1999 he got a position as Assistant Professor in the Department of Continuum Mechanics and Theory of Structures of the Universitat Politècnica de València (Polytechnic University of Valencia) and four years later became Tenured Professor in the aforementioned department, being nowadays on active service. In 2010 he was Visiting Professor at the Illinois Institute of Technology at Chicago. Moreover he has taught as guest lecturer in institutions such as the Universitetet i Stavanger (Norway), the Politecnico di Milano (Italy), the Yildiz Teknik Üniversitesi (Turkey), the Technische Universiteit Eindhoven (Netherlands) or the Universidad Autónoma de Encarnación (Paraguay).

His expertise is in advanced structures analysis and design focused mainly in structures for housing, historical structures and big sport facilities. He has participated in many congresses and published several papers in research journals about these and other topics always related to building structures. In 2016 he was elected Project Leader of the Erasmus+ Project “Confronting Wicked Problems: Adapting Architectural Education to the New Situation in Europe” funded by the European Union which had been the main research project since 2014 of the European Association for Architectural Education Council (EAAE).

In 2012 he became Academic Advisor of the Higher Technical School Architecture and four years later he became Director of this school, being nowadays on active service after being reelected in 2020. From 2013 to 2016 he was member of the European Association for Architectural Education Council (EAAE).

In 2013 he was awarded the Docent Excellence Prize by the UPV Social Council and the Education, Culture and Sport Department of the Valencian Regional Government. He coordinates his teaching responsibilities with his professional practice in his studio at his home town. Some of his projects have been published by specialized journals.

^b Valerio Perna (Rome, 1988) is an architect and PhD in “Architecture - Theory and Design” at Sapienza - Università di Roma. During his studies, he was a Visiting Scholar at AUAS Amsterdam and lectured and taught at several universities in Iran, Sweden, Albania, and Kosovo. He is currently employed at Universiteti Polis, where he is Coordinator of the INNOVATION_Factory (IF), Head of the Research Center in Architecture, Engineering and Design, and Coordinator of the Professional Master in Digital Architecture. His research agenda explores the role of games and game-based processes in contemporary architectural practice to address the complexity and behavioral phenomena in the urban fabric. Valerio has published in several international journals and has been invited as a speaker in European and Asian countries. He is a member of the Editorial Boards of architectural magazines and series such as archiDOCT, FORUM A+P, OMB series, Gli Strumenti series, etc... In 2020 he published his first monograph *L'attività ludica come strategia progettuale. Regole e libertà per una grammatica del gioco in architettura* (Quodlibet).

history of architecture, have a special symbolism in the community where they are located, or, at least, continue to provide an adequate service. Paradoxically, however, this mass character can sometimes be counterproductive. When the comfort standards and tastes that a building satisfied at the time it was erected expire faster than its materiality and upgrading is not advisable or possible, ending its useful life can be a major problem. The amount of materials that we can recover in a condition to be relocated or reinserted in production chains is usually low. In addition, large quantities of rubble and waste are generated, producing a huge energy expenditure.

On the contrary, everything that is projected as temporary has a very different character. Its announced expiration leads designers to choose materials and solutions that require little investment, simplicity in assembly and future disassembly, and consequently little waste. Materials are usually light, easy to move and place. Screwed joints abound, easy to reverse, and making possible the recovery of the intervening parts without any damage that could invalidate them. Many pavilions of numerous world's fairs are magnificent examples. A large number of them has been perfectly dismantled and reassembled in new locations, extending their useful life and the service they provide to society without any substantial need for new materials and with much lower energy consumption than would be required for a completely brand new building. But there are many other examples such as train stations, where, curiously, the weather is a frequent topic of conversation.

Let us use as an example two train stations located in the city of Valencia in Spain. The grand old *Estació del Nord* designed by Demetrio Ribes is one of the architectural jewels of the city. This monumental and patrimonial character exempts the building from being analyzed strictly from the point of view of its functionality and the adequacy of its configuration for the use that it provides today. And, fortunately, this is the case, because its demolition would reveal the low percentage of recoverable materials and, consequently, the immense amount of waste that would be generated. Just five hundred meters away, the *Estació de València-Joaquim Sorolla* was inaugurated in 2010, a temporary infrastructure to accommodate high-speed and long-distance trains connecting the city with the rest of Spain. Prepared to be replaced at any time by the future high-speed rail station when the tunnel through the city is finished, this station was born with an apparent announced expiration date. Its steel structure, serial and repetitive, the bolted joints of the different elements and the simple and modular nature of most of the construction systems used in its facades, partitioning and coverings make the future dismantling of this building simple and with a great capacity to recover the pieces that compose it. All this makes it a tremendously contemporary building, capable of providing a magnificent response to the needs of its time. Thus, the characteristics of temporary buildings and infrastructures in terms of lightness and capacity for easy recovery of the elements of which they are composed should also be the features of the architectural production which is not necessarily scheduled to be temporary.

Temporality is undoubtedly an interesting topic. Researchers from all over the world have proven this to be true with an amazing and unexpected massive response to the call made by the journal for its eighteenth issue. The remarkable set of papers presented in that issue is now complemented with a second collection of manuscripts which the Editorial Committee of *ArchiDOCT* invites you to enjoy.

“Sensing Time: Temporality in the Design of Buildings and Open Spaces” is a good-practice example by **Madlen Simon**. This American architect was educated at Princeton University and has focused on design thinking as a researcher and educator, currently at the University of Maryland. She considers that while scientific method is a manner of discovering what is, design thinking is a method for envisioning what it should be. She puts design thinking into practice to envision better futures for people and communities. In her own words, Professor Simon's current work weaves together threads of research, teaching, and service into the whole cloth of integrated design thinking; turning the narrative of her work into a kind of tapestry with up to six main strands in the weave: History and Theory of Design Education, Design Thinking, Design History and Criticism, Design Practice, Environment/Behavior Studies and Urban Design, and Design Thinking for Academic Leadership. Madlen Simon's works have received numerous awards and recognitions, including the award for the best paper presented during the EAAE-ARCC International Conference & 2nd Valencia International Biennial of Research in Architecture in 2020. Her manuscript for the nineteenth issue of our journal introduces a very stimulating view of temporality in architectural design. Instead of being something to be fought or hidden, the effects of the passage of time take center stage as a positive aspect that gives character and interest to the spaces we inhabit. Her paper proposes a framework to compare the design of buildings and open spaces across this relevant dimension, analyzing temporality according to different and suggesting lapses of time: moments, days, seasons, and history.

The first manuscript is written by **Stefano Sartorio** and **Francesco Airoidi**, both PhD candidates at the Politecnico di Milano in Italy. The work, titled **“Effects of Spatial Modelling on the Perception of time. Definition of Places Through Temporal Typologies”**, constitutes a remarkable theoretical approach to the relationship between time and architectural design. In addition to aspects previously mentioned, such as the consequences of the passage of time on buildings or cyclical perception variations, these Italian researchers focus on other sides of the concept such as duration, simultaneity, instantaneity, or endurance enhanced by spatial possibilities employed in architectural design. They argue that if space and time are frequently related, then the manipulation of space has a necessary consequence on the perception of time. Their research is illustrated by means of effective examples and some interesting final thoughts on highly topical problems such as the depopulation of inland areas in several southern European countries such as Italy or Spain.

The second manuscript is entitled **“A Spatial-temporal Network-Science Based Study of Walking in Urban**

Green Spaces: A Case Study of One-North Park” and is written by **Anjanaa Devi Srikanth**, a PhD candidate at the Singapore University of Technology and Design, and by her thesis advisor, **Thomas Schroepfer**, a PhD architect and engineer educated at Harvard University, whose work focuses, mostly and in his own works, on the increasingly complex relationship between design and technology in architecture. Their paper deals with time as a parameter to be considered when understanding and predicting pedestrian flows in projects which are not built yet. Their work proves a comparative analysis of temporal correlations between metrical correlations in a Spatial Network Analysis too and observed pedestrian flows using as one-north Park in Singapore as a case study. It also presents insights gained on walkability in the park on a temporal basis.

Luis Bosch-Roig and **Marina Docci** are the authors of the third manuscript. He is a PhD architect and professor at the Department of Architectural Projects of the Universitat Politècnica de València in Spain. His research focuses mostly on architectural heritage interventions, especially in the dialogue between new additions and preexisting remains. She is a PhD architect and associate professor at the Department of History, Representation and Restoration of Architecture of the Sapienza Università di Roma. Her research addresses the conservation of architectural heritage and the history of architecture. Their work, titled **“Time as a Design Resource in Architectural Heritage intervention”. The Case Study of the Conversion of the Escuelas Pías Church into a Library**” is strongly connected with their doctoral research and focuses on the importance of time when reflecting on pre-existing architecture. They argue that the different stages in a monument’s life are fundamental factors in the design process, requiring understanding of its past, recognition of its present and a good strategy for its future.

The fourth manuscript contains the results of the doctoral research of **Nooshin Esmaeili**, an architect, PhD candidate and sessional studio instructor at the University of Calgary, and her thesis advisor, **Brian Robert Sinclair**, a

PhD architect, award-winning professor of architecture and environmental design, and former Dean in the Faculty of Environmental Design, EVDS, at the aforementioned Canadian university. His expertise, experience and engagement span the breadth from science and technologies to art and humanities. **“Soul, Space + Time: Exploring Temporality in Architecture with Reference to Sufism”** deals, in their own words, with the continuous dance of the universe, the cosmos, and nature with time. According to the authors since ancient times, architecture has played a significant role in establishing a link between the divine and the sacred through space. This is especially obvious in many wisdom traditions and spiritual practices such as Sufism, and in architectural styles such as the one of Persia.

Juan José Barrios Avalos and **Jordi Franquesa Sánchez** are the authors of the fifth and last manuscript of this issue of the journal. The first researcher is a Mexican architect and PhD candidate at the Department of Urban and Regional Planning of the Universitat Politècnica de Catalunya. His thesis advisor, Jordi Franquesa, is a PhD architect and professor at Barcelona Higher Technical School of Architecture in Spain. His research deals with architectural education as well as with the dynamics of territories and how we inhabit them with a special focus on phenomena as topical as depopulation. Their essay, titled **“Urban Restructuring of Agricultural Productive Models in Hydrographic Basins Under Water Stress. The Case of the Nazas and Aguanaval Rivers”** argues that the history of a town is often the history of its water and that the passage of time shapes the territories and human settlements, and the use of the water that flows through them is one of the factors that most conditions their configuration. The case of a Mexican basin is used as an example to demonstrate their hypothesis with a remarkable interesting research methodology.

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