

PROCEEDINGS BOOK



INTERNATIONAL CONFERENCE ON NEW TRENDS IN ARCHITECTURE & INTERIOR DESIGN

11th International Conference on New Trends in Architecture and Interior Design 2025

PRE-EXISTENT ENVIRONMENTS AND THE QUESTIONS OF CIRCUMSTANCE: RETHINKING TRADITION AS A PARADIGM OF SUSTAINABILITY IN THE CONTEMPORARY ARCHITECTURAL DISCOURSE

Mahdi Alizadeh, Clara Pimenta do Vale, Anastasiia Kholopova

¹Via Panorâmica Edgar Cardoso 215, 4150-564 Porto, FAUP-CEAU, mmalizadeh27@gmail.com

² Via Panorâmica Edgar Cardoso 215, 4150-564 Porto, FAUP-CEAU, clara.vale@gmail.com

³ Via Panorâmica Edgar Cardoso 215, 4150-564 Porto, FAUP, anastasiia.kholopova@gmail.com

Abstract

Sustainable development has become a defining concern in contemporary architectural discourse, particularly within the European context. With the European Union aiming for climate neutrality by 2050, architecture has been defined as a key sector responsible for energy consumption and greenhouse gas emissions. As a response, policies and initiatives were made advocating for energy-efficient, bioclimatic, and technologically innovative design solutions. In spite of the various advancements, the main approach to sustainability is often narrowly focused on the questions of energy efficiency, material life cycle, and context awareness, yet neglecting historical continuity as a paradigm of sustainability. This paper argues that true sustainability extends beyond the questions of bioclimatic design and energy efficiency. Though the use of sustainable materials is an important step, it is insufficient if the vast majority of the buildings are not preserved. The most sustainable structures are those that societies value and maintain, avoiding the high carbon emissions associated with demolition and new constructions. Yet, on the contrary to addressing the root causes of unsustainable developments, contemporary practices that incorporate sustainability, often remain limited to the superficial questions which are mainly applicable for marketing goals. In addition, prior to the emergence of sustainability as a formal concept, leading architects and theorists of the twentieth century had already recognised the importance of historical continuity, which, in our contemporary reading, can be included as a paradigm of sustainability. Ernesto Nathan Rogers, through his notion of “Pre-existent Environments” and Fernando Távora's emphasis on “Circumstance”, both advocate for an approach that integrates tradition within the modern architectural practice. Their perspectives highlight the necessity of preserving and adapting architecture to the contextual and temporal context in which it is operating. By rethinking sustainability through the lens of historical continuity, this paper proposes a shift from a technologically driven, short-term approach to one that values architectural heritage as an essential dimension of the sustainable discourse.

Key Words: *Pre-existent Environments, Circumstance, Sustainability, Architecture*

1. Introduction

The architectural discourse around the theme of sustainable development has been among the leading topics in the past years, especially in the European context. To the extent that the European Commission has set the target of “economy-wide climate neutrality” by the year 2050. The relevance of the construction sector in the sustainability discourse is of such relevance that currently 40% of total EU energy consumption is used by the building sector, and 36% of total EU greenhouse gas emissions³ come from buildings. Therefore, the European Union has emphasised the path to green and sustainable buildings by promoting architecture that takes into consideration “ECO Construction, Bioclimatic and thermal insulation, integrate renewable energies, pursues innovative solutions smart energy efficiency as well as expanding knowledge on the discussed topics”. Interdisciplinary Initiatives such as the New European Bauhaus (NEB) have also gained popularity in academic and professional sectors with the aim to “connect the European Green Deal to living spaces and mobilise a collective effort to imagine and build a sustainable, inclusive, and beautiful/aesthetic future for minds and souls”⁴.

³ See EU figures > https://climate-pact.europa.eu/priority-topics/green-buildings_en

⁴ See published information by the EU Commission on the topics of Sustainable buildings and Green buildings. The Mission regarding Sustainable buildings is defined as the following: The Partnership on Sustainable Buildings is conceived as a strategic alliance between European regions to boost new markets and take advantage of regional opportunities for smart specialisation in sustainable buildings.> Sustainable buildings https://ec.europa.eu/regional_policy/policy/communities-and-networks/s3-community-of-practice/partnership_energy_sustainable_buildings_en

In today's world, one can refer to the various technological advancements in the application and development of new materials, calculation of energy management, and striving for buildings that are “engineered without engines”, as in the words of Bijarke Ingels, as he argues that “we have much to ‘re-learn’ from vernacular architecture in the regions where we work, but we must also put our latest technological advances to work in realising these principles” [1].

However, one can even argue that today, even in some cases, what symbolises sustainability is, in fact, not sustainable. Often restricted to bioclimatic design and energy efficiency, the concept of sustainability has been reduced to a stereotypical language that ignores the broader implications of sustainable architecture. During a building's operational phase, in various instances, a considerable number of architects still merely place a high priority on energy efficiency while ignoring other important factors, including resource extraction and material lifespan. Because of this, even while energy efficiency is emphasised, especially in high-rise buildings, these structures still mostly rely on non-renewable energy sources, which depletes natural resources and worsens the environment. In addition, the materials used to build them are frequently obtained by extraction methods that harm the environment and make little attempt at recycling or reuse. These structures are made exclusively for construction, which exacerbates resource depletion and increases waste, rather than being intended for adaptive reuse or responsible deconstruction. Therefore, even while operational energy efficiency is encouraged, it is not always a sign of an architecture that truly adheres to environmental standards [2].

2. On the notion of Continuity

In addition, sustainability is often seen merely in the relationship of architecture to the geographical context and its future outcome, where historical continuity is often neglected. The most sustainable buildings are those that society strives to preserve because the largest subsidy to CO₂ emission is when a building is built⁵. Hence, even though building in sustainable materials is a considerable step, it is not enough unless a building is preserved. Based on this argument, one should stress the sense of historical continuity of architecture, in which the artefact is embedded in a historical context, making it worthy of preservation instead of entering the repeated cycle of demolition and construction. This is to argue that the most sustainable architectural practice is the preservation of architecture (Reuse, Rehabilitation, Renovation and Reconstruction) or a new construction that can pass the test of time.

In the same sense, one can argue that Pantheon, though mainly constructed in Roman cement, travertine, porous tufa, and brick, is indeed a sustainable structure, having passed the test of time, remaining still centuries later. It is not the use of materials labelled sustainable that defines Pantheon as a sustainable structure, but rather the wisdom in its design principles. According to the renowned Spanish architect, one can find both “Beauty and Intellectual Enjoyment” in Pantheon. Campo Baeza argues that “The Roman Pantheon is the most beautiful piece of architecture in the world, capable of arousing deep emotion. Yesterday, today and tomorrow. I made a deal with my students many years ago that when they visit the Pantheon, if they shed tears, they have to send me a postcard telling me that they have cried. All those who have written have cried. And I’ve amassed a sizeable collection of postcards of the Pantheon in Rome, all handwritten and a few smudged with tears” [2,3,4]. It is exactly the historical continuity in Pantheon which makes it an oeuvre worthy of preservation, as the past and present generations have done, and those in the future will strive to do, reinforcing the idea that preservation is not just about safeguarding a structure but about sustaining historical identity.

⁵ See the published conversation between Michael Diamant’s interview in Cave of Apelles in 2022, where the theme of “New Traditional Architecture”, which has become a rapidly growing movement, especially in the Nordics, has gained popularity. The movement argues in favour of Neo-Classical architecture for today’s world, based on the premise that Classical architecture is more aesthetically pleasing and hence the society strives to preserve it. It should be noted that this article is not in favour of returning to a pastiche Classical architecture, which is detached from the actuality of the contemporary condition, yet reviving guiding principles of Classical and Traditional architecture can certainly be pondered upon.



Fig. 1. Pantheon

In this regard, and prior to the widespread use of the term “Sustainability” and its derivatives in architectural discourse, a number of architects and theoreticians of the twentieth century have emphasised the relevance of historical consciousness in design. Namely, the renowned Italian architect Ernesto Nathan Rogers, in developing his notion of “Pre-existent Environments”⁶, either in Casabella-Continuità as the editor or in his seminal book *Esperienza dell'architettura*⁷ [6] published in 1958, enhances the importance of incorporating tradition into the Modern Movement. One can observe a similar tendency in the work of the famous Portuguese architect Fernando Távora, as he emphasised the importance of Circumstance⁸ as a key theme in his book *Da Organização do Espaço*⁹ [7], published in 1962.

3. Pre-Existent Environments

The first use of Pre-Existent Environments in the work of Ernesto Nathan Rogers dates back to 1948, in the writing of Rogers in the Faculty of Literature and Philosophy of the National Major University of San Marcos, where he reflected upon the role of architect as an artist [8]. Rogers argued that one’s humanity is not due to the accumulation of knowledge, of the learning of facts but rather the constant balance between emotions and intellect translated to action, arguing that it is in the confrontation between artistic sensitivity and practical concerns that we find the morality of aesthetics, where an ideal encounters expression [8]. This understanding of aesthetics is deeply thought-provoking in the architectural discourse regarding the questions of sustainability. It is often assumed that sustainability in architecture must come at the expense of

⁶ Pre-existent Environments is the English translation of the Italian terminology “le preesistenze ambientali” of Ernesto Nathan Rogers. This translation was argued to be the more adequate version in Maurizio Sabini’s book, *Ernesto Nathan Rogers: The Modern Architect as Public Intellectual*. The author argues that in the past, translations have varied between “preexisting conditions,” “environmental pre-existences” (literal translation), or simply keeping the original Italian. Yet in his book, which is the first book about Ernesto Nathan Rogers written in English (published in 2021), Sabini preferred the “pre-existent environments” to preserve the concept of Rogers’ “environment”. Therefore, this paper also uses the same translation offered by Maurizio Sabini.

⁷ *Esperienza dell'architettura* often translated to English as *The Experience of Architecture*.

⁸ Fernando Távora referred to the notion of “Circunstância” in Portuguese, which, if translated literally into English, is “Circumstance”. Yet notably, Távora, in various cases, conjugates this terminology.

⁹ *Da Organização do Espaço* often translated to English as *About the Organisation of Space*

aesthetics. However, drawing lessons from Rogers, one can argue that addressing practical concerns such as climate change and energy efficiency should not exclude the questions of aesthetics in architecture. Instead, these elements should be integrated to create a new, functional, yet ethically grounded aesthetics. Rather than relying solely on technological solutions for sustainability, architecture should also embrace artistic and cultural dimensions.

Rogers expanded his notion by incorporating the idea of historicity, not as a nostalgic recollection of the past but as an operating tool within the realm of architecture [9]. In addition, Rogers, in numerous instances, clarifies that for him, tradition and the sense of history are contrary to a pastiche reading of the past. Arguing that;

“The early Modern Movement designers’ impulse to rebel against that situation [of eclecticism’s empty formalism] necessarily had to turn into a polemic against the past. This feeling was so strong that the new buildings represented an act of violence against the pre-existing environment. ... [Now] we examine the problem of the pre-existing environment in a new light. We are no longer satisfied if a work expresses our epoch; it must also assert contemporary values in full by blending with society and space—both of which are deeply rooted in tradition.

The modern meaning of tradition is close to that of historicity. ... For us, tradition is the common origin of opinions, feelings and facts, from which a certain social group derives, and toward which every individual’s thoughts and actions move” [10].

Rogers’ reference to contemporary values can also be read in today’s context, where true sustainability is both a responsibility and a value for contemporary society. Therefore, architecture is responsible for incorporating sustainability into its core principles, arguably as an inherent dimension of functionality (*Utilitas* by borrowing the words of Vitruvius). The echoes of Rogers’ pre-existent environments can be seen in the BBPR’s arguably most well-known work of architecture at the heart of Milan, the Torre Velasca [11]. A modern oeuvre, which does not lean towards the American-styled skyscrapers, rather, it is a tall Milanese building [10]. A building which, despite some of the polemic that was created around it, is surely one of the most significant marks of Milan. As described by Manfred Tafuri:

“an homage to Milan completed with the as yet unsilenced tools of historicism. The Velasca is being built in the city, lyrically telling the story of an urban body on its way to extinction. Once again, we await the catharsis from the intentions buried in the folds of a single object (..) the Velasca, wrapped in its ambiguous aura built on analogy and innuendo; it is there to act as a symbol of Italian architecture’s aspirations in the 1950s. In the great museum that is this historic city, the tower is almost certain to find a home that might alleviate their solitude, protecting them from the future and reassuring them of their moral duty” [12].

In this regard, the tower can be argued to be a sustainable work, having become part of the city’s identity. It is certainly a valid argument that the notion of sustainability, as understood in the current era, is absent in Rogers’ discourse. Yet, his notion of pre-existent environments, which he understood in close relationship to continuity and tradition, can allow us to rethink our current challenges. This is to argue that a sustainable structure is that which is conscious, not only in terms of energy efficiency, carbon footprints and the use of local materials, but also is reactive to the morphological and historical context in which it is situated. It is only through such a holistic approach to design that architecture becomes worthy of preservation.



Fig. 2. Torre Velasca

4. Questions of Circumstance

As the historical records reveal, Fernando Távora met Ernesto Nathan Rogers on at least two occasions, first in 1952 in which Távora participated in the first summer school of CIAM in Venice, and second in 1959 in which he participated in CIAM held in Otterlo presenting two projects, Mercado Municipal de Vila da Feira and Casa de Férias in Ofir¹⁰. Yet, the influence of Rogers on Távora goes beyond these two events. The generation of architects that Távora belonged to was profoundly influenced by Rogers, as it was through him that international architecture was interpreted and perceived in Portugal for many years [13].

Yet, when Távora in 1962 published his seminal work, *About the Organization of Space*, he did not reference Rogers even once; therefore, due to the lack of historical evidence, it is hard to argue that Távora's understanding of what he called circumstance is directly linked to Rogers' notion of Pre-existent environments. Nevertheless, one can argue that, like the invention of the telephone, both architects have developed similar ideas in two different places during the same span of time, both advocating for architecture to respect the sense of place.

¹⁰ See the chronology of Tavora100, the centenary of Fernando Távora, which promoted a series of events and exhibitions regarding his legacy.
<https://tavora100.pt/pt/timeline>

The Spanish philosopher, Ortega y Gasset's notion of circumstance, as described in his words, "I am me and my circumstance, if I do not save it, I will not save myself" [15], is echoed in Távora's understanding of the circumstance in architectural terms [14]. Subsequently, Távora translated this understanding to the profession, where identity, rooted in the physical built context and historical continuity, becomes the central theme of his works. This can be seen in one of his interviews where he stated, "The circumstances of each work are very different, and I think it's very interesting that definition of the circumstances, of the conditions of each work. It's fundamental, it gives the work its character, it gives the work its identity"[16]. Regardless, one can argue that Távora, despite not using terminologies which are often associated with sustainability, indeed advocated for a sustainable methodology of intervention in which the conditions of the place define the adequate decisions to be taken. This approach, according to him, is what constructs a modern work [17].

In addition, the desire to understand and respect the circumstances of the place may even oblige the architect to remain silent in some cases [18]. When Távora decides to intervene, architecture as an artefact, and the questions of form and the subtle line between the natural and man-made are reflected upon as the architect's language. He calls upon a conscious intervention [19], which, in today's wording, can be interpreted as a genuinely sustainable architectural principle, arguing:

"[...] the artificial forms, the result of human creation – in addition to the natural forms that play a role of fundamental importance – find themselves to be conditioning factors for every new form created since the space organised by man is conditioned in its organisation but, once organised, becomes in turn conditioning for future organisations. [...]"

The «circumstance» will, therefore, be, in the proper meaning of the term, that set of factors that surround man, that are around him and, since he is the creator of many of them, to these must be added those that derive from his very existence, from his being" [20].

This argument posits that architecture actively transforms the conditions of a place, reshaping its circumstances and contributing to the formation of a new identity. Consequently, the architect's role is fundamentally rooted in the ability to observe and interpret the built environment—an essential skill that informs the design process. Through critical observation, the architect must engage with the specific conditions of a site, ensuring that architectural interventions respond thoughtfully to their spatial, historical, and cultural contexts.

For Távora, architecture has the ultimate goal to instill itself in a historical continuity, where a constructive and critical relation with the past is reflected in the project [21]. In this regard, for him, reading history is not a collection of emerging styles which have consequently been subsequently substituted with one another but rather a critical understanding of principles that can serve our current needs. Hence, for Távora, history becomes an operating tool, making his architecture an example of a "permanent modernity" [22] that is respectful to the context, learns from it, and can sustain itself in time.



Fig. 3. Pavilhão Carlos Ramos

Arguably, an echo of incorporating the pre-existent circumstances of a work can be seen in his most well-known student and collaborator's work, where Álvaro Siza, through careful observation, documented in his numerous sketches, intends to understand the forces of the site and intervene accordingly. Pavilhão Carlos Ramos, which is one of the main buildings of the Faculty of Architecture of the University of Porto, is an example of this principle, where the presence of the pre-existing natural context, especially the presence of the beech tree (known as *faia* in Portuguese) defines the limits of the artefact's morphological implantation. Being a building dedicated to the students of architecture, it is an exemplary method of intervention in which Siza consciously takes Távora's notion of circumstance into consideration. A lesson of architecture, offering profound insights for young architects. Though the tree has unfortunately fallen a year ago, its impact due to the presence of the artefact remains still.

5. Final Consideration

As discussed in this paper, the reflections of Ernesto Nathan Rogers and Fernando Távora, which in many instances are in accordance, illustrate how tradition and historical continuity can function as dynamic tools for contemporary architectural practice in contrast to a mere reference to the past. Rogers' "pre-existent environments" and Távora's "circumstance" both advocate for an architecture that takes into consideration the historical and contextual conditions. In this regard, this paper argues that both Rogers and Távora's theoretical contributions based on their practice, in fact, highlight one of the dimensions of an architecture that is sustainable in its principle without using the specific terminologies which, in our current days, are often associated with the topic. This interpretation of sustainable principles in our current condition is especially of great relevance due to the fact that, in many instances, sustainability has become a branding tool for competitive purposes rather than core principles that should be embodied in our architectural education and practice.

In addition, by reading history as an operating tool, this paper argues that instead of constantly pursuing the answers to sustainability in technology, one can search for existing principles that can be applied today as well, hence bridging continuity and innovation to ensure that new interventions resonate with the identity of the environments in which they are situated.

Lastly, it is important to recognise that sustainability is a complex and multi-faceted topic. In some instances, the contemporary discourse of sustainability is commercialised as a marketable feature, which comes at the cost of its broader ecological, social, cultural and historical dimensions. While a building's ambitions and achievements can be assessed in relation to the evolving principles of sustainability, it is essential to recognise that no building is entirely sustainable. This is to argue that sustainability is not a fixed state but rather a continuous process of adaptation, critical engagement, and innovation. Hence, it is essential to promote an ongoing dialogue between architectural practice, environmental responsibility, and social needs. Thus, in contrast to perceiving sustainability as a mere certification or a set of predefined standards, it should be understood as an evolving framework that promotes architects to integrate existing concepts and ideas in the history of architecture and reinterpret them based on the characteristics of the era in which they belong to.

References:

- [1] Ingles B. Engineering Without Engines. *Council on Tall Buildings and Urban Habitat* 2015; 110-119.
- [2] Vafego L, Avellaneda J. The Unsustainability of Sustainable Architecture. *Fraunhofer-Informationszentrum Raum und Bau IRB*; 212-223
- [3] Campo Baeza A. *Palimpsesto Architectónico*. Madrid: Asimétricas; 2018.
- [4] Campo Baeza A. *Poética Architectónica*. Madrid: Diseño Editorial; 2014
- [5] Campo Baeza A. *Siete Lecciones De Arquitectura*. Madrid: Estudio Arquitectura Campo Baeza; 2023.
- [6] Rogers EN. *Esperienza dell'architettura*. Milan: Il Saggiatore; 1958.
- [7] Távora F. *Da organização do espaço*. Porto: Fundação Instituto Arquitecto José Marques da Silva; 1962.
- [8] Lattante V. Ernesto Nathan Rogers e Le Preesistenze Ambientali (Ph.D. Diss.). Bologn: Università di Bologna; 2013.
- [9] Sabini M. *Ernesto Nathan Rogers: The Modern Architect as Public Intellectual*. London: Bloomsbury Publishing Plc; 2021.
- [10] Rogers EN, in Sabini M. *Ernesto Nathan Rogers: The Modern Architect as Public Intellectual*. London: Bloomsbury Publishing Plc; 2021.
- [11] Molinari L. *Continuità: a response to identity crises. Ernesto Nathan Rogers and Italian architectural culture after 1945* (Ph.D. Diss). Milano: Politecnico di Milano; 2008.
- [12] Tafuri M, in Molinari L. *Continuità: a response to identity crises. Ernesto Nathan Rogers and Italian architectural culture after 1945* (Ph.D. Diss). Milano: Politecnico di Milano; 2008.
- [13] Maestri G. Fernando Távora: The Struggle from Português Suave to the Shifting Aesthetics of Resistance from 1923 to 1953. *Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 216-261.
- [14] Pinto da Silva M. *Fernando Távora: the Meaning of Time and the Reason of Things. Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 60-67.
- [15] Ortega y Gasset J, in Pinto da Silva M. *Fernando Távora: the Meaning of Time and the Reason of Things. Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 60-67.
- [16] Távora F, in Mendes M. Manuel Mendes Interviews Fernando Távora. Edifícios (1988). *Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 12-39.
- [17] Vierno de Moura F. Fernando Távora and the Concept for a New Civic Centre for Aveiro: Urban Project, Modernity and the Enhancement of the Urban Landscape. *Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 176-215.
- [18] Telesforo A. The "Third Way": Távora's Method in Masterwork. The Reconstruction of Porto's Old Municipal Tower, Known as "Casa dos 24". *Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 314-363.
- [19] Liverani G. Understanding Organised Space. *Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 450-485.
- [20] Távora F, in Liverani G. Understanding Organised Space. *Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 450-485.
- [21] Ordóñez-Castañón D, and Cunha Ferreira T. Designing with History: Intervention in Preexisting Buildings by Fernando Távora at the Dawn of the Third Way (1945-1962). *Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 102-131.
- [22] Bandeirinha JA. A Project with Many Dates. Fernando Távora, Santa Cruz and Sansão Square in Coimbra. *Histories of Postwar Architecture: Fernando Távora at 100* 2022; **11**: 368-383.

Figures

- [1] Fig. 1. Pantheon by Anastasiia kholopova
- [2] Fig. 2. Torre Velasca by Mahdi Alizadeh
- [3] Figure 3. Pavilhão Carlos Ramos by Anastasiia Kholopova

11th International Conference on New Trends in Architecture and Interior Design 2025

11th ICNTAD'25

11th International Conference on New Trends in Architecture and Interior Design 2025

Bologna, ITALY

Published by the ICNTAD Secretariat

Editors:

Prof. Dr. Burcin Cem Arabacioglu and Assoc. Prof. Dr. Pinar Arabacioglu

ICNTAD Secretariat

Büyükdere Cad. Ecza sok. Pol Center 4/1 Levent-İstanbul

E-mail: icntadconference@gmail.com

<http://www.icntadconference.com>

ISBN: 978-625-99435-2-7

Copyright @ 2025 ICNTAD and Authors

All Rights Reserved

No part of the material protected by this copyright may be reproduced or utilized in any form or by any means electronic or mechanical, including photocopying , recording or by any storage or retrieval system, without written permission from the copyrights owners.