BETWEEN EPHEMERALITY AND PERMANENCE /

Beatrice-Gabriela Jöger - *"Ion Mincu" University of Architecture and Urban Planning, Romania*

beatrice.joger@gmail.com

Abstract. The textile material, known and used for thousands of years, was and is ephemeral by its very physical materiality: that of the natural raw material from which it is made. The perishability of natural raw materials (whether of plant or animal origin), which degrades relatively quickly, having a limited life cycle, has also led to the disappearance of objects made with them. The 20th century, among its many inventions and innovations, also brought us synthetic textile materials which, through their chemically formulated life, seem to enjoy perpetuity, which is not sustainable and does not correspond to a natural life cycle and therefore, in a way, neither to our transient nature. In recent decades, research has revealed the possibility of having new natural sources of raw materials and possibilities for recycling synthetic materials. The article does not deal with textiles per se, but rather their presence as a variable architectural form. The theoretical investigation dedicated to the connection between architecture and textiles, which has developed especially in the last twenty years after Marc Garcia coined the term Architextiles, together with the technical possibilities and research in the field, have given impetus both to the positioning of textiles on another level of importance and to the multiplication of the use of textiles also at the exterior of the architectural object. Once the field of investigation was opened, it was proven that textiles are very present in architecture, both under the classic uses inside and outside (with new, high-performance materials, with special characteristics) and as a means of communication. For the case analyses, the tent was chosen as the subject of study, as an architectural object which, beyond its materiality, subject to the passage of time, became permanent through the development of its typology as a cultural archetype.

Introduction - textiles between ephemeral and permanence. This article is part of the author's ongoing research, spanning approximately 30 years, at the intersection of architecture and textiles. One of the subthemes of the research, which has been addressed before but is recurrent with a tendency to become permanent, is the relationship between the ephemerality of the textile material itself and its millennial and contemporary presence in our lives, both on a personal level and in terms of architectural space.

Textiles, known and used for thousands of years, were and are ephemeral due to their physical materiality: that of the natural raw material from which they are made. Given its wide range of uses, from clothing people to "dressing houses" (or even building houses out of textiles), we have few examples left from centuries past, and especially from millennia ago. The perishability of natural raw materials (whether of plant or animal origin), which degrade relatively quickly and have a limited life cycle, has also led to the disappearance of objects made from them. The remaining evidence has sometimes been preserved by chance, in extreme conditions (such as the world's oldest carpet, found in a Scythian tomb preserved in the ice of the Pazyryk Valley in the Altai Mountains of Siberia, after about 2,500 years) or through care taken for life after death (objects found in the tombs of Egyptian pharaohs), although even these, when we intrude into their isolated environment, become fragile and easily destructible. In the vast majority of cases, precious objects have been preserved, objects of cult or of great artistic or intrinsic value, thus receiving attention and being passed down from generation to generation.

We can take our country as an example, where most of the preserved textile heritage is at most a few centuries old, with older examples found in cult textiles (especially those used in worship), while popular textiles are only about 200-250 years old.

The use of natural materials, which are biodegradable by their very structure, meant that for millennia there was practically no textile waste. In addition, production was relatively limited (there was no overproduction) and valuable items were passed down from generation to generation, often documented (dowry sheets, wills, donations, etc.).

The 20th century, among its many inventions and innovations, also brought us synthetic textiles, which, due to their chemical composition, seem to enjoy eternal life. We were thrilled when, in 1935, Dupont patented Nylon. After enthusiastically and ubiquitously using synthetic textiles, we realized that they are not sustainable, are difficult to degrade, and, apart from the immense resources used for their manufacture—as in the entire textile industry, in fact—they pollute our planet to a much greater extent than we could have imagined. So now, a century later, we realize that the life cycle of materials, especially textiles, was natural and corresponded, in a way, to our own transient nature. Now we want to be able to eliminate (most) of the objects made of synthetic materials, but we are unable to do so. Or, at least not in our lifetime. And so we are looking for solutions to a problem that we have created ourselves, with our ingenuity, thirst for knowledge, and inventiveness. Solutions have begun to be found, such as the recovery of objects and their introduction into one of the phases of circularity—10 phases, from recovery to refusal (Kirchher et al., 2017)—but these solutions often run into the difficulty of separating the materials from which complex objects are made. In addition to combining materials, our inventions and innovations and complex technologies have succeeded in introducing special qualities and resistance to each material, which often makes the recycling process more difficult. Greater mechanical strength of the material also means greater effort is required to destroy or transform it. Its elasticity requires innovative solutions if we want to tear a piece apart. Resistance to UV rays or high temperatures poses other problems in the recycling process. The very dismantling of a complex object and sorting it by material type is a difficult process that is only just beginning to be carried out with the help of technology (rather than manually), through optical (microscopic) identification of the type of fiber.

Beyond research dedicated to recycling synthetic materials, in recent decades, both fundamental research conducted by major institutes and

research developed by artists and craftsmen has revealed the possibility of new natural sources of raw materials. To introduce special qualities, nanotechnology, which is now also present in the technological flow of textiles, helps to process natural raw materials or combine natural and synthetic ones.

Methodology. Part of ongoing research (for which the Introduction serves as a summary), the relationship between the ephemerality of textiles and their permanence in our lives utilizes multiple research methods. For this article, which discusses the presence of textiles as a variable architectural form, extensive basic bibliographic research and recent literature were used, as well as the analysis of archetypal and contemporary examples from different contexts, most of which were seen personally by the author. For the case study argument, the tent was chosen as an architectural object that has become permanent through the development of its typology as a cultural archetype, beyond its materiality, which is subject to the passage of time.

Theorizing the relationship between architecture and textiles. Although the properties of textiles have been used by architects as an example of structural behavior for decades (we can mention Frei Otto's example, with his emergency housing and, later, the Olympic Stadium in Munich), the connection between architecture and textiles has rarely been addressed theoretically by architects, apart from Semper in the 19th century. Although it is a material that is close to us throughout our lives (we dress ourselves in textile items), architects tended to record its characteristics and capabilities in their subconscious. Relegated to the decorative field, textiles in architecture began to gain ground with the development of technologies that allowed for the introduction of novel characteristics in textile materials.

The December 2006 issue of the prestigious *Architectural Design* (AD) magazine was dedicated to architecture and textiles, establishing the theoretical link between them. Editor Marc Garcia defined the term *Architextiles*: "A hybrid between 'architectures' and 'textiles', the word 'arhitextile' refers to this set of projects and the ways of thinking and making that unite the two." (Garcia, 2006, p.7) Architecture and textiles are linked not only by a common etymology of the words themselves, but also by various research projects, by architecture that has been realized or not, by the new paradigm of contemporary architecture, which "promotes an architecture that is never finished, never static, but in a continuous state of becoming, provisional in its transitional nature." (Garcia, 2006, p.8)

By happy coincidence, in the autumn of that same year, *Textile* magazine, which is as influential in the field of textiles as AD is in architecture, dedicated an issue to exactly the same topic, but viewed from a different perspective: textiles and architecture (Jöger, 2022, p.59).

However, literature on this subject remains limited. Only recently did Christopher Bardt revisit the history of the relationship between architecture and textiles in *The Philosophy of Fabric Innovation in Architecture* (2023), starting from the common etymology of the words and moving from the art of antiquity to Semper and Mies van der Rohe. Like the author of this article, Bardt sees the future of textiles in architecture as being linked precisely to their potential for sustainability and the modeling possibilities of parametric architecture, which can finally encompass the capricious weaving of textiles in its formulas.

There is no doubt that these theoretical investigations, together with technical possibilities and research in the field, have given impetus both to placing textiles on a new level of importance and to the use of textiles in architecture, both indoors and outdoors. Once the field of investigation was opened up, it became clear that textiles are very present in architecture, both in their classic indoor and outdoor uses and as a means of communication.

Case study - the tent and its architectural valences. The variety of new materials and uses of textiles in today's architecture makes it difficult to choose examples for the case study. Looking for a common thread between them, the author settled on an archetypal architectural object, the tent, which has proven to have multiple uses over time. Seemingly ephemeral in form due to its materiality and duration of existence, the tent has become permanent through millennia of use, through new materials and through its presence, declined and interpreted in contemporary times, inspiring architects and artists alike.

Permanent residence. From an architectural point of view, the tent is one of the oldest forms of housing. Made from various materials, textiles have become particularly popular due to their reusability and ease of assembly and disassembly, which has made them the preferred choice of nomadic civilizations. The tent is not only a form of dwelling from the past, but also continues to exist today as a form of dwelling, either permanent, in cases of precariousness or, on the contrary, super-technological, or in various forms of temporary dwelling. Although theoretically a form of ephemeral housing due to its very materiality, it becomes permanent through its millennial longevity of use as an architectural typology. Among the people who still use tents as a form of housing, we can mention the Bedouins of North Africa and the Middle East, as well as, in a more complex form, the yurts used in Central Asia by Uzbeks, Mongols, Kyrgyz, and others.

Yurt. A complex form of tent, which retains its characteristic mobility through assembly/disassembly, with a wooden structure covered with textiles (felted) and lined on the inside with other textiles (kilim or knotted carpets, other decorative fabrics), yurts have been modernized. Traditional lamp lighting has been replaced by electric bulbs powered by solar panels. FIGURE 1a. These also provide electricity for modern means of communication. The existence of synthetic, waterproof textiles (tarpaulins) represents a contemporary way of covering traditional textiles to increase resistance to wind and water.

Bedouin tent. Globalization, which has penetrated almost all areas, brings positive things to the field of knowledge. For example, Jordanian architect and artist Abber Seikaly teaches architecture at the prestigious Yale University School of Architecture in the US and has introduced the tent as a subject of study into the workshop curriculum, transferring her research on construction techniques and technologies using traditional Bedouin tent materials into the academic environment. She conducted an exercise

exploring textiles and the possibilities of creating spatial structures with them, based on the method of making Bedouin tents from long strips of fabric sewn together. FIGURE 1b.

Seikaly notes that the creation of a traditional tent is, beyond the object itself, a cultural undertaking of the community (Seikaly, 2023, p.117), with the sequence of technological stages bringing the members of the tribe together. We can mention the tradition in Romanian villages, where the stages of processing wool or other textile raw materials were an opportunity for gathering (*șezătoare*), especially in the cold season, when field work was sporadic or even absent. Although the final product is different—a tent-dwelling for the Bedouins and textile objects used indoors or for clothing in Romania—the act itself has a common characteristic in that it brings together members of the community, fosters communication between them, brings together several generations, and transmits traditions orally and by example. Thus, a craft whose ephemerality lies in the very moment of its exercise ensures its permanence through this gesture—its transmission from generation to generation—achieved collectively.

Inspired by traditional tents and in order to preserve this type of permanent housing, today's Bedouin tents can have the most modern facilities, being in fact perfectly equipped houses but with a textile envelope and the possibility of relocation by dismantling and reassembly. Electricity, air conditioning, and even running water (similar to hookups in trailer parks—which are also mobile homes, but not textile ones) are present in an amalgam of traditional and contemporary elements, in an effort to continue a tradition while adapting it to the demands of modern life. For the traditional pilgrimage to Mecca, a veritable city of tents was built – Mina City (Imam & Alamoudi, 2014), perfectly organised in terms of urban planning and equipped with modern amenities (electricity etc.). FIGURE 1c.

The canopy bed - the house within a house. The tent also represents the separation of a (smaller) space from a larger space (nature), thus creating a space within a space. Taken to the extreme, the canopy bed built within the space of the room in which it is located represents a smaller house within a larger one. Called the "dressed room" (*camera vestida*) in Old Spanish, it arose from an objective necessity—easier heating of a small space reserved for rest. Enclosed on all four sides with drapes (depending on social status and possibilities - common wool curtains, or precious velvet, brocade, or even tapestry), the canopy represents a personal tent, brought indoors and which, after the strict need for a warmer space disappeared, became a decorative-aesthetic typology that became permanent in the repertoire of bedroom furniture. FIGURE 2.

Temporary housing. *Military tent*. As an example of organized temporary housing, we can cite the military tent, whose image can be seen since ancient times on Trajan's Column. The organization of a military tent camp is planned in advance, and the duration of construction depends on the length of the camping stage: one night, weeks, or months. A comparative analysis of an image from Trajan's Column (FIGURE 3a) and a modern military tent camp (FIGURE 3b) reveals the similarity between the rectangular volumes covered with gable roofs, which have endured for millennia as a testament to the efficient design of the ancients. Of course, the materials used today are different, with increased waterproofing, fireproofing, and thermal insulation properties, and modern tents sometimes benefit from contemporary amenities (electricity, heating/cooling, etc.).

The recreational tent. Taken from permanent dwellings and multiplied with the development of global tourism, tents also represent a means of temporary shelter in environments or areas where there are no other types or possibilities of accommodation. In the isolated heights of the mountains or in the vastness of the desert, tents provide shelter. The ephemeral nature of the need leads to the requirement that the textiles used for them be both lightweight (for portability) and relatively inexpensive (we are not talking here about those for sports performance). The recreational tent can create a tent camp and thus a community (FIGURE 3c), whose physical life is ephemeral. From various civic actions to summer music festivals, which, due to the crowds they attract, exceed the local accommodation capacity, temporary solutions become necessary.

Exhibition or event pavilion. An important section of contemporary tent use is dedicated to pavilions. Ephemeral by their very architectural program, exhibition pavilions are often built in more generous spaces, thus becoming, themselves, "a house within a house." At the Venice Architecture Biennales in 2021 and 2023, dedicated to themes that generically concern our future together - "How will we live together?" (2021) and "The Laboratory of the Future" (2023)—objects made of textiles were used to construct the pavilions, to communicate messages, or both.

Azra Aksamija; Melina Philippou (2021). Contemporary wars have led to the exodus of entire populations, which is what happened to the people of Syria after the outbreak of civil war in 2011. In 2014, a camp for approximately 35,000 Syrian refugees was established in Jordan. The impossibility of living in what is considered normal housing, in non-mobile homes built with durable materials, led a research team of 12 researchers from all over the world (Europe, Asia, USA) to speculate about a future world in which most people have been forcibly displaced (Aksamija & Philippou, 2021). It should be noted that in the meantime, the war much closer to us, in Ukraine, has shown us here too, in real life, what the massive presence of refugees means and the logistical problems that arise and need to be solved with the utmost urgency. The group of researchers came together to carry out the project: *A Displaced Empire: Al Azraq Refugee Camp*, Jordan. To illustrate this new reality, they used recycled materials, both civilian and military, and other recovered components. FIGURE 4a. Through cutting, reassembling, knitting, twisting, weaving, and other techniques (laser burning on denim, etc.), the proposed object explores the potential of textiles, both in terms of malleability and the possibility of controlling the degree of transparency of the resulting surface. The surfaces that limit the volume of the tent are marked by rhythms and graphic elements specific to Muslim culture, thus localising this creation, which could otherwise be situated on other meridians.

Italian Pavilion (2021). The generous space reserved for the Italian pavilion at the Arsenale in Venice brought together exhibitions and events under the theme of *Resilient Communities*. But in a large space, built for an architectural program other than exhibitions and events, visitors' footsteps, con-

versations, and public events can reverberate, causing acoustic discomfort. One of the most physically and economically effective methods of improving the acoustics of a space is to place sound-absorbing objects or textile surfaces. In this case, the thick, dense, rough-looking fabric used for this purpose, similar to that used for the sails of the ships that once came and went from the waters of Venice, had both sound-absorbing and light-filtering properties, filtering the harsh light cast by the spotlights. FIGURE 4b.

OPAFORM Architects (2021). Subscribing their project entitled *Make a Space for my Body*, to the generous theme of the 2021 Architecture Biennale – *How Will We Live Together* – the Norwegian firm OPAFORM Architects presents it in three spaces created within the larger space of one of the Arsenal galleries. With their work in recent years focused on repurposing and expanding buildings for reuse, the architects used only two materials for the pavilions in Venice: wood and wool. These natural materials allow for climate control in relation to the space they delimit, bringing not only warmth but also protection, creating more intimate spaces dedicated to meditation, protected by archetypal forms – the disc, the sphere, the truncated pyramid. The latter is, in fact, a tent under which the project plans are displayed on a platform. FIGURE 4c. The silhouette of the ensemble suggests the house, also archetypal, the house-shelter, the house-hearth, the house-temple.

As part of the 2023 Architecture Biennale, the sixth edition of the *Time, Space, Existence* exhibition was held at the European Culture Center in the Palazzo Mora, an open platform, a laboratory dedicated to research, where architects, artists, academic institutions, and professionals in the field of creation are invited. Between the general theme of the 2023 biennial - *The Laboratory of the Future* - and those consistently addressed in recent years: sustainable materials, reuse of materials, acute climate and social issues, the more than 200 projects presented seek innovative solutions that incorporate new technologies in construction without harming the planet.

Student Collective at35 (2023). In Venice, a city located on land "stolen" from the lagoon, every private courtyard is highly prized, with those located on the roof of the house (*altana*) becoming an architectural feature in their own right, far from the hustle and bustle of tourists. This has been reinterpreted by the Student Collective at35 from Coburg University of Applied Sciences and Arts School of Design (EEC, 2023). The installation itself is also a demonstration of the reuse of leftover or already used materials: the reuse of wooden slats left over from the exhibition at Palazzo Mora during the 2021 Biennale and firewood bags (recycled textiles). The pavilion thus created on the roof of the palace also proposes an improvement to the traditional form of the *altana* through a covering that protects from the strong sun, filters the light, and even the degree of visibility. FIGURE 5. The shape of this covering, integrated into the orthogonal structure, is reminiscent of the traditional tent.

BioMat (2023). A research company founded by Prof. Dr.-Ing. Arch. Hanaa Dahy, BioMat seeks sustainable solutions for the architecture of the future. To this end, its research starts with materials, one of the results being LightPRO. Hemp, a textile plant known since ancient times and now having multiple uses, can become structural. BioMat has obtained hemp profiles for lightweight structures through pultrusion technique, profiles that are joined by biocomposite connectors. The resulting structures can be covered with waterproof or non-waterproof textiles, and the resulting pavilions offer multiple benefits: easy assembly and disassembly, low weight (important for transport), and, of course, mobility. One of the characteristics of natural fibers, flexibility, has been preserved in the new material, and the pavilion built at the University of Stuttgart, Institute of Building Structures and Structural Design in 2021 has a compressed double-curved structure, with the covering membrane also being tensioned. All forces are concentrated in the three foundation anchorage points FIGURE 6a. The project was presented at the 2023 Venice Architecture Biennale.

Norman Foster Foundation with Holcim (2023). With an estimated 103 million people forced to leave their homes by 2023 (ECC, 2023), the temporary situation often becomes quasi-permanent (even decades), turning emergency shelters into a challenging research topic that must meet, in addition to housing criteria, those of rapid construction, portability, and low cost. Following a workshop on this topic held in June 2022 at the Norman Foster Foundation, Holcim invited Norman Foster and his team to develop the *Essential Homes Research Project* for the 2023 Venice Biennale. The result was a work in progress that presented the project, the model (FIGURE 6b), and part of a prototype shelter that can be improved and scaled up. Holcim's contribution consists of using a rollable low-carbon concrete impregnated canvas which hardens on contact with water. The shape proposed by Norman Foster resembles that of a classic tent, and its function (temporary shelter) and proposed facilities qualify it as a reinterpretation and improvement of the latter.

Conclusions. With a millennial presence in our lives, textiles have generated objects, including architectural ones, which, through their materiality, lie between physical ephemerality and cultural permanence, the latter taking many forms and interpretations. The analysis here of various examples of tents reveals a continuity/permanence of their presence in the built environment, but also their ephemerality as constructions in themselves. The difference today is made by the application of contemporary technologies in the field of textiles and the conscious use of the material by architects who appreciate its qualities and sustainability potential.

Now at the forefront of architectural research, textiles and architecture have come together over the last twenty years in theoretical discourse, after lengthy aesthetic and empirical research and applications. The apparent fragility of textiles and their texture bring a special warmth to architecture, regardless of the material itself or the scale at which they are used.

References.

1. Bardt, C. (2023). The Philosophy of Fabric Innovation in Architecture. In T. Stonorov (Ed.) *FABRIC*[*ated*]: *Fabric Innovation and Material Responsibility in Architecture* (1st ed., pp.18-26). Routledge. https://doi.org/10.4324/9781003138471-3
2. Aksamija, A., & Philippou, M. (2021). *Displaced Empire: Al Azraq Refugee Camp, Jordan* [Exhibition]. Bienale Architettura di Venezia. Venice, Italy. https://www.labiennale.org/en/architecture/2021/co-habitats/azra-aksamija-melina-philippou, accessed 16 November 2025.
3. European Cultural Centre (ECC) (Ed.). (2023). *Time, Space, Existence, Venice*

2023 Architecture Biennial. European Cultural Centre Venice, ISBN 9789082943474, TSE_2023_Online_V4.pdf at https://drive.google.com/file/d/1ILNoy6Ttor5nHDd_Jm7eg7AgeALwa2Z7/view
4. Garcia, M. (2006). Architecture + Textiles = Architextiles. *Architectural Design*, 76 (6), 6-20.
5. Imam, A. & Alamoudi, M. (2014). *Mina: the city of tents origination and development*. At: International Conference Virtual City and Territory. "9° Congresso Città e Territorio Virtuale, Roma, 2, 3 e 4 ottobre 2013". Roma: Università degli Studi Roma Tre, Italy, pp.1351-1365. DOI: 10.5821/ctv.8014.
6. Jöger, B.-G. (2022). The Lastingness of the Ephemeral. The Presence of Textiles in Contemporary Architecture. *studies in History and Theory of Architecture. Efemeral. Built not to Last*, 10, 55-70. DOI: 10.54508/sITA.10.05, https://sita.uauim.ro/article/10-04-joger-lastingness-of-the-ephemeral
7. Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation and Recycling*, 127, 221–232. https://doi.org/10.1016/j.resconrec.2017.09.005
8. Bienale Architettura di Venezia (2021). *Make a Space for My Body* [Exhibition]. Venice, Italy. Retrieved November 16, 2025, from https://www.labiennale.org/en/architecture/2021/new-households/opaform-architects
9. Seikaly, A. (2023). Weaving a Home. From Bedouin Tents to Structural Fabrics. In T. Stonorov (Ed.) *FABRIC[ated]: Fabric Innovation and Material Responsibility in Architecture* (1st ed., pp.116-127). Routledge. https://doi.org/10.4324/9781003138471

Figures.

FIGURE 1 - (a) Yurt in Arkhangai Province, Mongolia, 2023. Source: https://commons.wikimedia.org/w/index.php?search=Yurt&title=Special%3ASearch&ns0=1&ns6=1&ns12=1&ns14=1&ns100=1&ns106=1#/media/File:Yurt_in_Arkhangai_Province.jpg, Author Bernard Gagnon, Licence CC0, https://creativecommons.org/publicdomain/zero/1.0/; (b) Encampment of Beduins, 1900. Source: https://commons.wikimedia.org/wiki/File:Encampment_of_Beduins_(cropped).jpg, Boston Public Library, Collection: William Vaughn Tupper Scrapbook Collection, Photographer: G. Lékégian & Cie., Licence CC-BY- 2.0. (Attribution 2.0 Generic); (c) Tents in Mina City (Saudi Arabia), 2 km away from Mecca. Source: https://upload.wikimedia.org/wikipedia/commons/a/ab/Haji_pilgrimage_mina_tent_city.jpg, Author Seeley International, Licence CC-BY-4.0 (https://creativecommons.org/licenses/by-sa/4.0/deed.en).
FIGURE 2 - (a) *Camera Regia*, Alcazar de Segovia, 15th c., 2002; (b) *Camera vestida*, Casa Lope de Vega 17th c., 2002; (c) Contemporary canopy setup at Mobexpert, 2013. All photos by the Author.
FIGURE 3 - (a) Conrad Cichorius, *The Reliefs of Trajan's Column*, Plate X, 1896. Source: https://commons.wikimedia.org/wiki/Trajan%27s_Column_-_Cichorius_Plates#/media/File:010_Conrad_Cichorius,_Die_Reliefs_der_Traianss%C3%A4ule,_Tafel_X.jpg, public domain; (b) A "tent city" erected for a U.S. military exercise, 2015. Source: https://upload.wikimedia.org/wikipedia/commons/6/6c/Military_ tent_city.jpg, Author U.S. European Command, Licence File usage on Commons; (c) Tent City at Anglesea Pano, Victoria, Australia, 2009. Source: https://upload.wikimedia.org/wikipedia/commons/7/7a/GVBR_Tent_City_at_Anglesea%2C_Vic%2C_jjron%2C_09%2C_04.12.2009.jpg, Author jjron (John O'Neill) 2009, Licence GNU Free Documentation License, Version 1.2 https://en.wikipedia.org/wiki/en:GNU_Free_Documentation_License
FIGURE 4 - (a) *Displaced Empire: Al Azraq Refugee Camp, Jordan* Pavilion, 2021; (b) Interior of the Italian Pavilion, 2021; (c) *Make a Space for my Body*, by OPAFORM Architects, 2021. All photos by the Author.
FIGURE 5 - *Re-altana* at the Palazzo Mora, Bienale di Architettura, Venice, Italy, 2023. Photos by the Author.
FIGURE 6 - (a) *LightPro Shell Pavilion* by BioMat, project panel photo, 2023. Photo by Masih Imani, 2021; (b) Model of the *Essential Home Research Project* by Norman Foster Foundation with Holcim, 2023. Photos by the Author.

1.







2.







3.











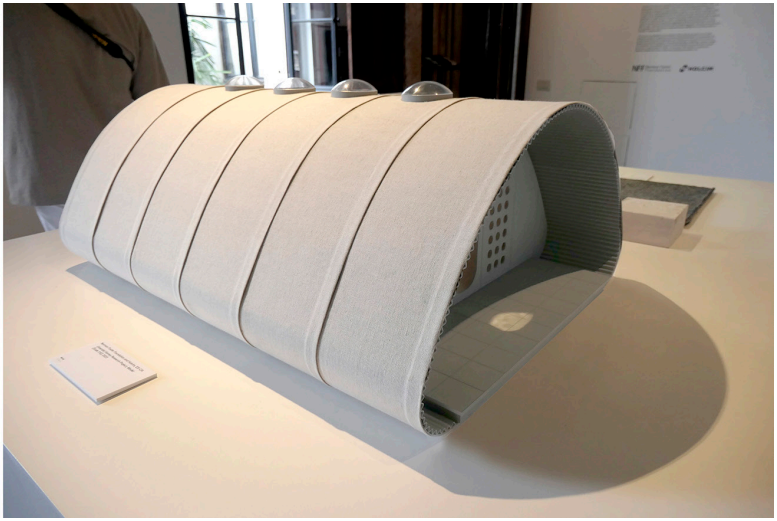






6.





FROM INDUSTRIAL VOID TO URBAN CONTINUITY: REGENERATING THE BRAGADIRU INDUSTRIAL ENSEMBLE /

Pietro Dorissa - *"Ion Mincu" University of Architecture and Urban Planning, Romania*

pietro.dorissa@gmail.com

Abstract. The Bragadiru Brewery ensemble represents one of the most significant historical industrial sites of Bucharest, located at a sensitive point in the relationship between memory, urban transformation and regeneration potential. This article examines the site not only as an architectural object, but as an urban territory marked by historical accumulations and discontinuities generated by political transformations and large-scale interventions during the late socialist period.

The theoretical framework integrates Hannah Arendt's conception of public space as the place of appearance, the ideas of Jane Jacobs and Jan Gehl regarding the human scale, social dynamics and urban vitality, as well as Charles Montgomery's reflections on the relationship between the built environment and wellbeing. The Heideggerian perspective on dwelling allows the industrial heritage to be interpreted as an existential support for collective memory. The analysis traces the historical evolution of the Bragadiru Brewery ensemble, emphasising how the demolitions of the 1980s, which eliminated approximately 5.9–7 square kilometres of urban fabric and resulted in the displacement of around 40,000 inhabitants (Tănase, 2019), profoundly reconfigured its territorial context. The site became isolated and detached from the urban network, losing its natural connections with the city centre.

At present, the ensemble is examined as a potential node within a north south green urban direction, capable of connecting the city's major parks into a continuous urban infrastructure that combines vegetation, pedestrian routes and public spaces. Within this framework, the site can become an interface between the centre of the capital and the southern districts, contributing to the rebalancing of the urban structure. The article argues that the regeneration of the ensemble can function both as a local intervention and as a city scale intervention, transforming a fragmented territory into a coherent sequence of the city.

Introduction and theoretical framework. The industrial heritage of Bucharest constitutes a complex assemblage of elements in which collective memory, political transformations and the absences produced by demolitions overlap in ways that are, at first glance, difficult to decode or disentangle. The Bragadiru Brewery ensemble, located in an area between the historic centre and the Rahova district, reflects this stratification. Its present condition is marked by fragments, inaccessible areas and ruptures of continuity, and these characteristics are not due solely to the decline of industry, but also to broader urban transformations that have altered the relationships among space, community and identity.

To construct an appropriate interpretative framework, the article brings into dialogue conceptual positions originating from different fields. Hannah Arendt understands public space as the place where individuals become visible to one another and articulate their shared existence (Arendt, 1958). Jacobs and Gehl emphasise the importance of everyday interaction and the human scale, both essential for a lively and inclusive city (Jacobs, 1961) (Gehl, 2010). Montgomery highlights the relationship between the urban environment and psychological well being, underlining the role of socio ecological infrastructures in the proper functioning of communities (Montgomery, 2013). Heidegger reinterprets dwelling as a form of existential anchoring and as a fundamental structure of being in the world (Heidegger, 1971/2001).

Seen through this perspective, the Bragadiru Brewery ensemble becomes more than a degraded industrial site. It transforms into a space where the city can reconstruct its broken continuity, a place where memory can be reactivated and where urban reconstruction extends beyond physical restoration to include the reestablishment of a coherent urban trajectory. Its location in a strategic area of Bucharest gives it the potential to act as a transitional element between the centre and the southern districts, offering the possibility of urban reconnection.

Historical evolution, fragmentation and the current context. The evolution of the Bragadiru Brewery ensemble is closely connected to the transformations of the Rahova area from the late nineteenth century to the mid twentieth century. Between 1894 and 1899, the initial nucleus of the brewery took shape in parallel with the street reorganisation of the neighbourhoods located on the right bank of the Dâmboviţa River. The first industrial buildings, erected by architect Anton Schickerle, together with the Bragadiru Palace and the auxiliary constructions, defined the embryonic structure of the ensemble. During the period 1899–1911, economic growth led to substantial expansions, including new production buildings, facilities for workers and logistical infrastructures, all integrated into the functional logic of the complex. Between 1911 and 1948, the ensemble underwent its most extensive phase of modernisation through the introduction of the industrial railway, the reorganisation of production spaces under the coordination of architect F. Waffler and the addition of technical facilities such as the power plant or the rice cleaning station. These transformations converged towards the formation of a modern industrial complex, adapted to the technological demands of the time and integrated into Bucharest's urban dynamics.

The major changes of the 1980s profoundly affected the relationship between the ensemble and the city. The demolitions associated with the Civic Centre project erased between 5.9 and 7 square kilometres of urban fabric and led to the displacement of approximately 40,000 inhabitants, eliminating the historical continuity between Rahova and the city centre. The Bragadiru ensemble thus remained isolated, fragmented and detached from the natural urban circulation. After 1990, the absence of a coherent reconversion strategy, incomplete privatisations and punctual interventions kept the site in an intermediate state, without active functions and without urban integration. Although its location is central, the lack of a unified project has perpetuated the difficulty of reconnecting the ensemble