EPHEMERAL ARCHITECTURES FOR EXHIBITIONS
TEMPORARY PAVILION IN ROME

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EXTENDED ABSTRACT
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The present abstract is based on the report, titled *Ephemeral architectures for exhibitions: temporary pavilion in Rome*, that followed the Final Project of the Master in Architecture at Instituto Superior Técnico (Technical University of Lisbon). The project consisted in the design of an ephemeral pavilion for exhibitions in Rome, and was developed at the École Polytechnique Fédérale de Lausanne, under the Erasmus Program, in the second semester of the academic year 2011/2012. This report aims to present a critical view on the project, based on a theoretical study of ephemeral architecture in exhibition contexts.

Firstly, the contemporaneous society is analyzed from a sociocultural perspective, in order to understand how the ephemeral concept influences architecture, contradicting one of the architectural work’s basic characteristics - its durability. Moreover, with an historical study, since the 19th century up to nowadays, about international exhibitions and world fairs, it’s meant to understand the evolution of ephemeral architecture. Also, through a general approach concerning architecture for exhibition purposes, it’s noticed the need to exhibit beyond museums' physical boundaries.

Secondly, the Final Project is presented, including the scenographic development of an architectural exhibition. By means of the comments and suggestions made by the project teachers, as well as the acquired knowledge of the theoretical analysis, it is intent to build up a critical view on the project regarding mistakes and possible further developments.

The ephemeral concept in contemporary architecture

The ephemeral implies a fleeting temporality, with a timeline so short that the creation itself admits destruction. Accepting the man as the measure for human realities, it is understood as transitory what it is dissolved into the human scale of time, in a perceptible way. In fact, in the poetic language of its brevity, the ephemeral work acquires a dramatic sensitivity. Its temporary existence is intense and resistant. Thus, it

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often appears associated to events, exploring relationships between space, environment and people.

Contemporary society, where capitalist tendencies prevail, incites an intense need for consumption, based on marketing and advertising strategies. The objects become quickly obsolete, valuing interim and innovation instead of durability. Also, the cultural space in a saturated society with images and communication becomes dominated by simulation and spectacle. Therefore, economic circumstances favor low cost and fast executable architectural solutions. At a time based on an almost nomadic existence, should the architects build for the moment and devalue posterity? Despite of the moment’s experience as the basic instinct of ephemeral architecture, every plastic, formal and social experiment inspires a strategy of analysis and reflection about materials, space and form, important to the evolution of the architectural drawing and construction. The concept of ephemerality, on the project level, describes itself as a trend of techniques to do more with less, toward a profitable use of matter, energy and time. In fact, the balance between technical, sensitive and humanistic regard, is based on a respect for available resources, on the way to a sustainable development².

When ephemeral architecture approaches large-scale events, they are frequently linked to urban planning projects, aiming to improve the city. Besides, concentrating several temporary pavilions, under a common purpose, creates new cultural poles in preexisting contexts. Referring as an example, the recent 2010 World Fair in Shanghai, implemented with an urban restructuring program designed by the french atelier Architecture Studio. In this environment, seeking to represent their countries, the extravagant designed pavilions tend to reach high economic values. As an example, the Denmark Pavilion designed by the architecture atelier BIG, presents a huge monolithic steel structure with different atmospheres and activities that arise along an ascending spatiality. Beyond this, the Spain Pavilion designed by Miralles Tagliabue – EMBT architects, also composed by a steel structure, demonstrates a more organic formal drawing, making use of rattan modules as revetment in a peculiar use of this material³. Still the UK Pavilion, designed by Heatherwick Studio architects, it’s build on a composite structure of steel and wood, supporting a wide network of optic fiber rods that let in natural light, during the day, and allow the structure to shine, at night⁴.

⁴ Phillip Jodidio, op. cit., p.203.
If ephemeral architecture seeks for the enthusiasm of the moment, making use of its experimental freedom to challenge and amaze visitors, it raises the question of its formal limitations – could ephemeral architecture materialize itself beyond the container-space definition? Designing program-less spaces, as a pure artistic creation, generates an architectural piece as an almost inhabited sculpture, being mutually an element of pure contemplation and a definer of space. As part of the Architecture Biennale in Venice, in 2012, the architect Álvaro Siza Vieira, in the Giardino delle Vergini, shapes space through a simple set of walls and color, creating a contemplative area of deep and emotional experience. In this context of interventions, that challenge traditional experience of architectural spaces, can as well be actions that take place inside pre-existing buildings. Still in the Venice Architecture Biennale 2012, the proposal by the architect Zaha Hadid appears as an abstract modeling composition, suspended at eye level, displaying a wonderful play of light and shadows that defines the entire room’s sensitive atmosphere, under a visual and psychological impact. On the other hand, there is the intervention of Valerio Olgiati in an evident space configuration that develops a large suspended structure, drastically reducing the height of the room. Indeed, the architect employs volumetric impact as a means of guiding users’ attention to the photographic elements set the room’s central table.
Notwithstanding, in a smaller scale of temporary architecture interventions, featuring a distinctive line of architectural reflection, it is developed the paradigmatic program Serpentine Gallery, located in Kensington Gardens, London. It has been a place for ephemeral architecture experimentations signed by international referenced architects⁵. Jean Nouvel brought, in 2010, a project rendered in a vivid red, built in metal and fabric structures, polycarbonate and striking glass, creating a versatile system of spaces able to be adapted, to any momentary need⁶. In 2011, Peter Zumthor designed a contemplative room, a garden within a garden, as a refuge from the world of noise and traffic of London, seeking his aesthetic goal of presenting, simultaneously, a physical body and an object of emotional experience. This year, 2012, with the architects Jacques Herzog & Pierre de Meuron, the program proposes a presentation on the hidden history of the previous Gallery’s pavilions. The project is shaped under a floating platform roof 1.5 meters above the ground, following an archaeological approach where visitors are invited to look beneath the surface of the park⁷.

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⁵ In previous editions, since 2000, several architects have participated, such as Zaha Hadid, Daniel Libeskind, Toyo Ito, Cecil Balmond, Oscar Niemeyer, Alvaro Siza, Eduardo Souto Moura, Olafur Eliasson, Frank Ghery, SANAA, Jean Nouvel, Peter Zumthor and Herzog & de Meuron, whose projects are available in: http://www.serpentinegallery.org/
The projects previously stated hold distinct expression designs and programmatic specificities: while the Universal Exhibition in Shanghai is headlining national pavilions to reveal both propagandist and bold architectural moves, the Venice Architecture Biennale displays a collection of contemporary referenced architecture, modeling the exhibition space with a sensitive language, additionally, the Serpentine Gallery, in a minor scale, combines as a conceptual gesture the programmatic component and the experimental intellect. Nevertheless, despite different motivations these works reveal similar project principles, standing out for the importance given to the structural system, a clear action, unimaterial and often modular. Next to exploring new constructive territories arrives the awareness of sustainable development. Ephemeral works are marked by the instant’s sensation, using mostly a contemplative component to model space, time and impressions, controlling the visitors’ sensitive nature.

**Exhibition pavilions: a brief historical overview**

In a period where a new mindset is developing new aspirations, new processes and new materials it is introduced an era of architectural experimentation. The 19th century, characterized by technological success as a starting point toward the cosmopolitanism of culture, is the museums’ affirmation moment as an autonomous architectural program, also giving rise to the appearance of large international exhibitions. The first buildings of the great fairs were designed to exalt ephemeral as an expression of social and technical transformations. In 1851, in England, in the context of the first Universal Exhibition, Joseph Paxton builds the Crystal Palace in London as an orthogonal huge glazed gallery. Later, in France, stands out, in 1889, the Paris Universal Exhibition, notable for the physical embodiment of engineering progress by the Eiffel Tower. Also the irreverent glass pavilion of Bruno Taut, in 1914, for Werkbund Exhibition in Cologne, Germany, became an architectural landmark.

After the First World War, in a political instability and upheaval background, exhibitions are often used to express ideological messages, denoting an impressive narrative and iconographic power. Likewise, in 1929, the International Exhibition in Barcelona takes place as a propagandist event, introducing to Spain the recent avant-garde currents that emerged in Europe. There, arises an ephemeral pavilion representing Germany, designed by Ludwig Mies Van der Rohe. The pavilion’s material option - concrete, steel

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and marble – somehow rises a contradiction. Is Mies van der Rohe discrediting the principle of material truth? Despite being authentic in the representation of its time, with a regular design and a structural clarity, opposes itself, yet, to the ephemeral principles. Probably because what drove the architectural choices on this time, does not correspond to the contemporary vision of ephemeral architecture and their project specificities: nowadays materials reach countless potential; there is a developed concern about architectural effectiveness; a sustainable action is required, searching for economic monetization and a reuse of materials. The Barcelona’s Pavilion, disassembled in 1930, was reconstructed in 1986 due to its importance as a 20th century’s architectural reference, with the same characteristics and materials as the ones originally employed9.

Le Corbusier also distinguished the experimental nature of temporary architecture. In 1937, in the context of the World Exhibition in Paris, the “Pavillon des Temps Nouveaux” was built as a large tent, where a metal structure supported a canvas cladding, serving as prototype for the structural system of the Ronchamp chapel, in France. Additionally, in 1958, Le Corbusier designed the Philips Pavilion for the International Exhibition of Brussels, built with a concrete skin adopting a defiant shape.

In the meantime, crossing the 19th century, a new mentality for exhibitions emerges. Art and architecture exhibitions are conceived, such as the current Biennales of Venice, Sydney and Sao Paulo as a result of the Universal Exhibitions’ legacy. These events are developed to a world scale, usually involving a competition, being able to arouse a

considerable impact on the artists’ reputation and influence\textsuperscript{10}. In Italy, Carlo Scarpa is seen as a reference in the creation of architecture exhibitions, participating in a variety of interventions for the Venice Biennale, from planning scenographic compositions of exhibition spaces until designing pavilions. Thus, with the development of exhibition events, it is witnessed an evolution in exhibitions communication. A scenographic consciousness is gained, seeking to develop an attractive atmosphere between the viewer and the artwork.

With the proliferation of communication systems, in the '60s, a growing obsession for images and advertising motivates a consumerist dimension that induces the integrating of art and architecture exhibitions into the economic and entertainment market. Ultimately, it is developed an appreciation for the autonomous work of art, as a memory fixation, celebrating art in its uniqueness towards to public discussion. In this context, there were pointed out several projects, for instance, the trilogy exhibition at Centres Georges Pompidou in Paris, "Paris-Berlin" (1978), "Paris-Moscow" (1979) and "Paris, Paris" (1991). This cultural transformation in exhibitions’ atmosphere is reflecting in its growing independence from the museum as an institution, both at the organizational, financial and symbolic level.

**Expanding museum's physical boundaries**

In the beginning of the 20\textsuperscript{th}, temporary exhibitions inside and outside museums gained cultural relevance and, since then, have undergone several transformations regarding its concept, organization and scenographic view. Therefore, exhibitions have achieved a progressive independence, coming to life outside museum institutions, often through ephemeral architecture.

While museums tend to prevail collecting, preservation and exhibition currents, ephemeral interventions for exhibitions attempt to create dynamic and space energy, drawing an attractive atmosphere among the artworks, the space and the visitors, through original performances. In fact, temporary fairs and exhibitions act, frequently, by the most recent thinking currents, towards to innovate and challenge the spectators’ perception. On the other hand, museums seek for a guaranteed and stable exhibition quality. However, it is important to understand that despite the conceptual and

\textsuperscript{10} Emma Barker - Contemporary Cultures of Display, Yale University Press/The Open University, New Haven/London, 1999. p106.
architectural differences, both spaces, inside and outside museums, have always an exhibition common process related to the cultural demands of society. Actually, besides progress and changes in exhibition processes and the growth of new projects outside museums, the contemporaneous art dynamic will imply independent spaces. Moreover, despite museums and large scale exhibitions have a bigger impact in creating audiences for the future, it’s through independent spaces that the connection between museums, international exhibitions and commercial galleries can be influenced and change market values. Therefore, museums tend to create complementary poles or to occupy alternative spaces.

As a reference of the increasing accession to the development of exhibition beyond the physical boundaries of the museum, there is The Museum of Modern Art (MoMA) in New York, that since 2002 until 2005 during the reconstruction of its facilities, moved some exhibitions for a temporary pavilion designed by the architects Michael Maltzan and Scott Newman, named MoMA QNS. On the other hand, as a national reference there is the National Museum of Ancient Art (NMAA) in Lisbon, that presents in 2012 an outside of the museum architectural initiative, designed by the architect Manuela Fernandes, located inside the Colombo Shopping Centre, challenging users from the shopping area to arrive and explore the opportunity to learn more about portuguese art.

12 MoMa QNS, New York.
13 MNAA’s ephemeral architecture, Lisbon.

Final Project: temporary pavilion in Rome
In the framework of the subject Théorie et Critique du Project taught at École Polytechnique Fédérale de Lausanne, it was proposed as exercise, the design of an ephemeral pavilion incorporating an exhibition of architectural works. The intervention would take place in a semi-private garden on top of the Pincio hill, in Rome. The program’s foremost space is the exhibition area, complemented by a small library, a cafeteria, a shop and public spaces. The exhibition catalog embodied models and illustrative panels belonging to the next subjects: animal architecture (hives, mounds, nests, etc.), vernacular architecture (igloos, tipis, shabonos, etc.) and classical architecture (the Coliseum in Rome, the Villa Rotonda, the Column of Trajan, etc.). Moreover, it has been established a criterion of organization and connection between these three topics by identifying the natural element that influenced the construction base: water, earth, rock and vegetation. Thus, in this scenic atmosphere it was intended to encourage reflection on the issue of adapting architecture: Does the architecture adapts to the natural environment? Does the place fit the architecture? Will both strands converge in complementarily?

Therefore, the claim for an exhibition display presenting the scenographic themes sequentially, led to the pavilion’s formalization into a horizontal volume. The strategic deployment in the middle of the garden is related to the possibility of enjoying the outdoor space in the course of the exhibition pathways. The building’s position is intentionally separating the garden into two areas with a distinctive connection character with the inside space. At northeast, facing the ground slope, the pavilion and the garden denote a physical proximity reinforced by the presence of visual elements related to the exhibition themes (such as the mirror of water, or the stone arch, or the high concentration of vegetation, or even the expression of the ground). On the other hand, at southwest, the pavilion turns to Rome keen on a distant frame view referencing the historical importance of the surrounding environment.
It is conceived, then, a floating pavilion marked by two large slabs. Structurally, it is presented a wood system: wood fiber panels supported by columns. On the inside space, it was developed a system that would serve both functional and scenographic needs for the exhibition. For this purpose it was drew a three-dimensional prototype of a module which, depending on its position on the ground, could function as a façade/wall framing the view and displaying panels of information, or as a desk/support, to place the pieces to expose. The module could also become a resting place for the visitor or a shelter/niche, to enable the suspension of some pieces that so demand, or even create areas with less light, facilitating video projections. In practical terms, these pieces transportation would be facilitated by the possibility of fitting the modules on each other. Spatially, it draws a continuous dynamic movement by its possible attachment to the next module, defining different dimension and ambience areas.
Conclusions

The ephemeral architecture is an architecture conditioned by the time of its existence. At a time where the culture and public exhibitions are the target of global interest, ephemeral architecture as a temporary event, materializes many of these acts, emerging as an artistic work in a sensorial atmosphere, able to enhance social gatherings, dialogue and reflection. Although it stands out by its formal and material nature of experimentation, ephemeral architecture it is, increasingly, developing into the use of simple and repeatable structural systems that concern programmatic requirements and illustrate the conceptual idea in a clear and innovative performance. Nowadays, the architect considers the possible reuse of materials, the means of transportation, the implementation and assembly/disassembly process, in order to minimize environmental impacts, bringing in a sustainable action.

Taking account the examples analyzed along the theoretical research it is possible to indentify as a final project weakness, the lack of a clear structural option. Considering what the jury of Lausanne said, in fact, there is an overlap of contradictory gestures. Indeed, using wood as a structural material required a large amount of vertical supports, blurring the ambitioned special fluidity. Eventually, in this case, a valuable option could be the choice of a more efficient material in space configuration, rather than an economic option, such as a metal structure.

Another possible approach could be the assumption of the modular component not only as a space composer but also as structural element. In fact, the jury of Lausanne suggested that possibility however, once the module operates mainly as a support to
display architectural modules instead of a vertical plane, it would touch the roof very punctually not being enough to sustain it. On the other hand, it could be develop a modular system with three-dimensional space dynamic, working by itself also as roof. Consequently, it would be generated a greater unity between scenographic planning and architectural gesture as a global concept.

Finally, the theoretical study highlights the importance of a clear connection between place, proposed program and structure, in addition with the demand to do more with less. Thus, it seems that, on one hand, ephemeral architecture reflects an artistic thinking, seeking innovation and exuberance, in a sensorial experimentation of space that communicates with the user's emotional perception. And, on the other hand, there is an investigation for a functional adaptability, referring to a language of material reuse, methodical and rational structural system, subseuent to a sustainable future. At last, the design of an ephemeral architecture for exhibitions depends on the ability to harmonize these multiple factors in a clear artistic gesture.
Bibliography


Websites
