Closed Form versus Open Form: A Possible Reading of Contemporary Architecture

1. Introduction

The September 2011 issue of the journal OASE addressed the question of uncertainty in architecture. The editorial of this issue made the assertion that, in the context of continued economic instability since the financial crisis of 2008, the rapid variations in political, social and economic parameters had a negative effect on architectural design which is generally created over the long term. This observation rekindled the necessity to integrate the parameter of uncertainty into architectural design much like the concerns developed by the radical architects of the 1960s.

Those architects were the dissident heirs to the modernist movement. They shared with their predecessors an ambition to develop viable models for the greater number of people while at the same time rejecting their hegemonic claims. Instead, they incorporated an awareness of individualities, situations and events. They theorised about the effect of time on architecture and the resultant unpredictability this creates. They also incorporated a new category intended to develop quickly thereafter: individual desires, with all their singularity and evolutions.

The question of housing the greater number of people addresses these problems head on: how is it possible today to develop housing models that can be applied on a large scale, but which also take account of the impermanence of means, needs and desires, and their cultural and individual specificities?

In our proposal, we propose to analyse the theoretical developments of the 50s and 60s which addressed the questions of indeterminacy, adaptability and evolution in architecture, while also dealing with the question of the occupant with all his personal and cultural singularities.

2. Theoretical context

a. The ‘aesthetic of change’: issues of evolution of the architectural form

This Architects Year Book 8 contains an article by Peter and Alison Smithson: ‘The Aesthetics of Change’. In this article, drawing on the case of the university, the Smithsons tell us that the university and the city are growing and changing. Consequently, the new buildings of a university should no longer be conceived according to traditional aesthetic theory in which the part and the whole are in a finite relationship with each other, the aesthetic of each being ‘close’. Their aesthetic must be an ‘aesthetic of change’. Retrospectively presenting their Sheffield project, completed 4 years earlier, the Smithsons described the system of footbridges connecting the old building with the new as a ‘linkage’ between independent elements, an elevated street. The façade, in addition, is made up entirely of screens, allowing all the class changes inside but without changing the external aspect.

In their article, the Smithsons also presented the Santa Monica house, designed and built by Charles Eames. For the Smithsons, this project was the expression of a

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‘transient aesthetic’, composed of elements that could be easily replaced over time and therefore expressing an ‘aesthetic of change’. This refers to the quest of an Open Form4 as mentioned by Oskar Hansen in his conference by an open criticism of the lacks of architectural norms which had been practiced before. He denounced the inability of ‘closed architecture’ to adapt to the ‘changes imposed by life’5.

a. The ‘open structure’

The ‘open structure’ results from an application of the principles of ‘growing form’ and ‘aesthetic of change’ as previously described. It represents a way of understanding architecture not as a finished object, but as a perennial support enabling temporary appropriations that are sustainable to a greater or lesser degree. The concept of an ‘open structure’ also presupposes a capacity for growth and transformation in time, without change of nature. Following the biological and molecular structures put forward by the Independent Group in the exhibition growth and form, it is organised around principles of spatial arrangements, ‘patterns’, offering supports and facilities for the implementation of functional programmes that are partially or totally indeterminate.

This principle supposes a possibility for evolution of architecture over time, considering that the programmes which take place in the structure as defined can be added, withdrawn or modified without changing it. The structure, whether or not it is seen as perennial, possesses a greater sustainability than the programmes it welcomes.

An architecture incorporating the ‘open structure’ principle can also be designed in such a way as to expand over time, extending the principles of arrangement from which it was organised in the first place, like the “endless architecture” theorised by Llewelyn Davies and Weeks, and whose principles are applied to the Northwick Park Hospital project.

Applying the ‘open structure’ principles involves defining the minimal spatial characteristics necessary for the viability and quality of an architecture intended to develop over time and/or to receive variable programmes over time.

In brief, the architect no longer acts here as creator but as the conscious revealer of realities that are beyond his control. We will see immediately afterwards that this approach finds a particularly relevant echo in the posture of the architects Lacaton & Vassal.

3. Contemporary syntheses

4. Lacaton & Vassal: extra space and the aesthetic of “as-found”

a. Extra space and “open structure”

On their return from Africa, Anne Lacaton and Jean-Philippe Vassal worked on the project of the Latapie house. For these architects, it was important to think of housing in an alternative way. This project was an occasion for them to think about the type of

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3 Ibid., 22.
5 Ibid., 4.
housing an ordinary family could afford. According to building standards, they could consider a house that was 80m² in size. The objective followed by the architects was to produce a bigger house, ‘not an extra 10m², but perhaps twice as big if possible, because we are intimately convinced that you’d live better in a big house and that also offers an opportunity to have different sorts of spaces and atmospheres’⁷. The architects responded to this equation by designing the accommodation inside an agricultural greenhouse, an industrial device making it possible to provide an inner space with a controlled climate and with very low construction costs.

This ‘extra space’ is also mentioned by the architects as ‘double space’⁸ depending on the project. Their quest for a complementary space changes architecture by offering a better quality of life to the residents, and freedom of appropriation by the fact that the available surface is not totally invested by a determined program.

For the authors of the project, ‘You don’t have to conceive everything; you just have to give [the inhabitant] the potential space to be used and appropriated. If you give enough qualities and a range of capacity, then you provide maximum opportunities for everybody and the project will assume to be changed, transformed and re-appropriated’⁹.

For Lacaton and Vassal, this possible degree of appropriation and freedom is a definition of ‘luxury’: ‘luxury is linked to freedom of use and a high level of possibility and minor constraints, in order not to set limits to your imagination and desires and is not linked to the cost of a construction. By the way, the architects humorously adopted a famous advertising slogan from a car brand, “What if real luxury was space”’¹¹.

In a text published in 2014¹², the architects claimed principles that were very close to the definition of the open structure mentioned above. Besides, the term ‘open structure’ is cited in this text:

‘We always aim to make [the structure] independent of what it contains, so as to let this content emerge. The structure should be free, very roomy, in order to create a new rapport with climate and the ambience, a new rapport with activity so as to produce the conditions for mobility and enjoyment. A structure that generates urbanism through its capacity to interfere with existing structures and activate the urge to continue the city. We always approach this concept of an open structure through the imaginary aspect of the fabric, the imaginary aspect of the expanse [...]’¹³

In this short extract we find the two general principles of the open structure: programmatic indetermination (‘the structure independent of what it contains’) and the possibility of growth (‘activate the urge to continue the city’, ‘imaginary aspect of the expanse’).

Later, Lacaton & Vassal spoke about the possibilities offered by the use of agricultural greenhouses as a basic structure for creating housing or other programmes,

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⁹ Ibid., 11.
¹⁰ Ibid., 17.
¹³ Ibid., 162.
as ‘an open structure for inventing climate and ambiance’\textsuperscript{14}. They indicate that, contrary to the usual ‘defensive’\textsuperscript{15} approaches concerning the insulation of buildings, agricultural greenhouses are envelopes that ‘play and react with the outside’\textsuperscript{16}.

The architects also claim to have conceived the architecture ‘from the interior. […] We do not think of the exterior project as an act of distanciation in itself, but we try to construct a multitude of situations of uses that are linked and connected to each other’\textsuperscript{17}. This approach to space ‘from the interior’ resonates with the suggestions of Mereau-Ponty, cited by Lucan when he evokes architecture as a ‘milieu’\textsuperscript{18}: ‘I do not see it [space] in terms of its external envelope, I live it from within, I am included in it. After all, the world is around me and not in front of me’\textsuperscript{19}.

These considerations have been further explored in the project of social housing in Mulhouse.

\textsuperscript{14} Ibid., 166.
\textsuperscript{15} Ibid.
\textsuperscript{16} Ibid.
\textsuperscript{17} Cristina Diaz moreno and Efren Garcia Grinda, « Everyday Delights. A conversation with Anne Lacaton and Jean Philippe Vassal”, El Croquis no.177/178 (2015), 25.
\textsuperscript{18} Lucan, \textit{Précisions sur un état présent de l'architecture}, 224.
Fig. 2a
Plot size

Fig. 2b
Concrete structural grid 7.5x6.5m

Fig. 2c
Groundfloor subdivision

Fig. 2d
Interior heated volume

Fig. 2e
Extra-space contained in greenhouses
5. Conclusion

As a conclusion, through our proposal we would like to discuss the possible legacy of Team X theories in the field of contemporary practices. As mentioned through Lacaton et Vassal works, the consideration around indeterminacy, and the aesthetic of change issue may change the role of the architect in order to provide an architecture that can evolve and be appropriated by their users. From our point of view, the opposition between closed and open form is still relevant today and is a possible critical lecture of contemporary architecture. This is the topic we would like to discuss tracking back in the 1960’s the theoretical background in order to enlighten a certain indeterminate architecture.