

PATRIZIO M. MARTINELLI*

BRUTALIST INTERIORS. ADAPTIVE REUSE OF THE ARCHITECTURAL MACHINE

BRUTALISTYCZNE WNĘTRZA. POWTÓRNE WYKORZYSTANIE MASZYNY ARCHITEKTONICZNEJ PO ADAPTACJI

Abstract

The essay focuses on the issue of the interior design of brutalist architecture. Moving from Banham's researches about "New Brutalism" published in the fifties-sixties and from the interpretation of "interior" as an architectural and urban topic, the analysis ends with a project-manifesto by Ricardo Bofill: the transformation (focused on the adaptive reuse of interior spaces) of a concrete factory in Barcelona in a multifunctional building for living and working.

Keywords: brutalism, interior, interior design, adaptive reuse, Banham, Bofill

Streszczenie

Niniejszy esej poświęcony jest zagadnieniu brutalistycznej architektury wewnątrz. Wychodząc od badań Banhama nad nowym brutalizmem, opublikowanych w latach pięćdziesiątych i sześćdziesiątych, oraz interpretacji „wnętrza” jako architektonicznego i miejskiego tematu, autor kończy swoją analizę na projekcie-manifestie Ricardo Bofilla: przekształceniu (opierającym się na powtórnym wykorzystaniu przestrzeni wewnętrznych po adaptacji) opuszczonej fabryki cementu w Barcelonie w wielofunkcyjny budynek mieszkalny z pracownią.

Słowa kluczowe: brutalizm, wnętrze, architektura wewnątrz, powtórne wykorzystanie obiektu po adaptacji, Banham, Bofill

1. (New) Brutalism

One of the most important phases in the history of architecture where concrete became one of the main issue has been the movement called "New Brutalism". Actually, probably the most important character; for someone maybe the unique one, considering how this "ism" takes its name from the so-called *béton brut*, the raw concrete whose greatest expression is recognizable

* Arch. Patrizio M. Martinelli, Phd in Architectural Composition, Assistant Professor, Miami University, Oxford (Ohio, USA).

in some projects by Le Corbusier. The Swiss master has been the main reference for the generation of English architects who began to work in the Fifties, in particular thanks to his works where, after the Purism abstraction of the origins, he finally seems to achieve what he expressed in *Vers une architecture*: “L’architecture, c’est, avec des matériaux bruts, établir des rapports émouvants”¹. And this statement was used by Reyner Banham in the opening of his seminal essay “The New Brutalism”, published in “The Architectural Review” in 1955, later followed by his own monography with the same title, published in 1966². These two documents soon became the most important theoretical references to understand the principles of the movement, which, in particular in these last years, still inspires a great general attention³.

I think that this lively interest is based on some aspects, still fascinating and fertile for inspiration and research, allowing, moreover, a wide possibility of cross-disciplinary interpretations. For example, the pop art sensibility, which permeates that period and its expressions; the collage technique as an instrument of design (for example, talking about materials, there is not only “raw concrete” in the palette of the brutalist architects); the montage as design strategy, which emphasizes the relationship between the expression of architectural form and the structural/tectonic/technological topics; the maybe unconscious use of rhetorical devices and figures of speech (*emphasis, metaphor, synecdoche, quote*) and compositional strategies (*addition, layering, insertion, juxtaposition, infill*) at the big scale and the “under-designing of the details” and the “ineloquence, but absolute consistency of such components as the stairs and the details”⁴, at the smaller scale of construction.

Getting back to Banham, in his writings he clearly defines a series of characteristics of “Brutalism”⁵, taking as paradigms two projects by the Smithson, the Hunstanton School and a small house in Soho, and Yale Art Centre by Louis Kahn:

- clear legibility of plans;
- emphasis and exhibition of structure and of technical elements (such as water pipes, electrical components, conduits), which means to show clearly the relationship of parts;
- use and expression of materials and finishes for their character and quality “as found”: predominantly concrete, with integration with glass, brick, timber;

¹ “The business of *architecture* is to establish *emotional* relationships by means of *raw materials*”. *Le Corbusier, Towards a new architecture*, Dover Publications, Mineola NY, 1986 (first edition Paris 1923), p. 4.

² R. Banham, *The New Brutalism*, *The Architectural Review*, 118, December 1955; R. Banham, *The New Brutalism*, Architectural Press, London 1966.

³ In 2015 London National Trust organized guided tours called “Brutal Utopias” touching several paradigmatic examples in London, Sheffield, Norwich. The graphic design studio Zupagrafika has recently released a set of illustrated paper cut-out models representing brutalist architecture of London from 1960s-1970s. Illustrated books are regularly published collecting photographs of brutalist buildings. The internet social networks (a clear representation of people’s moods and interests) cover the topic, such as in *Facebook*’s page “The brutalism appreciation society” which collects, in June 2017, about 52.000 followers; and similar popular pages can be found in *Tumblr*, *Instagram*, *Twitter*, *Dezeen*.

⁴ R. Banham, *The New Brutalism*, *The Architectural Review*, 118, December 1955, p. 357.

⁵ Beginning from the term itself, linked to *béton brut*, but also to the nickname of Peter Smithson, “Brutus”. As we read in Banham monography, the joke between Giedion’s American students was that “Brutalism equals Brutus plus Alison”. Another quote from Banham’s book is that if Peter Smithson’s nickname had been Fido, the movement would be for sure “The New Fidelity”. See R. Banham, *The New Brutalism*, Architectural Press, London 1966, p. 10.

- strong correspondence between perception of forms, experience of the building in use and its functions.

All of these lead to the introduction of the concept of “image”, which Banham sets against the concept of “beauty”. While “beauty” is *quod visum placet*, “what is pleasant, when seen”, as defined by Saint Thomas, and represents an abstract quality linked to the classical principles of proportion and geometry, “image” is *quod visum perturbat*, which means “what affects emotions, when seen”, that deals, in architecture, with perception and feeling of space and its qualities. “Image” is the most important aim for the brutalist architect: “to construct moving relationships out of brute materials was the central ambition of Brutalism”⁶, building the “thing itself, in its totality and with all its overtones of human association”⁷, reacting to a design attitude based on abstraction and immateriality, getting back to matter and its sensuality, and how this have to do with life, feelings and senses.

It is clear how these concepts deal strongly with the construction of interior space, where structure, often pushed to its extreme expressions, technical elements and devices, such as the furnishing itself, built in raw materials and transformed in an architectural sculptural components, materials’ characteristics and qualities showed naked and sincere, and finally the utilization of space, are the elements of composition. And their relationship, perfectly arranged by the architect, constructs those “fatal disposition”, established on life of men, which Le Corbusier wrote about in a wonderful page of *Precisions*⁸. It is a magnificent description of a table in a popular tavern where the “fatal disposition” of bottles, plates, napkins, becomes expression of the rules for the perfect arrangements, based on human proportions and human life, which keep together in harmony everything: from the small objects of daily life to the elements of the house of man, and of course of every interior space, both monumental or domestic.

Also, or mostly, of a brutalist interior.

2. Interiors

The word “interior” comes from Latin “internus” whose radix is “inter”; “inter” means *between*, but it is interesting that its origin, again, is “in”, “intra”, which means *inside*. So we can understand how, in the same word we have a duality, a tension, an opposition. On one side, “interior” defines the concept of being inside a place, to stay. Its character is the

⁶ *Ibidem*, p. 16. A statement that stands as a paraphrase of Le Corbusier’s one, in *Vers une architecture* (see footnote 1).

⁷ R. Banham, *The New Brutalism*, *The Architectural Review*, 118, December 1955, p. 358.

⁸ *Just look, in a popular tavern, two or three people who have had coffee and are still having a conversation. The table is still covered with glasses, bottles, dishes, cruet, salt, pepper, napkins, napkin rings, etc. Consider the fatal order that puts each of these objects in relation to the others, and each of them is good for something, they were chosen from the hand of one or another of the persons, the distances that separate them are the measure of life. It is a mathematically-crafted composition, you cannot find any error, an emptiness, a false step. If a filmmaker not hallucinated from Hollywood was present and could take a shot in ‘foreground’ of this still life, we would have a testimony of pure harmony. (...) I find myself in what I call the ‘House of men’ these same fatal dispositions. Le Corbusier, *Precisions on the present state of architecture and city planning*, The MIT Press, London 1991, (first edition Paris 1930), p. 19.*



III. 1. "La Fabrice revisited", collage by P. M. Martinelli

stillness, the static position of being inside a room, a place defined by four walls that delimit the space we are living in, our house. It is interesting that the ancient Egyptian ideogram for the word “house” is a square, with a little cut: like a plan of a room, with the door to get inside. On the other side, “interior” suggests the topic of the relationship between elements and parts. Here, we deal with the tension between them, the distances, the measures that define their position in the three dimensional space; with the possibility to move between them, to see them or through them; with the possibility to “break” the box (the room) and build views (the window) and movements (doors). Again, if we get back to ancient Egyptian ideograms, these concepts and possibilities are inside the word “city”, where a circle define the space of the relationship between a series of small squares. Like houses inside a city wall; but also like elements inside an interior, inside a room. Without doubts this reflections lead us also to urban issues: house is the primal element of city construction. The city can be read, as Leon Battista Alberti said, as a big house, and the house as a small city: the corridor is a street, the room is a square. This analogy is the essence of the art of architecture⁹. Dealing with interiors spaces, and as architect, dealing with interior architecture, necessarily means to have in mind this overlapping of meanings, of this “displacement of concepts”¹⁰, of this chiasm of possibilities between scales, between city and building, in order to build an “urban interior” and a “domestic landscape”¹¹. As Georges Teyssot wrote, the buildings of the nineteenth century city are “large spaces that creates vast interiors for the collective...they are all interior”¹²: the arcades, the glasshouses, the enclosed rooms of panoramas, museums and casinos, the halls of factories and railway stations. Containers of crowds that enclose the collective dream, public spaces of the city appearing as interiors in which citizens live, work, and represent themselves like in a theatrical play in a theatrical scenery. In fact, *at both urban and architectural scale, another important ingredient that takes part in the composition of interior space, is that: our life, our way of staying, move, take part of the “play” inside space. Not only the life we are living here and now but also the life we have lived; or the lives, which the building, through its history, have hosted. And that gives to interior space the dimensions of memory and time, with its stratification of layers of past existences, behaviours and ceremonies that gives depth, density and width to its perception*¹³, like we can read in these amazing page of Rainer Maria Rilke: “I never saw this remarkable house again because when my grandfather died it passed into strangers’ hands. Thus, seeing it now, in a version of my childhood

⁹ *I think that this reference of the building to the city, this projection of an urban universe inside a single urban fact, is a principle of architecture.* A. Rossi in VV.AA., *Progetto realizzato*, Marsilio Editori, Venezia 1980, p. 158. Translation by P. M. Martinelli.

¹⁰ *What I mean by ‘displacement of concepts’ is that a concept belonging to a field or associated with one set of functions becomes transferred to another.* A. Colquhoun, *Displacement of concepts*, in I. Murray, J. Osley (eds.), *Le Corbusier in Britain*, Routledge, Abingdon on Thames 2009 (first publication in “Architectural Design”, 43, April 1972), p. 255.

¹¹ I take this term from the catalogue of the exhibition about interior design edited by Emilio Ambasz, Italy: a new domestic landscape, Museum of Modern Art, New York 1972.

¹² G. Teyssot, *Thresholds and folds: issues of interiority*, in “Casabella”, 681, september 2000, p. 92.

¹³ *Don't we seek historically dense settings because they connect us experientially and imaginatively with past life, and we feel safe and enriched to be part of that temporal continuum? Traces of life support images of safety and generate further images of continued life.* J. Pallasmaa, *Frammenti. Collage e discontinuità nell'immaginario architettonico/Fragments. Collage and discontinuity in architectural imagery*, (ed. M. Zambelli), Giavedoni editore, Pordenone 2012, p. 189.

memories, it is not a building, rather it is all split up: a room here, a room there, and here a section of passageway that doesn't link these two rooms but has simply been preserved, a fragment. Similarly, it is all scattered about within me, – the rooms, the staircases which opened onto the ground floor with such great elaborateness and other narrow circular stairways in whose darkness one travelled like blood through veins; the tower rooms, the high balconies, the unexpected galleries one was urged along from the little entrance door: all that is still within me and will never cease being within me¹⁴.

3. Concrete as a metaphor

“The combination of concrete and steel basically creates a unique hybrid material, within the concrete guarantees compressive strength. The steel, for its part, provides the tensile strength in the form of a reinforcing mesh, a tension net created from a minimum of material. Reinforced concrete is the only building material that possesses this perfect bi-polar quality. (...) The flow of forces, however, is organized accordingly to the actual energy concentration through bundling and distributing the reinforcement deep inside the concrete¹⁵.”

Outside, reinforced concrete is static, a monolithic mass.

Inside, energy flows thanks to the relationships of the elements (steel and concrete).

Static (exterior) and dynamic (interior).

Stillness (“intra”, “inside”) and tension (“inter”, “between”).

I think we can read concrete as a metaphor of interior space.

4. A brutalist interior

Adaptive reuse of “La Fabrica” cement factory, Sant Just Desvern (Barcelona) 1973–1975

Re-used and renovated buildings often project a sensory richness and relaxed ambience in opposition to the formality and demanding tenseness of new buildings. Buildings like Carlo Scarpa's Castelvechio, Sverre Fehn's Hamar Museum, or David Chipperfield's renovated Neu Museum in Berlin, tell epic narratives of time and life which contemporary buildings usually fail to convey.

Juhani Pallasmaa¹⁶

¹⁴ R. M. Rilke, *The notebooks of Malte Brigge*, Wolf Pup Books 2012 (first edition Paris 1910). Translation by W. Needham

¹⁵ A. Deplaze, *On the metaphysics of exposed concrete*, in A. Deplaze (ed.), *Constructing architecture. Materials Processes Structures*. A handbook, Birkhäuser, Basel-Boston-Berlin 2009, p. 58.

¹⁶ J. Pallasmaa, *Frammenti. Collage e discontinuità nell'immaginario architettonico/Fragments. Collage and discontinuity in architectural imagery*, (ed. M. Zambelli), Giavedoni editore, Pordenone 2012, p. 160.

The transformation of the industrial and infrastructural areas of the cities is one of the most important topic in contemporary times, and reflects a social and economic situation in which also the discipline of architecture must give an answer. The city's expansion has often absorbed these areas, which were in origin outside the urban tissue; often they stopped to be operative, becoming huge sites with no functions, with abandoned and ruined buildings. Some studies define this phenomenon as *internal periphery* and *abandoned threshold*: what was, in the past, an external portion of territory, became a part of the city itself, surrounded by the urban tissue and buildings. External becomes internal; periphery becomes the center.

Working (as architects, theorists, researchers)¹⁷ on these critical contemporary urban landscape means to deal with the concepts of *edge*, *limit*, *threshold*; it is about the re-definition of these boundaries, inside city and landscape, in a contemporary context where it is necessary *build where it is already built*. In these urban environments, in particular at the architectural scale, it is necessary to work on existing buildings, for their renovation, adaptation, transformation, reuse and for giving them a new role in the urban and territorial scenario: abandoned warehouses, industrial buildings, factories, silos, facility plants, gasometers, barracks. Moreover, the first step toward this transformation is to understand the interior space of these buildings and work on it: a project that from the inside goes to the outside, from private to public, from the room to the city, in order to transform gradually, piece by piece, the city itself.

That is what Ricardo Bofill did, in the Seventies, when he transformed an abandoned cement factory, located in Sant Just Desvern, a small town close to Barcelona, in his home and office.

The factory, lately named "La Fabrica", is very close to "Walden 7" housing complex designed by Bofill's atelier between 1972 and 1974. It was the result of the addition of a series of concrete functional buildings, such as silos, warehouses, underground galleries, a chimney, dating back to the first industrialization phase of the Barcelona area. This composition of elements was a real "architectural machine" that, once abandoned and not working, became a derelict archaeological industrial ruin. This contemporary "monument" inspired Bofill when he decided, in 1973, to preserve it in order to give it a new life¹⁸. What he found there was, as well as a magnificent piece of architecture, an overlapping of architectural and artistic vibes, such as the surrealism of stairs leading to nowhere, huge but useless empty spaces (from 4 to 10 meters high), strong but absurd (and because of that magical) elements;

¹⁷ About these topics see the results of my researches and projects, collected in the following publications: P. M. Martinelli, "La costruzione della macchina compositiva: il progetto per l'ex magazzino sali tabacchi a Porto Marghera", in A. Dal Fabbro, P. M. Martinelli, *Machinae Compositiva*, Arcari Editore, Mogliano Veneto 2016; P. M. Martinelli, "Aree portuali e paradigmi del *waterfront urban renewal*" in P. M. Martinelli, *La seconda natura. Paesaggi, elementi, architettura*, Libria, Melfi 2016; P. M. Martinelli, *Urban regeneration and strategies of intervention. A project for Münster's harbour*, Libria, Melfi 2015; P. M. Martinelli, *The construction of the Venetian lagoon waterfront. A project for Porto Marghera urban regeneration*, "PORTUS plus" (online magazine), 4, 2014; A. Dal Fabbro, P. M. Martinelli, "Il Parco delle torri con un poggio belvedere e una spiaggia urbana", in R. Neri (ed.), *La parte elementare della città. Progetti per Scalo Farini a Milano*, Letteraventidue, Siracusa 2014; P. M. Martinelli (ed.), *Progetto Porto Marghera. From first industrial to urban district of the metropolitan city*, Marsilio, Venezia 2012.

¹⁸ As Bofill explains in <http://www.ricardobofill.es/fabrica/read/> and in the amazing video about "La Fabrica" in the "In residence" series published in <https://www.nowness.com>.

the abstraction of pure volumes; the metaphysical rhythm of windows and openings; and of course the brutalism of naked and raw exposed concrete. “Domestic, monumental, brutalist and conceptual” were the keywords for the renovation of the cement factory through a project focused exclusively on the accurate design of the renewed interior. In order to do that, Bofill first acted removing and tearing down the elements and the parts not useful and strategic in his view for the future of the building: as he said, his preliminary work has been similar to what the sculptor does. Nevertheless, once he revealed the naked geometry, proportion, harmony of spaces, it was necessary to add, to overlap, to superimpose. Recalling Michelangelo, who wrote that “(...) sculpture is what is done through taking away: painting is what is done through adding”¹⁹, we could say that in this phase he acted like the painter, introducing the human scale of life and work (as already said, the renovated building hosts Bofill’s home and architectural office) thanks to the accurate and “fatal disposition” of a few, minimal and elegant elements. Pieces of furniture made in precious materials (natural as marble, wood, leather; artificial as steel and glass), mostly designed by the architect himself, tents, stairs, drawing tables are the actors of this interior theatrical play. The relationship that links one to the other, and the dialectical tension between them and the concrete box that defines the space they are flowing in, are what have transformed from the inside this monumental building in a microcosm of activities, like the aforementioned Alberti’s “house as a small city”. Here, the halls, the silos, the galleries become spaces of a multifunctional building that keeps together the private dimension of living and the semipublic dimension of the architect’s profession with spaces for working, meeting, conferences, exhibitions. Life, energy, intellectual and corporal activities fill with dynamical flows the interior spaces, as happens in a reinforced concrete structure, while the exterior remains still and monolithic. In fact, Bofill’s intervention does not involve the design of the exterior facades; the only element he introduces is vegetation (eucalyptus, palm trees, olive trees, prunus and climbing plants) which transforms the outside in a pleasant garden, and the building in a contemporary ruin wrapped in plants. It is clear that Bofill’s design strategy for the adaptive reuse of this “natural-born-brutalist” architectural machine is based on preserving what exists: emphasizing its character (of a functional building, of a ruin, of a monument, made of raw concrete), adding physical and abstract layers (the tools and the devices useful for a new life and a new work inside the building) to the existing ones (heritage and memory, coming from the past). All of that gives birth to a brutalist interior made of beauty and emotion, thanks to the masterly sensibility and capability of the builder, as described by Henri Focillon: “Thus, the builder (...) is a draughtsman when he draws the plan, a mechanical engineer when he composes the structure, a painter for the distribution of the effects, a sculptor for the treatment of the masses. He is all of these things as required to a greater or lesser degree, according to the needs of his spirit and the state of the style”²⁰.

¹⁹ “(...) io intendo scultura, quella che si fa per forza di levare: quella che si fa per via di porre, è simile alla pittura”. Michelangelo Buonarroti, in the letter to Benedetto Varchi, published in *Le lettere di Michelangelo Buonarroti pubblicate coi Ricordi ed i contratti artistici per cura di Gaetano Milesi*, Firenze 1875.

²⁰ H. Focillon, *Vita delle forme/Life of forms*, Einaudi, Torino 2002 (first edition Paris 1943), p. 36–37. Translation by O. Barmine.