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## Color Composition Features in Postmodern Architecture

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## Color Composition Features in Postmodern Architecture

### SHORT SUMMARY

This research aims to know some of the most innovative aspects of color in composition of postmodern architecture in Europe, approximately between 1960 and 2000. We describe the main formal and chromatic trends in this period following JA. Ramírez's classification: the new utopias ('60s), neoiluminist rationalism ('70s), figurative postmodernity ('80s) and deconstructivism ('90s). For each trend, we point out some color composition features; analyze a case study building; and reflect on later influence on contemporary colored architecture.

Keywords: architecture; color theory; color composition; Spanish color committee; art

### OBJECTIVES AND METHODOLOGY

This research aims to describe the main characteristics of color compositions in post-modern architecture in the second half of the 20th century, approximately between 1960 and 2000. This paper is not intended to perform an exhaustive classification of architectural color during this period, but to point out its most important aspects.

In order to do so, we take the classification that the historian J. A. Ramirez (1996) proposes for architectural forms of post-modernism and which roughly correspond with each of the decades of the aforementioned period: *new utopias* ('60s), *neoiluminist rationalism* ('70s), *figurative postmodernity* ('80s) and *deconstructivism* ('90s). For each period we analyze a case study building and point out the main features of its color composition.

These historical categories are very useful because they organize trends according to the critical stance they take with respect to Modernity. 'Postmodernism is a hotchpotch where we put everything that critically confronts modernity and all that comes after, when it stopped being the dominant doctrine in specialized circles and in centers of political and economic decision. Perhaps it isn't much as the characterization of a complex phenomenon, but it can give an example of good sense in the way of setting the debates out'.<sup>1</sup>

The analytical method used includes the following tasks:

#### 1. Collection of data and relevant information to the study:

- 1.1. Literature review of the information contained in some of the main databases and repositories, with special reference to the "Chronological Bibliography on Color Theory" held by Professor Caivano.
- 1.2. Visit and documentation of some of the most important post-modern colored buildings in Europe.
- 1.3. Meetings with specialists and architects involved in research on color and architecture in different international forums (SEDO color conferences, AIC conferences, etc.) and color research centres (*Istituto del Colore del Politecnico de Milano*, *Grupo de Investigação de Cor da Universidade Lusiana Lisboa*, Color Laboratory at Oxford Brookes University).

#### 2. Analysis and structure of the information:

- 2.1. Selection of case study architects and buildings
- 2.2. Design of an analytical chart that permits to systematize the analysis of chromatic composition with the following information: identification of the building, physical description of every relevant color aspect, artistic context, plastic strategies, intentions and bibliography.

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<sup>1</sup> **Chronological Bibliography on Color Theory.** <http://www.fadu.uba.ar/sicyt/color/bib.htm>. Last updated: August 1, 2007. Compiled by José Luis Caivano with the assistance of Paulina Becerra. Collaborators: Juliana Agostinelli, Rodrigo Amuchástegui, Gracia Cutuli, Mario Chegaray, Julieta Garavaglia, Mabel López, Cristina Manganiello, María Luisa Musso, Manuel Net, Andrea Pappier and Pablo Valle.

- 1  
2 2.3. Design of a conceptual order that unifies the intentions expressed by the architect in relation with the  
3 color arrangement.  
4  
5 3. Interpretation and critical discussion of the results, assessing the validity of some concepts commonly  
6 linked with post-modern color.  
7

### 8 9 TIME FRAME OF POST MODERN PERIOD

10  
11 After Second World War, the principles practiced and defended by the Modern Movement spread throughout  
12 the Western, both in academic and professional circles. Ramirez notes that 'the post-war reconstruction and  
13 the strong speculative pull during the fifties and the sixties, were based on modern ideas such as zoning,  
14 housing concentration in blocks surrounded by green spaces, etc. (...) Moreover, the "cold war" contributed  
15 to strip such architecture of its social and/or revolutionary adhesions and that is the way all the yearnings of  
16 the past utopia could serve as an alibi for an universal and indiscriminate extension of monotonous and poor  
17 architecture'.<sup>1</sup>

18 The fifties are years of big town plans based on modern criteria of urban zoning and historical  
19 amnesia which alter the quality of some European historic city centers of great traditional value. In the late  
20 sixties some critical opinions start to claim an alternative architecture, although they still don't talk about a  
21 real post-modern architecture. In the first chapter of "The Language of Post-Modern Architecture" entitled  
22 "The Death of Modern Architecture", Charles Jenks identifies the birth of post-modern architecture in 1972,  
23 when the *Pruitt-Igoe* blocks in St. Louis (Missouri, USA, 1951) were dynamited. These blocks were  
24 designed by Minoru Yamasaki, who would build the World Trade Center in New York years later.<sup>2</sup>

25 These modern blocks which had won an award from the American Institute of Architects, turned out  
26 to be uninhabitable just twenty years later. The depersonalized nature of its design had increased the crime in  
27 a so dangerous way that the best solution found was to demolish them. Ramirez notes that it might be  
28 exaggerated to blame the architecture for these social problems, but we also should remember that master  
29 architects of modernity had associated new architecture with a not inconsiderable increase of virtues and  
30 positive feelings. In any case, the date set by Jenks can't be understood as a definitive boundary between  
31 modernity and post-modernism, because there are formal, ideological, economic and political factors  
32 involved in the matter.

33 To investigate the color in post-modern architecture we have considered the period between the  
34 sixties and the end of the 20th century. We believe that the 21st century first decade can't be studied in the  
35 same way, because it is not distant enough to make a proper assessment yet. In this latter contemporary  
36 period, which is becoming known as *ultra-modernity* in other disciplines, we can just try to sense chromatic  
37 trends: direction vectors.  
38

### 39 40 NEW UTOPIAS ('60s)

41  
42 At the 9th CIAM Conference (1953), opinions contrary to the modern doctrine began to be obvious,  
43 especially those related to town planning, claiming for architecture closer to the city reality. But it was in the  
44 60s when these ideas began to be translated into a large number of utopian architectural proposals, many of  
45 them non-built projects, which imagined different futures.

46 Some of the *new utopian* proposals were somehow romantic or non-urban, and sometimes linked  
47 with ecological activism. In this sense, it stands out Friedensreich Hundertwasser's (1928-2000) work or  
48 manifestos like "Design With Nature" (1969) held by Ian McHarg (1920-). Other *new utopian* proposals  
49 were tinged with a technological nature and they trusted a prodigious technical development, such as  
50 Friedman's, Archigram's or Kikutake's. Ramirez points out that *new utopian* opposed complex technical and  
51 formal solutions to their predecessors' simple rational forms, although they shared with Modern Movement  
52 the same optimistic trust in architecture as a driving force to change society.

53 In 1958, the Austrian artist Friedensreich Hundertwasser (1928-2000) launched the controversial  
54 "Mouldiness Manifesto against Rationalism in Architecture" in which he advocated in favour of the self-  
55 construction and against the coldness of modern housing: 'We must at last put a stop to having people move  
56 into their quarters like chickens and rabbits into their coops'.<sup>3</sup> Hundertwasser, who is politically committed  
57 to environmentalism, designs a large number of facades with curves, bright colors and vegetation on  
58 balconies and roofs. Trying to avoid the orthogonality and the abstract purity of modern architecture, his  
59  
60

designs recall the modernist work of Antoni Gaudí (1852-1926), the expressionist works of Egon Schiele (1890-1918) or Gustav Klimt (1862-1918) and the surrealist oniric universe in general. His chromatic arrangements can be described as *naïve*: they are multicolored, spontaneous and seem to be displayed by non-experts. So, the self-constructed architecture belongs to a color composition distant from theories: populist.

As far as they were concerned, *technological new utopians* were confident of an economic development that would let them use war resources in favour of the construction of *mega-structures*: built artifacts with a highly complex technical level and inspired by science fiction spacecrafts. Some examples are the *Arcologies* designed by the Italian-American architect Paolo Soleri (1919 -), a technological alternative to compact city model; the Yona Friedmann's (1932 -) mobile architectures; the Kiyonori Kikutake's (1928 -) super-dense towers; or the Schoffer Nicolas' (1912-1992) light and mobile structures. It also was enormously influential, the *new utopias* of the British group *Archigram*, founded in 1961 and linked to the London Architectural Association (AA). Some architects such as Peter Cook (1937-1995) and Ron Herron (1930-1994) belonged to this group and both seemed slightly more interested in the glamour of the machine than in social or environmental issues.

In *Walking City* (1964), Herron imagined giant insect-machines that roamed the land searching for resources, while in *Plug-in-City* (1964) Cook designed huge mega-structures that contained standard habitable housing cells. These images of *new utopian* cities are often represented by *collages* and photo-montages which introduce typical pop culture colors (pure and contrasting tones), although most of the times they are almost exclusively in black and white with occasional color emphasis.

The intended technological sophistication translates into very complex shapes but with a simple color composition. Finally, the color of the machines themselves is the color of the materials: white, black, grey, metallic finishes or coded colors that identify a particular functional feature. Tom Porter points out that 'this mania for *achromatics* was, of course, a direct reflection of a science fiction fantasy- a recurrent theme in fashion and product design in which we become bedazzled by the glitter and gadgetry of black and silver electronic products. Indeed, the mathematical and hard-edged mood of the first part of the decade simply responded to the advent of space travel and our mental journey into outer space'.<sup>4</sup>

### The National Centre for Art and Culture Georges Pompidou (Paris, 1977)

The Georges Pompidou National Centre for Art and Culture is designed by the architects Richard Rogers (1933 -) and Renzo Piano (1937 -), and the construction starts in 1970 in Paris, so it does not belong strictly to the sixties. Nevertheless, its formal design links with the "mechanic aesthetic" of the *new utopian*, which is really inherited from modernity and represented by teams like *Archigram* and their drawings with complex structures full of pipes and cables.

The George Pompidou Centre is literally understood as a 'machine for living' like Le Corbusier's, but which shows its own gears (figs. 1, 2). 'We believe that buildings are machines, as did the modern architectural pioneers'<sup>5</sup>, says Rogers, although they get away from the 'elegant' and 'monochromatic' color of modern architects. In fact, Rogers criticizes Mies attitude of imposing a color that destroys the chromatic variety of his buildings. 'The whole "Miesian" thesis which states: "you will all have special brown blinds to match the color of my building" is contrary to our beliefs. one would like to think that one could develop a patchwork form of building which would still have the scale and possibilities of good, classical architecture'.

So the color composition of the building is a consequence of its internal working. It is a descriptive color which identifies the different parts and systems by means of conventional codes, like those used in industry (e.g. red for hot water, blue for cold water, etc.): 'A strong influence on our work is the way in which color is used as a safety factor in the coding of industrial environments and machinery'.

Rogers describes what we could qualify as a *chromatic-functional* method to arrange color with a top technical criterion and moving away from the subjective assessments done by personal taste. The effectiveness of this method is based on three criteria for electing or dismissing colors: use coded colors with conventional meanings; use durable colors that do not fade<sup>†</sup>; and take into account the scale and pace of the building. 'We are seeking rules so that our color decisions do not stem purely from arbitrary preferences. We

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<sup>†</sup> Rogers means that he uses colored steel because of its durability against corrosion, which has been a very typical criterion since antiquity: use a layer of paint to protect wood, metals or other construction materials against weathering: "Stronger environmental colours are emerging from the fact that the new materials work just as well, if not better, with pigment added on them."

begin color selection, therefore, with a process of elimination through color-coding. [...] The material we use most is steel, and, as it cannot be left unprotected, we are dealing with applied finishes such as vinyl plastic coating, especially on the ducting. [...] Our third system of elimination comes down to *what is the building about?*, specially its scale and rhythm.- What Renzo Piano calls, *the nervousness of a building*'.

Despite the use of such scientific arguments to select the colors, Rogers admits that the election is also a personal and subjective choice, which aims to give some joy to the building so as not to remain indifferent to users: 'Why should I use black, brown or grey when plasticated steel offers such a wide range of color? I suppose the whole thing is personalization -we have always consciously designed with color because of our interest in what Renzo and I call *happy buildings*- Buildings that people react to'.

### Continuity of color of the new utopias in contemporary architecture

*High Tech* architecture during the eighties is greatly influenced by the *technological new utopian* proposals of the sixties and it inherits its paucity of color in some ways. The same occurs in Rogers's later work, characterized by neutral ranges of colors, with an addition of *chromatic accents* that still continue the *chromatic-functional* method investigated at the Georges Pompidou Centre. Rogers explains the use of color to enhance the "readability" of some of his building (Minami Yamashiro Nursery School in Kyoto, Bordeaux Law Courts, the Antwerp Law Courts, Lloyd's Register in London, Barajas's Terminal 5 or Hesperia Hotel in Barcelona). In all of them color arrangement allows a better understanding of the building shape and its use.

In this sense, Rogers operates color in a similar way to Norman Foster or Renzo Piano, who share a common *High Tech* aesthetic of plain colors. We must keep in mind that this functional coloration that has enabled such interesting results has not been a creative constraint for Rogers, who adds to the concerns of many other contemporary architects seeking for color *versatility*. This mean they try to raise colors that fade, loose opacity and establish new relationships of transparency, overlaps and reflections. Rogers<sup>6</sup> states that he is 'searching for a more subtle world between solid and transparent, a sequence of spaces where the eye is lead through overlapping strata, where light and shadow enhance the impression of transparency'. It is in this quest for chromatic versatility where the work of such apparently distant architects like Jean Nouvel, Herzog & de Meuron and Richard Rogers have a point in common<sup>‡</sup>.

Those *mega-structures* imagined by the *technological new-utopians*, a kind of small cities in just one building, with versatile and modular architectural pieces, have also survived today in the work of architects such as MVRDV or Rem Koolhaas, who work with stacks and stratification that resemble those composition systems. Unlike chromatic scarcity showed by those *mega-objects* of the sixties, the current ones have a pretty protagonist color that helps to identify the individual character of the different parts that make up the whole.

The *new-utopia ecological* architecture is probably in the origin of the increase in the use of green in current architecture. There are many examples of contemporary buildings covered with vegetation 'such as the Ricola Office Building in Laufen, Switzerland, by Herzog & de Meuron, or the *murs végétales* conceived by the biologist Patrick Blanc in Paris, as in the Museum at Quai Branly by Jean Nouvel, or the Tower Flower of the *Jardins de Saussure* by Edouard François, which demonstrates the special kinds of harmonies of analogy produced through chlorophyll. Depending on the light, the buildings appear yellowish-green, blue or even reddish'.<sup>7</sup>

### NEOILUMINIST RATIONALISM ('70s)

The *neoiluminist rationalism* brings together a group of architects who care about correcting the rationalism of the Modern Movement in the late sixties and during the seventies, with two different architectural and chromatic trends depending on whether we talk about U.S.A. or Europe.

In the U.S.A., standed out 'The New York Five architects': Peter Eisenman (1932 -), Michael Graves (1934 -), Charles Gwathmey (1938 -), John Hedjuk (1929-2000) and Richard Meier (1934 -). The

<sup>‡</sup> To go deeper into this question, please consult the article: Serra J. The versatility of color in contemporary architecture: Color Research and Application, 2012.



1 press called them *The Whites* in reference to the whiteness of their buildings facades. Richard Meier said:  
2 'for me, white is the most wonderful color because within it you can see all the colors of the rainbow. [...] It  
3 is against a white surface that one best appreciates the play of light and shadow, solids and voids. [...] In this  
4 way whiteness has been one means of sharpening perception and heightening the power of visual form'.<sup>8</sup> The  
5 conceptual reference to Le Corbusier and his 'architecture as a wise game of the volumes under the light',  
6 shows the influence that his villas of the twenties had on *The Whites*, but obviously with the blindness to the  
7 color that was common in the reinterpretation of the modern architecture of those years. As Ramirez notes,  
8 *The Whites* feel that they are the heirs of the modern pioneers', and not creators who are struggling to impose  
9 a radical language in a hostile world as *new-utopians* did. Their buildings have plain volumes with numerous  
10 references to the architecture of the classic moderns'.

11 In Europe, the architectural debate was led by the Italian group *Tendenza*, with architects like  
12 Manfredo Tafuri (1935-1994), Aldo Rossi (1931-1997) and Giorgio Grassi (1935-). *Tendenza* tried to join  
13 the order and the clarity in modern's composition with the lifestyles of a long secular tradition. They tried to  
14 distil the typological forms of historic architecture to reduce them to its most essential aspects by following a  
15 process of rationalization. In relation to color, the result is a chromatic composition that pursues a  
16 monumental aspect. They often use the color of uncoated materials (mainly marble, brick, concrete and  
17 copper) as well as the combination of two or three dominant colors in the composition.

### 22 **San Cataldo Cemetery (Modena, 1971-1984)**

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25  
26 The S. Cataldo Cemetery in Modena was designed by the Italian architect Aldo Rossi, who wins the  
27 competition to expand the old cemetery of the city. Rossi designs the cemetery as if it was an unfinished and  
28 solemn architecture; conceived as a civic monument to the memory, with obvious references to classicism,  
29 and a great formal simplicity. The cemetery pretends to be a monument to the collective memory of a  
30 society, which identifies the formal attributes of the past and renders meanings onto these essential shapes  
31 (figs. 3, 4).

32  
33 The inconclusive nature of the project is especially significant in the *House of Deads*, a cubic  
34 columbarium with lots of regular squared holes that resemble a house with no floor and no roof.<sup>9</sup> As Rafael  
35 Moneo notes, this is a house stripped of its 'house of the living' status, without attributes, desolate, but that  
36 has not turned into ruins<sup>10</sup>. The red color of this *House of the Deads* contrasts with the environment and  
37 reaffirms its monumentality, its conception as a visual reference with significant capacity.

38  
39 According to Rossi, architecture is immersed in a continuous process that involves its own  
40 destruction, and he finds a kind of beauty in everything unfinished and incomplete. The cemetery color  
41 reinforces this idea of an unfinished work, since uncoated materials (such as the grey of concrete in arcades,  
42 or the blue of metal cover) coexist with coated materials and elements that seem to be fully *finished* (such as  
43 the blue paint on the woodwork of the windows, or the red plaster in some vertical walls). The colors of  
44 building materials together with applied colors over them, suggest the idea of an unfinished composition.

45  
46 Rossi wishes to retrieve the values of classical architecture that modernity had left out, and so he  
47 pays attention to the collective memory of a cemetery as the place for those who are gone. Rossi uses the  
48 typical formal attributes of the ancient cemeteries, plenty with cultural meanings, and reduces them to their  
49 essence. Thus, in the "L" shaped building which embraces the columbarium, colors are arranged with a  
50 tripartite composition following the classical style: a *base*, with a succession of grey concrete columns; a  
51 *development*, consisting of a face with undifferentiated square hollows and rendered with red plaster; and an  
52 *ending*, consisting of a bluish metal roof. The color reinforces a composition linked to antiquity and related  
53 to attributes that are characteristic of the collective imagination: the atrium, the window, the roof of the  
54 house, etc.

55  
56 In the niches pavilion there are few architectural elements that throw shadows on the facades and  
57 help to evaluate the passing hours. Here, time seems to stop or fully dilate, and the fate of the living is  
58 blurred with the eternity of those who are absent. The color is somewhat monotonous and undifferentiated, it  
59  
60

1 is present and absent, as life and memory of those who rest there and those who remember them. A small  
2 *architecture of the city*,<sup>§</sup> similar to a 'camp of the living and the dead, where many items remain as signs,  
3 symbols or warnings'.<sup>11</sup>  
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### 8 **Continuity of Color of the Neoiluminist Rationalism in Contemporary Architecture**

9

10 We cannot say that white color in much of contemporary buildings is a consequence of the  
11 Americans' architecture during the '70s. In this biased reinterpretation of the modern period, which was  
12 *blind* to the colors of the early 20th Century, many other factors had influence besides the *Five Architects*  
13 work. We emphasize especially the popularization of international architecture with black and white photos,  
14 which had great influence in the teaching given in architecture schools for some generations.  
15

16 Nowadays, it is still common to find buildings that waive any color different from white, following  
17 this tradition of rationalism, which have tried to prioritize the clear vision of the shapes declaining other  
18 colors. So it happened in Spanish *rationalist* architecture (Coderch, Sert, Fisac, etc) and in the subsequent  
19 *minimalism* that reaches its peak during the '90s (Alberto Campo Baeza, etc). It also happens among the  
20 Portuguese architects associated with the Porto school (Tavora, Souto de Moura, etc.) that have a  
21 predilection for the purity of white color, rarely blended with other hues. When this abstract and rationalist  
22 architecture displays other shades borrowed from the physical or historical context, it approaches to Italian  
23 *neoiluminist rationalism*, as it happens in some works of the Portuguese Alvaro Siza or the Spanish Rafael  
24 Moneo.  
25

26 There are other contemporary architects linked to the simplicity and the abstraction of *neoiluminist*  
27 *rationalism* to a certain extent, who give a leading importance to color in their buildings. So it happens with  
28 the work of the Swiss Gigon and Guyer, who has been labeled as 'minimalist multi-color'<sup>12</sup>, referring to their  
29 clear continuity with the formal restraint of modernity, but avoiding the purity of white color.  
30  
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### 33 **FIGURATIVE POSTMODERNITY ('80s)**

34

35 Those architects identified with the American *pop* architecture and the claims led by Robert Venturi (1925 -)  
36 and Denise Scott Brown (1931 -), belong to *figurative postmodernity*. Starting with the analysis of the  
37 American *Main Streets*, plenty of advertisements, Venturi and Scott Brown wanted to recover the plastic and  
38 communicative effects of the buildings, getting over the 'simple' and 'clean' solutions of the functional  
39 school<sup>13</sup>. As Alan Hess notes, color takes a significant role in commercial buildings, with the aim 'to create  
40 individual buildings and to assemble them into distinct, legible urban districts in the growing suburbs of  
41 America.'<sup>14</sup>  
42  
43

44 In the essay 'Learning from Las Vegas' (1972), Venturi and Scott Brown put in crisis the unity  
45 between the external shape of architecture and its structure, a paradigm of modernity, in favor of the  
46 meaning. This fracture is exemplified by two architectural basic models: what they call the *duck architecture*  
47 (recalling a drive-in restaurant), in which the spatial and functional structure is distorted by the commercial  
48 figurative message; and the *decorated shed*, which is a box decorated in accordance to the function, but with  
49 no relation with the spatial structure. In both cases, as Ramirez notes, an 'exaltation of the buildings carrying  
50 messages, with superimposed masks, that open the door to a new attitude, clearly opposed to the asceticism  
51 and the semantic containment of modernity'. It emerges a new figuration that uses freely the repertoire of  
52 classical architecture's forms to achieve an 'ironic classicism'<sup>2</sup> in Robert Stern's words or a 'pompous and  
53 sometimes hilarious monumentality' in Ramirez's words.  
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58 § "Arquitectura de la Ciudad" collects reflections of the Italian master and it provides the title to his paradigmatic text of  
59 1966.  
60



1  
2 Riedijk points out some characteristics of color composition in American *pop* architecture deduced  
3 from the buildings of Venturi, Rauch (1927-2008) and Scott Brown.<sup>15</sup> He notes how, in opposition to  
4 modernity, postmodern color decreases the emphasis on the building shape and spreads freely on the facades  
5 with a two-dimensional character. These facades have sometimes figurative patterns, similar to a wrapping  
6 paper, and very often include letters that introduce semantic meaning to buildings.  
7

8 Two of the most important compositional devices of American *pop* architecture are probably the  
9 *scale distortion* and the *de-contextualization*. In these buildings, daily objects which are usual to any  
10 observer, sometimes acquire an unusual size or appear in a disconcerting context so the meaning of the  
11 building is distort. These compositional strategies are often linked to basic hues and very chromatic colors,  
12 which are commonly used in day to day consumer goods.  
13

14 On the other hand, the '80s in Europe are years of large color plans in the urban areas. France was  
15 fully involved in this colorful fervour, and cities like Cergy Pontoise, Le Vaudreuil and Hervé got to be  
16 planned and built with painted colors. The urban centres of historic cities like Lyon and Nymes also used the  
17 color to provide interest and personality to the housing states that were flourishing around them.<sup>16</sup> There stand  
18 out the color interventions by the architect Emille Aillaud (1902-1988) nearby Paris; those by the landscape  
19 architect Bernard Lassus (1929-); as well as those by the muralist specialized in *trompe l'oeil* Fabio Rieti  
20 (1927-).  
21

22 Portugal also faces during the '80s to a difficult social period that requires the construction of  
23 massive social housing in both Lisbon and Porto. Although both cities oppose to architectural positions of  
24 the previous fascist regime, they represent two different ways to understand the discipline, which become  
25 evident in the exhibition 'After Modernity' (Lisbon, 1984). Oporto's architects\*\* decide not to participate in  
26 this exhibition, which shows different buildings that reject the seriousness and the messianic spirit of the  
27 modern movement, and which emphasizes other values such as the pleasure and novelty in the use of  
28 materials and colors. Lisbon's architects are influenced by American post-modernity, both *pop* and  
29 *historicist*. Some outstanding Portuguese architects are Tomas Taveira (1938 -), Julio Teles Grilo and  
30 Antonio Tomás de Eça Leal, among others.<sup>17</sup>  
31

32 Although the urban landscape in Europe during the '80s was witness to a kind of color excitement,  
33 the inner spaces were characterized by soft and bright colors that were considered sophisticated and elegant.  
34 Tom Porter maintains that 'pastel color became a truly international spirit', under the influence of popular  
35 television series such as 'Miami Beach'.<sup>4</sup> Talking about the Harvey's Broiler drive in restaurants, Alan Hess  
36 points out that 'while the sign clearly announced the restaurant to the driver cruising past, the interior  
37 broadcast the image of a clean, popular, exciting space in which to eat'. American *pop* architecture after the  
38 Great Depression 'fluidly combined wide-open urban space with more intimately scaled interior spaces, all  
39 in one piece of architecture', and this is probably one of its best goals.  
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#### 44 **Mass Housing Zone J or Barrio do Condado (Lisbon, 1975-1978)**

45

46 The housing state *Zona J* or *Barrio do Condado* was the work of a team<sup>††</sup> which Tomas Taveira  
47 (1938 -) was part of. He is an architect who developed his studies and career in Lisbon, but related to the  
48 United States, where he got a Doctoral Degree at the Massachusetts Institute of Technology (MIT). Taveira  
49 confesses himself openly postmodern, and the color in his work is mainly understood as a deliberate  
50 provocation to the public. Although the artistic references of his work are an amalgam of styles and  
51 intentions, both M. Graves and J. Stirling have exerted great influence on his buildings. Taveira is fascinated  
52 by computer graphics, which appeared at first time during the eighties, and his projects often use brightly  
53 colorful and non-necessarily harmonic computer images.  
54  
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58 \*\* Álvaro Siza Vieira (1933-), Eduardo Souto de Moura (1952-) and Adalberto Dias (1953-), among others.

59 †† Madalena Peres and Antónia Pimenta  
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The exuberant and casual color of *Barrio do Condado* housing opposed conservative architectural stances and it tried to introduce a breath of fresh air in a city that wanted to recover from a period characterized by neutral and bland buildings<sup>##</sup>. Taveira says he ‘gradually renounced *puritanism*, embracing colors and diversity’<sup>18</sup>. His buildings are disconcerting and excessive, and the color seems not to establish any link with the surroundings, despite some critics assure Taveira’s color is somehow linked with a *collective unconscious*. This housing state itself is an artificial landscape strongly colored (figs. 5, 6).

It seems that the color composition criterion for these 700 houses was to achieve the greatest possible hue contrast, arranging shades with maximum chromatic degree. It aims to catch attention of the viewer, to captivate him with extremely controversial and polemical colors, generating debates that even had politic consequences.

In Taveira’s work we find *classical* architecture features, such as the symmetry and a kind of tendency towards grandiloquence; but his striking, eccentric and populist color attitude links him better with the *pop* tendency of *figurative postmodernity*. The colors onto the facades of this housing state, suggest us the brightness of the fashion or the advertisements: they are designed to catch attention of consumers who are briefly captivated by such chromatic caprices.

Taveira’s color is also post-modern regarding his obvious renunciation of the chromatic principles of modernity, which consisted of short ranges of colors and the search for order and formal simplicity. On the contrary, Taveira paints secondary elements such as railings or windows with complementary hues or very contrasting shades, in order to acquire a disconcerting prominent role. Besides, when two adjoining and perpendicular facades share a common corner, the architect uses different shades suggesting the desire of disintegrating the parts of the volume, rather than reinforcing its unity. Surely, the use of so contrasting colors in addition to the spatial ability of the shades (ability to move forward or backward for the observer) makes it difficult to perceive the built volumes, and suggests the sensation of independent plain colors.

### Continuity of color of the figurative postmodernity in contemporary architecture

We can summarize that one of the main contributions of color in *figurative postmodernity* during the ‘80s was the claim for its semantic value, influenced by the mass media and consumer market. As well as the free and unprejudiced reuse of classical architecture features, which are transgressed to communicate contradiction, confusion, etc.

William Alsop is probably a good contemporary heir of many of these chromatic positions. He is an architect disinterested about theories and building interpretations, who uses color in a completely intuitive and personal way, to give some joy to the city and arouse people’s interest. Just like during the *figurative postmodernity*, both the shape of his buildings and their colors are linked to controversy, provocation and excess.

Also Dutch architects MVRDV have some building with color used as a slogan, as a message full of meaning and not free of forcefulness, shrillness and provocation (e.g. Studio Thonik, Amsterdam, 1998-2001). These Dutch architects stand out as developing their architectural ideas to their last end, resulting in a very interesting architecture halfway among utopia, denunciation, irony and nonsense.

### DECONSTRUCTIVISM (’90s)

In 1988, Philip Johnson (together with Mark Wigley) organized an important exhibition at the MoMA of New York entitled ‘Deconstructivist Architecture’. There they showed ‘the angular and full of corners work

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<sup>##</sup> Tirana is another example of European city where it has been used color as expression of political regime change. In this case by means of a local plan for facades decoration performed by different artists, that has little relationship with the architectonic objects that they colored.

of seven young and middle-aged architects, who performed completely different buildings (at least apparently) to predominant fashion of *classical post-modernity*<sup>1</sup>. The exhibition was coincident with the growing of *post-structuralist* philosophy by authors such as Michel Foucault (1926-1984), Gilles Deleuze (1925-1995) or Jacques Derrida (1930-2004). They introduced the so-called *postmodern doubt*, rejecting universal and totalitarian interpretations of reality and, on the contrary, accepting discontinuous, provisional and fragmentary theories<sup>19</sup>. To a certain extent, architects at this moment had already lost the faith in the great utopian visions of modernity.

However, Ramírez considers that it is not possible to talk about a real transfer from *post-structuralist* philosophy towards architecture, since *deconstructivist* architects, in fact, just mimic the artistic shapes of some avant-garde trends, like the German *expressionism* or the Russian *constructivism*, both trends that were somehow left aside in the 20th century historiography. 'It might be said that these new architects behaved in the early nineties as the *New York Five* did twenty years before regarding to modernity. (...) And it is odd irony that this stylistic revival of Russian constructivism has been the official style of capitalist West during the years of the fall of the Berlin Wall and the collapse of regimes founded in the 1917 revolution'<sup>1</sup>.

Therefore, *deconstructivist* architects abandon the great utopian visions that were one of the mainstays of Modern Movement, and they focused on particular problems of the architectural shaping, using complex compositional systems, with overlaps and fractures. Some architects related to *deconstructivism* are Frank O. Gehry (1929-), Daniel Libeskind (1943-) or Eric Owen Moss (1943-) in U.S.A.; Coop Himmelblau (1968), Zaha Hadid (1950-), Enric Miralles (1955-2000) or Benedetta Tagliabue (1963-) in Europe; among others.

### Fire station for Vitra factory (Weil am Rhein, Germany, 1993)

The fire station for Vitra factory is one of the first built works by Zaha Hadid (1950-), after arousing the admiration of professional critics with her paintings and models of fragmented geometries. The shape and the color of the building are explained through its relationship with the environment; the influence of abstract avant-garde trends; the expression of the movement; the search of versatility and contradiction; as well as the representation of resources used during designing.

It might seem that Vitra building, like other Zaha Hadid's buildings, could be an *object d'author*, out of context, but the fact is it does respond to a kind of analysis of the environment. Thus, the building's shape results from the intersection of the lines of the land, the nearby streets, and the movement of those using the building. Early sketches show the architect's attempts to reconcile these directions in order to shape the fire station, in a very personal way to express and conceive architecture that some authors<sup>20</sup> have noted as 'Kufic Suprematism'<sup>§§</sup>. *Suprematism* due to its formal resemblance to the abstract art of Russian avant-garde<sup>\*\*\*</sup>, *Kufic* because of its similarity with former calligraphy in Arabic script. As it happened with many Russian avant-garde artistic works, Zaha's building aims to be 'frozen movement' and to express the usual tension of firefighters, who remain alert with 'the possibility to enter the action at any time'<sup>21</sup> (figs. 7, 8).

The conciliation of contradictory concepts like *abstract-contextual* or *frozen-movement*, gives us the clue to understand *deconstructivist* color, which tries to be at the same time something and its opposite, what we have called the search for *versatility*. So this building aims to reach ambiguous situations such as 'being transparent without using a transparent material, but concrete' or 'attempting to make lightweight a heavy mass'.<sup>22</sup> Pavilion's function is also *versatile* since property developers 'wanted a building that could be used as a fire station, but also with other uses'<sup>21</sup>, something that is achieved with moving elements that distort the relationship between inner and outer space.

§§ Characters employed by arabic writers of antiquity.

\*\*\* We must recall the abstraction of *suprematist* paintings by Kasimir Malevich (1878-1935) or the *constructivist* work by Vladimir Tatlin (1885-1953) or Lissitzky (1890-1941).

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Initially, the interior was to be colored and the outside was of raw grey concrete, but once built, Zaha Hadid changed the initial idea: 'I realized that walls quality should be quite cold, and I decided to keep them with plain materials. (...) We thought a lot about it but eventually we decided not to use color. I was always skeptical about this contrast'.<sup>21</sup>

Bright colors on black backgrounds are usual in her paintings, since she likes them to resemble an image watched on a computer screen. Again, a new conceptual ambiguity between a laborious hand craft, and a formal result that aims to look like artificial technology.

Unlike *Suprematist* paintings, Zaha Hadid uses colors to identify the *planes of the shape*, but not necessarily uses *plain colors*, since brightness and chromatic gradients exist in her paintings. These colors, however, better correspond to the painting composition itself rather than to the final built solution, where they are scarce. In fact, Vitra station can be considered monochromatic: 'Everyone asked me the same question. Did you color concrete [in your paintings] because it was too dark? And I said no, everything was the same color. (...) People always misunderstood this and thought that colors in paintings were representative, but they never were. They were related with the building quality, because it does not necessarily had to be built with bright colors'.<sup>21</sup> Since the beginning of her career 'the use of color [in drawings] had more to do with the expression of ideas about the light' and 'colors were not exactly the building representation'.<sup>21</sup> In the Vitra Fire station, color showed 'which wall should be illuminated and which should not, and how the building was transformed from day to night'.<sup>21</sup>

### Continuity of color of deconstructivism in contemporary architecture

It's hard to know what has been the chromatic novelty that could have been introduced by *deconstructivism* in the subsequent architecture. As Montaner states, what seems true is that these broken shapes and their colors are too contrived, since they belong to a chaos that is permitted and celebrated by artists from countries that are actually rich and tidy and are far from the real chaos, typical of natural disasters and wars.

In relation to the composition of these artificially disordered shapes, there are architects who simply use the natural color of building materials, especially metals and glass (e.g. Daniel Libeskind, Frank Gehry or Coop Himmelblau). Other architects keep some proximity with Russian avant-garde colors, by using white, black and grey backgrounds with small emphasis of other saturated colors (e.g. Zaha Hadid). Sometimes colors are more expressive and they are treated as a pure entertainment or a real irony (e.g. Enric Miralles and Benedetta Tagliabue). And not so infrequently we find artificial colors, as if they were transferred directly from a virtual reality (e.g. Van Berkel & UNStudio).

Maybe the most outstanding feature of color in *deconstructivism* period is the importance of graphic expression media used during designing, whether traditional or technological. The use of specific drawing software, the possibilities of digital image processing, or the artificiality of the colors watched on the computer screen, are issues that end up influencing the *deconstructed* architecture. Additionally, ambiguity, disorder and deliberated contradictions in this architecture establish the roots for *versatile* colors, typical of the 21st century.

## CONCLUSIONS

As a summary and conclusion, we can point out some of the most important contributions in relation to color in postmodern architecture.

In the '60s, we distinguish two trends among *the new utopias*, those of environmentalist tendency which proposed a *naïve* color and with presence of vegetation; and those of technological tendency which propose a functional and restrained color, fascinated by the aesthetics of the machines. As an example of this second trend we have analyzed the National Centre of Art and Culture Georges Pompidou, designed by using

1 what may be labeled as a 'chromatic-functional method' and that is based on three criteria: the color encoding  
2 according to conventional meanings that are close to the industry; the durability of the colors arranged; and  
3 their relationship to the rhythm of the building.  
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5 In the '70s, we distinguish two disparate trends in the *neoiluminist rationalism* period. On one hand  
6 the abstract work of those architects who feel followers of the modernity forms, but with an almost exclusive  
7 use of white color. On the other hand the work of those mainly European architects who want to bring  
8 together the rationalist thought of modernity with the historical architectural forms, with color compositions  
9 which often use uncoated materials and that pursue some monumentality. As an example of this second  
10 trend, we have analyzed the S. Cataldo Cemetery in Modena with a color that accompanies the idea of an  
11 unfinished solemn architecture that was conceived as a civic monument to the memory, with marked  
12 references to classicism, and simple forms.  
13

14 In the '80s, *figurative postmodernity* trends demand the symbolic meaning of both the color and the  
15 surface finish, thanks to the influence of North American architecture. The color is used in a free and non-  
16 prejudiced way, as it is the eclectic formal repertoire of classical buildings. The eighties are characterized by  
17 ambitious color proposals in public spaces in European cities and, at the same time, the spread of pastel  
18 colors in inner spaces. As an example, we have studied the residential *Zone J* or *Barrio do Condado*, which  
19 color must be understood from a semantic point of view, as a denunciation against a past time where there  
20 was no freedom, neither in politics nor in architecture.  
21

22 In the '90s, *deconstructivist* trends waive order and clarity of the shapes in favor of chaos and  
23 complexity, which are artificial to some extent. Color accompanies the design process and it is heavily  
24 influenced by the graphic expression media used, either traditional or computerized. It begins in this decade  
25 the *versatile* understanding of color, which is a characteristic of the 21st century color, and materials are  
26 worked in a completely free way regarding their color finishes. The Fire Station for Vitra factory is an  
27 example of this kind of architecture, based on contradictory and difficult architectural concepts, with folded  
28 and voluptuous shapes, which paradoxically ended in a simple range of shades.  
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- 1 Ramírez JA. Aprendiendo de la arquitectura postmoderna. In: Bozal Fernández V. editor. Historia de las ideas estéticas y de las teorías artísticas contemporáneas, vol II. Madrid: Visor; 1996. p 339-345.
  - 2 Thoenes C. and Evers B. Teoría de la arquitectura: del Renacimiento a la actualidad. Köln: Taschen; 2006. 575 p.
  - 3 Hundertwasser F. (1958) Mouldiness manifesto against rationalism in architecture. In: Marchán S. and Corazón A. editors. La arquitectura del siglo XX: Textos. Madrid: Lumen, 1974. p 448-455.
  - 4 Porter T. Colour in the looking glass. UK: Architectural Design: Colour in Architecture; 1996. p 8-10
  - 5 Rogers R. The colour approach of Piano and Rogers. In: Porter T and Mikellides B. editors. Color for Architecture. London: Studio Vista; 1976. p 60–61.
  - 6 Rogers R. Theory: Legibility [Online]. 2011, [30/03/2012] Available at: <http://www.richardrogers.co.uk/theory/legibility>.
  - 7 Schindler VM. Why is green more and more used as a color for buildings to create a harmonic chromatic environment? Budapest (Hungary): International Conference on Color Harmony, April 2007. p 24-26. Available at: [www.aic.kee.hu/color-harmony/icch\\_2/proceedings/Schindler.pdf](http://www.aic.kee.hu/color-harmony/icch_2/proceedings/Schindler.pdf)
  - 8 Meier R. The Pritzker Architecture Prize: Acceptance Speech [online]. The Hiatt Foundation, 1984, [08/03/2012]. Available at: [http://www.pritzkerprize.com/1984/ceremony\\_speech1](http://www.pritzkerprize.com/1984/ceremony_speech1)
  - 9 Braghieri G. Aldo Rossi. Barcelona: Gustavo Gili; 1982. p 72-73.
  - 10 Moneo R. In: Bonfanti E. and Ferlenga A. Aldo Rossi. Barcelona: Ediciones del Serbal, 1992. p 46.
  - 11 Rossi A. Scientific autobiography. In: Bonfanti E and Ferlenga A. Aldo Rossi. Barcelona: Ediciones del Serbal, 1992. p 161.
  - 12 Gigon A. and Guyer M. The variegated minimal [=Minimalismo multicolor]. Madrid: El Croquis; 2000. p 262-263.
  - 13 Gössel P. and Leuthäuser G. Arquitectura del siglo XX. Köln: Taschen; 2001. 448 p.
  - 14 Hess A. Colorful landmarks: how color shaped public space in 1950s suburbia. In: Doherty G. editor. Cambridge: New Geographies 3: Urbanisms of color, Harvard University press; 2010. p 108-109.
  - 15 Riedijk M. Giant blue shirt at the gasoline station. In: Komossa S, et al., editors. Color in contemporary architecture. Delft (Netherlands): SUN; 2009. p 144-171
  - 16 Lenclos J. The geography of color. In: Porter T, et al., editors. Color for Architecture Today. London: Taylor & Francis; 2009. 39 p.
  - 17 Siza A, et al. Tendencias de la arquitectura portuguesa: Obras de Alvaro Siza, Hestnes Ferreira, Luiz Cunha, Manuel Vicente, Tomás Taveira. Barcelona: Col.legi d'Arquitectes de Catalunya, 1987. p 23-27.
  - 18 Taveira T. General assembly building extension in Lisbon. In: Toy M, editor. UK: Architectural Design: Colour in architecture; 1996. p 30-31.
  - 19 Montaner JM. Arquitectura y crítica. Barcelona: Gustavo Gili; 1999.
  - 20 González-Cobelo JL. and Hadid Z. Landscape as a plan [= El paisaje como planta]. Madrid: El Croquis; 2001. p 17.
  - 21 Binet H. Architecture of Zaha Hadid in photographs. Baden: Lars Müller; 2000. p 109-110.
  - 22 Hadid Z and Futagawa Y. Zaha M. Hadid. Tokyo: A.D.A. Edita; 1995. p 66-93.



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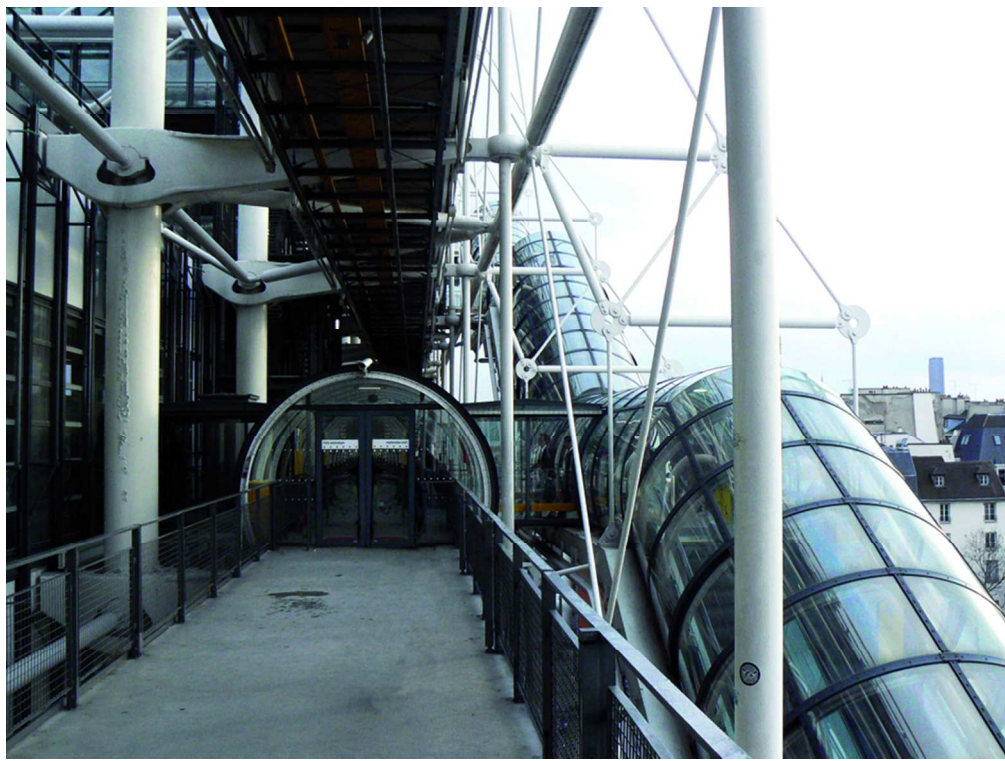


Fig 1. The National Centre for Art and Culture Georges Pompidou, Richard Rogers and Renzo Piano, Paris, 1977. Photo by the author. 80x60mm (300 x 300 DPI)

review



Fig 2. The National Centre for Art and Culture Georges Pompidou, Richard Rogers and Renzo Piano, Paris, 1977. Photo by Al Ianni in: <http://www.flickr.com/photos/ainet/884301553/> 176x132mm (72 x 72 DPI)

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Fig 3. San Cataldo Cemetery, Aldo Rossi, Modena (Italy), 1971-1984. Photo by username-guiba6 in:  
<http://www.plataformaarquitectura.cl/2011/02/01/clasicos-de-la-arquitectura-cementerio-de-san-cataldo-aldo-rossi/1292007831-sancat1/>  
225x150mm (72 x 72 DPI)





Fig 4. San Cataldo Cemetery, Aldo Rossi, Modena (Italy), 1971-1984. Photo by kalevkevad in:  
<http://www.flickr.com/photos/kalevkevad/3416924475/>  
225x169mm (72 x 72 DPI)

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Fig 5. Mass Housing Zone J or Barrio do Condado, Tomás Taveira, Lisbon, 1975-1978. Photo by Maria Cristina Pinheiro.  
100x59mm (180 x 180 DPI)



Fig 6. Mass Housing Zone J or Barrio do Condado, Tomás Taveira, Lisbon, 1975-1978. Photo by Maria Cristina Pinheiro.  
100x74mm (180 x 180 DPI)



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Fig 7. Fire station for Vitra factory, Zaha Hadid, Weil am Rhein (Germany), 1993. Photo by Wojtek Gurak in:  
<http://www.flickr.com/photos/wojtekgurak/4121827372/>  
352x235mm (72 x 72 DPI)

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Fig 8. Fire station for Vitra factory, Zaha Hadid, Weil am Rhein (Germany), 1993. Photo by Wojtek Gurak in:  
<http://www.flickr.com/photos/wojtekgurak/4121055363/>  
56x84mm (300 x 300 DPI)