

Influence of Pop Art on Architecture from the Independent Group analysis

Influence of Pop Art on Architecture from the Independent Group analysis
Degree's Final Thesis
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Barcelona, July 2020

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Abstract

In the 1950s, in a post-war environment, a current emerged contrary to the passive attitude and anchored to the past of the time, pop art. A generation that trusts the need for a new point of view which meets current needs, and which is closer to everyday language. Under this premise the Independent Group emerges, as an interdisciplinary collective that accepts the new popular culture driven by mass communication, discusses it and enjoys it. Through the work of the members of the group we will analyze how this thought colonized all areas of production, including architecture.

Key Words

Mass consumerism, exhibition space, adaptability, as found, expendable arts

I. Introduction

The multidisciplinary aspect of architecture has always been the subject of speculation and controversy and historically it has been classified in the three main areas of knowledge: humanities, arts and sciences. At different periods it has been classified in the field of Fine Arts, Humanities and its use of the Technique was also valued. This classification has varied according to ideological and social contexts, however, without assessing whether one has more weight than the other, this discussion suggests that architecture emanates from all of them.

Nowadays, issues related to the typecasting of architecture are still being debated, however, it will not be the center of this research to justify these concepts, but rather we will focus on finding the points of agreement between different disciplines at a specific moment in history. All of them found a point of dialogue in the Independent Group, therefore, it is intended to value their work, as a trigger for a paradigm shift in his day, first in the art world —pop art— to be later transferred to all areas of production.

This movement arises without being sought, as a response to the social and cultural changes of the British post-war period. Personally, and according to the aforementioned Denise Scott Brown quote, architecture must respond to the needs of the moment, therefore, and based on this premise, their collaboration is undeniable. It must provide solutions to users and, in the same way, manifest their way of living, of socializing.

Given that it is still a subject of debate, which currently continues to be undervalued or questioned the dialogue between these areas and due to my growing interest in the art world throughout my progress in the career, I consider it necessary to highlight this branch. My first years in the career were focused on the technical part, maintaining a shy attitude towards graphic and visual exploration, which over the years grew until reaching a superlative degree for me. Thanks to this, my mind has opened up to other fields that feed my projects and that I consider have made my concerns grow, therefore it seems essential for an architect to know the value of art specifically in our discipline, as two elements inherent to our lives.

To expose in a clear way and delimit such an extensive topic I find necessary to make an analysis of a specific movement that brings us closer to specific examples that can demonstrate in a simple way the coexistence and interaction of art in architecture. I consider Pop Art a movement that meant a paradigm shift at the time, that did not refuse to look at the context and make use of it as a production tool. Specifically, a group emerged that was its main promoter in Europe, the Independent Group, which brings into dialogue the disciplines of art, architecture, technique and humanities with the common goal of enriching each other. Due to this interdisciplinary nature, we will use it to demonstrate the influence of pop art on architecture, because the ideas discussed there, were points of reference, obviously for the architects who were part of it, but also for other contemporary architects.

In the following investigation, the relationship between pop art and architecture in the context of the Independent Group will be studied, analyzing the exhibitions and works in which its members participated and which more clearly reflect contemporary concepts and ways of making architecture. In order to reach these conclusions, we will analyze the three exhibitions related to IG members that show the most significant ideas of the group and that allow us to see as more clearly the relationship between the concepts that are exposed with the architectural work of both architects members of the group (Alison and Peter Smithson) who used them as a field of experimentation prior to architectural production, as well as other contemporary architects (Cedric Price, The Eames) enriched by the group ideas and, in turn, assimilate that, although it had not been given a name before, other predecessor architects had used ideas that were later discussed in the IG.

“New sources are sought when the old forms go stale and the way out is not clear.”

Denise Scott Brown



Figure 1: Nigel Henderson, Shop front, East London, 1949-52

2. Historical-Cultural Context of Great Britain 1950

After Second World War, England was in a deep social and economic crisis, strengthened by its geographical isolation and the divisions that emerged from the confrontation. The post-war period entails the loss of the Indian colonies in 1947 and one year later his mandate over Palestine wore of. At the same time, its allies in the war, the United States and the Soviet Union, became superpowers, who became enemies during the Cold War. In the midst of this situation, the government attempted to maintain the full performance of the job, which resulted in rationing extensions and high taxes, which inevitably led to widespread austerity.

During the war the idea that culture was one of the struggles of England was reinforced through the Council of Encouragement of Music and Arts (CEMA)¹ and when it ended, most of the artists took refuge in the British character and in maintaining the inherited traditions. However, certain groups of the generations that had seen their youth dissolved during the war, took a position against the comfortable attitude of anchoring themselves to the past and they began to assimilate the reality of the moment.

In this context, a series of sociocultural aspects impacted the way of living and inhabiting: the forms of consumption, technological development, industrialization or mass production, among other factors. Mass consumerism was booming, but art denied this reality and closed itself in its intellectual and elitist sphere. However, a generation that had lost its youth during the war years is positioned against the mechanistic and abstract character of the Modern Movement to seek a new aesthetic fully integrated into contemporary life.

In 1946, The Institute of Contemporary Arts (ICA) was founded as an Institute (not a museum) where all the arts were contextualized with contemporary culture within the sociopolitical conditions of the time, positioning itself outside the limits of art defined by the Royal Academy. His first exhibitions, such as *Forty Tears of Modern Art*, in 1948 when he did not even have his own premises, showed that they were still anchored to past modernist ideas. In May 1951 they took two samples to the Festival of Britain: *Ten Decades: A Review of British Taste, 1851-1951*, which continued to look back, and *Growth and Form*, by Richard Hamilton², where scientific and organic material was exhibited. This work took a step forward using the most innovative and imaginative technologies of the moment.

¹ The Council for the Encouragement of Music and the Arts (CEMA) was a government funded council established in 1940 with the goal of preserving British culture. In 1944 it was divided into the Arts Council of England, Scottish Art Council and Arts Council of Wales.

² Richard Hamilton (1922-2011) British artist, considered the great standard bearer of the pop movement. His late career as an artist finds brushstrokes from his previous work in the advertising sector. His collage *Just What Is It That Makes Today's Homes So Different, So Appealing?* exhibited in 1956 at the exhibition *This is Tomorrow* has been named on multiple occasions as a work that begins British Pop Art. Analysis of the collage on page 12.

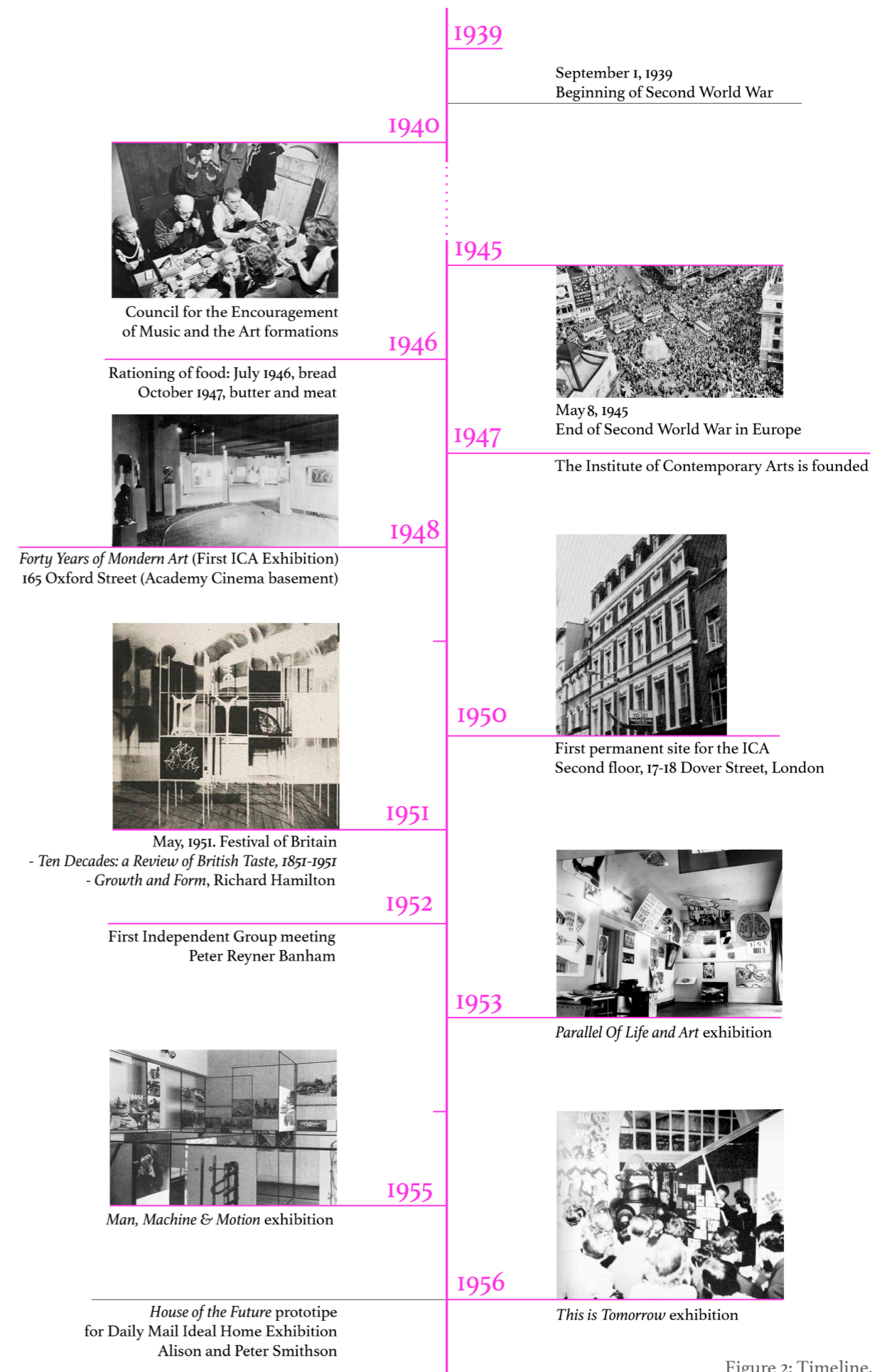


Figure 2: Timeline.

3. Pop Art

The term 'Pop Art' was first used around 1954 by Lawrence Alloway³, but initially referring to the mass communication products, not the arts based on popular culture. During the following years the expression came into force in debates and always in relation to the work and meetings of the Independent Group.

Since Alloway first named Pop Art, misrepresentations of it have spread. Currently it is difficult to find an objective definition, on the one hand because those who were in charge of deciding what was exhibited in the galleries, and therefore, those people responsible for classifying what art was worthy of the name 'art', never took this trend seriously, excluding it from 'high culture'. On the other hand, it was not a movement with marked guidelines, nor certain precedents, it was developed in parallel in England and the United States attending to the social aspects of each backdrop.

The artists used forms close to the viewer taken from the mass media, in this way everyone had shared allusions. A point of convergence was created which made them succeed amongst the generic public, without concessions to fine arts or popular arts, a point of coexistence. Robert Indiana⁴ perfectly defines the idea of Pop Art that I personally perceive: "Pop Art looks towards the world and gives the impression of accepting what surrounds it, which is not, in itself, good or bad, but different It's another state of mind." The previous artists tried to reflect on their work, while pop authors wanted to get out of it, exploring the needs of the moment.

In short, Pop Art sought to eliminate the claims of the post-war avant-gardes, rejected the abstraction and subjectivism of the scene, to advance in a new organization of culture where the "high" and "low" strata intermingled and dialogued. The potential of mass produced and consumed culture and its undeniable link with the society of the moment, including artists of course, became evident. This idea colonized all production devices, from film to architecture.

"Pop Art is
Popular (designed for a mass audience)
Transient (short-term solution)
Expendable (easily forgotten)
Low cost
Mass produced
Young (aimed at youth)
Witty
Sexy
Gimmicky
Glamorous
Big business"

Richard Hamilton: *Letter to Peter and Alison Smithson, 16 January 1957*



Figure 3: Karel Reisz Documentary: *We Are the Lambeth Boys*, 1959

³ Lawrence Alloway (1926-1990) British art curator and critic closely linked to the Independent Group and very important in the group's data collection. From 1961 his work moved to the United States. Development of the topic in chapter 4.

⁴ Robert Indiana (1928-2018) a prominent figure in the development of assemblage art and Pop art in America.

4. Independent Group (IG)

The ICA was the meeting point for young artists, architects and writers in London, in this environment an informal organization called Independent Group was created. In the midst of the intellectual Great Britain of elitist aesthetics, a generation arises that does not feel rejection of contemporary culture, but rather assumes it and learns from it. The group did not have a fixed structure, a specific list of members, nor did they collect dues, in fact, they hardly left a trace of their meetings, so the data collected about the IG is often imprecise.

The group was first convened in the winter of 1952-1953 by Peter Reyner Banham⁵ around the techniques. The second meeting did not take place until a year later, led by John McHale⁶ and Lawrence Alloway, a meeting encouraged by the second director of the ICA, Dorothy Morland, as a way to keep in touch the organization with current ideas and art. This second session revolved around the only common point of the Institute and the IG: popular culture. They all shared a vernacular culture that went beyond individual interests. One consequence of the debates was to provide pop culture with a layer of seriousness.

As I have mentioned, there is no physical record or reports of such meetings, the material has been largely compiled from members' testimonies, including: artists and photographers: Magda Cordell, Richard and Terry Hamilton, Nigel Henderson, Sylvia Sleigh, William Turnbull and Eduardo Paolozzi; architects and designers: Alison and Peter Smithson, James Stirling and Colin St John Wilson; graphic designer Edward Wright; theorists and critics: Lawrence Alloway, Mary and Reyner Banham, John McHale, Toni del Renzio and music producer Frank Cordell.

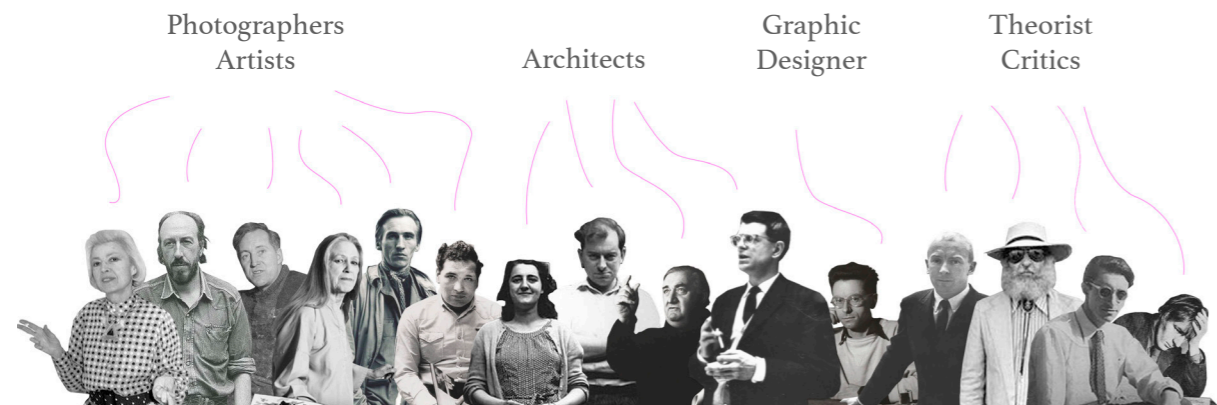


Figure 4: Some of the IG members in the order in which they have been mentioned in the text.
No photos of: Terry Hamilton, Mary Banham and Frank Cordell.

⁵ Peter Reyner Banham (1922-1988), British engineer, one of the most influential architecture critics and historians of the 20th century. He was the first ICA secretary for a little over a year, until 1954 when he focused on his doctoral thesis.

⁶ John McHale (1922-1978) British artist, art theorist, and sociologist. He worked in 1962 with architect Richard Buckminster Fuller on ecological issues and environmental sustainability.

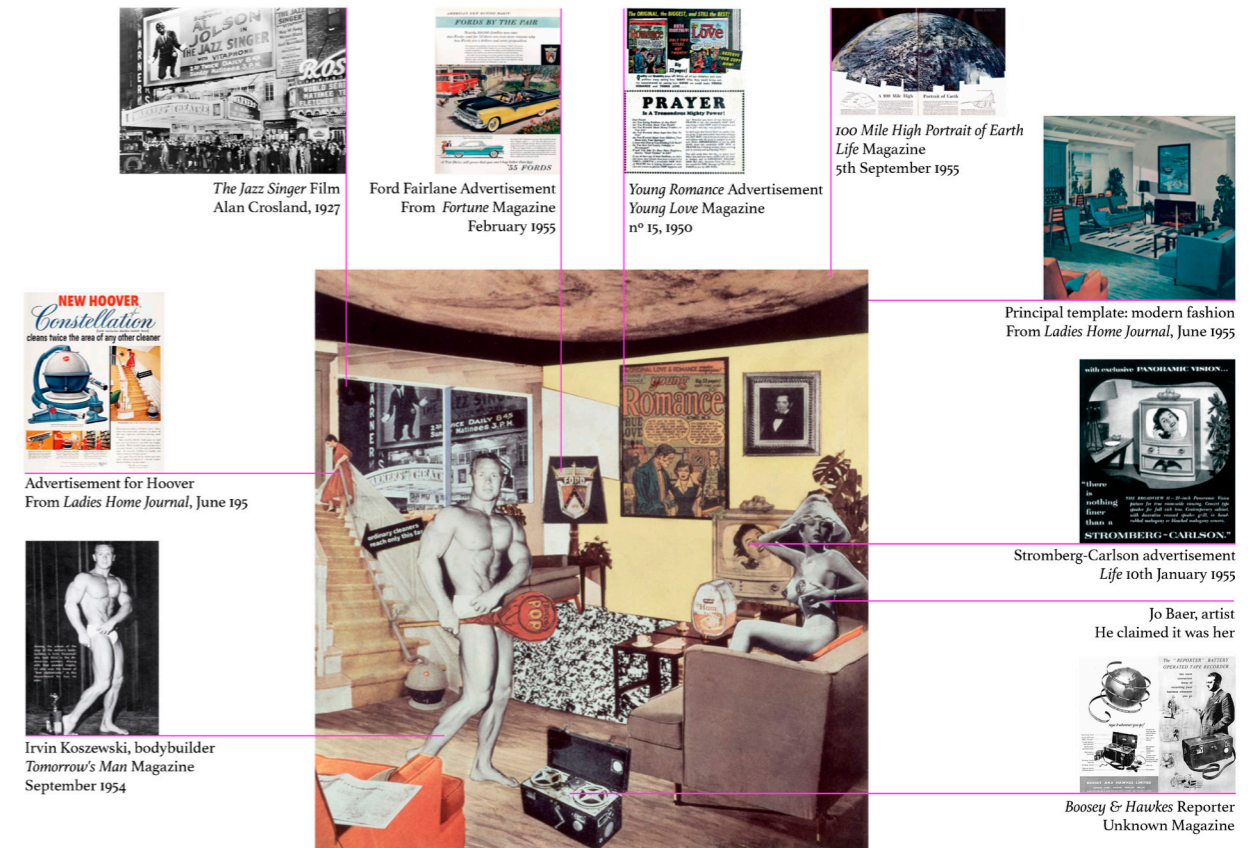


Figure 5: Analysis of *Just what is it that makes today's homes so different, so appealing?*, Richard Hamilton

The IG enacted an aesthetic of abundance typical of Pop Art, mixing diversity of styles and influx of consumers. In contrast to the deprivation experienced in England after the Second World War, the group preached with the aesthetics of abundance. Lawrence Alloway introduced this concept as productivity not restricted by the post-war depression, it also included the union of two doctrines hitherto treated separately: the fine arts and the mass media.

The approach of these young people removes the boundaries between disciplines and invites their mutual collaboration. Like their trades, their interests were diverse and they nurtured each other, science fiction magazines, Hollywood, Jackson Pollock's paintings, helicopter and auto mobile industrial design, Detroit, American advertising... This type of expendable arts was placed at the height of the considered "high culture" by the British intellectual sphere. Most of the members come from the middle class, that is to say, they were closer to popular culture and social changes in the population. This could influence the position they took, contrary to the ideals of the founders of ICA, who had an ideal world view and an Aristotelian aesthetic inherited from Modernism.

They did not reject the conditions of the moment, they assumed an anthropological definition of the cultural, for which all kinds of human activity are object of aesthetic judgment and attention. It is about expanding the limits of art, living and developing it in accordance with the culture in which each one has developed instead of rejecting it.

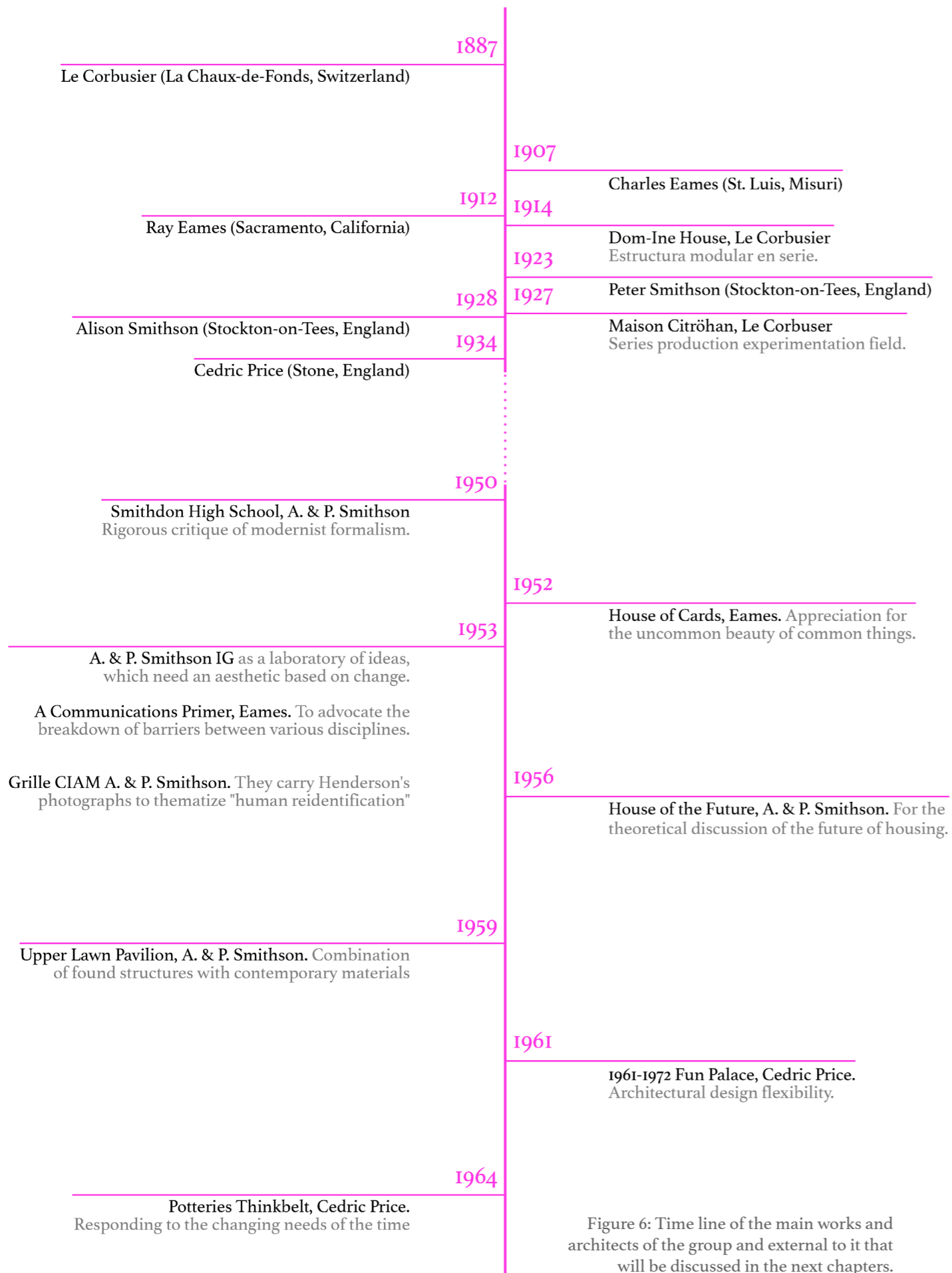


Figure 6: Time line of the main works and architects of the group and external to it that will be discussed in the next chapters.

As we have mentioned in the introduction, in this research we will start from the exhibitions organized by members of the IG to search for the link between pop art and architecture. Along this path, architects belonging to the group (Alison and Peter Smithson) will be mentioned, architects who opened debates discussed by their members, very typical of pop art and who were influential for the group (Le Corbusier, Eames) and other architects who used the ideas discussed there to apply in your work (Cedric Price). In this time line the main works are collected as an introduction to what will be exposed in the next chapters.



Figure 7: Eduardo Paolozzi: Scrapbook n°2, 1947

“Why certain folk art objects, historical styles or industrial artefacts and methods become important at a particular moment cannot easily be explained.

Gropius wrote a book on groin silos.
Le Corbusier one on aeroplanes,
And Charlotte Perriand brought a new
object to the office every morning
But today we collect ads.”

Alison and Peter Smithson: *But today we collect ads.*

5. Study of the exhibitions organized by the IG members in relation to architecture

The IG was not a homogeneous group and the exhibitions often attributed to the IG were not made on behalf of the IG, but rather individual decisions of the members made on an individual basis. It is true that all of them contain issues and strategies associated with the group and can be seen as the only tangible element resulting from their meetings.

A great disparity is found in the themes of the following exhibitions, even between the works exhibited within each one, a fact that is easily associated with the IG as an interdisciplinary collective seeking a complete reading of culture.

Mainly the whole group has been credited with creating three exhibitions: *Parallel of Life and Art* (1953), *Man, Machine and Motion* (1955) and *This is Tomorrow* (1956). However, its true organizers have repeatedly denied the involvement of the group as a whole in these works, although they do affirm that its realization was highly linked to the ideas that were discussed in the IG. Therefore, throughout the work we will talk about exhibitions related to group members, in value of the members who really dedicated their time to them.

It is not surprisingly that these exhibitions have been attributed to the IG, as, for example, *Parallel of Life and Art* and *Man, Machine and Motion* classified the perspectives their organizers brought to the group's discussions. For its part, *This is Tomorrow* is a greater discussion for including people outside the IG and gathering very disparate proposals. In my opinion, precisely these differences perfectly represent the internal structure of the group, which was characterized by its heterogeneity and conflicts.

It was a time of great exhibition production at the ICA, several members of the group participated in exhibitions not included in this work and which have never been attributed to the IG, for example, *Opposing Forces* (1953) or *Collages and Objects* (1954), in which Renzio, Alloway, and McHale participated above all. Despite having been the subject of debate in the IG's analyses of aesthetic proposals, they have never been attributed to the entire group as the three mentioned above and will not be the subject of this investigation, probably due to the same reason: the concept was applicable to a concrete world and were not extrapolated to a generic one, unlike *Parallel of Life and Art*, *Man, Machine and Motion* and *This is Tomorrow*. These last three will be the object of study selected, on the one hand, for dealing with themes present in the society of the moment and expressing the fundamental ideas of pop art and, on the other hand, for being a space for multidisciplinary experimentation that served as a link between art and architecture.

The three exhibitions described below are not samples of concrete artistic works, but constitute it as a whole, they are a work in themselves.

We will start from a conceptual and formal analysis of the exhibition to find its link with contemporary architects, even to detect brushstrokes of these ideals in previous architectures, which were already exploring very typical themes of pop art. The analysis of these three exhibitions pursues the search for the influence of pop art on thought and the formation of concepts that have been modelled and applied in architecture.

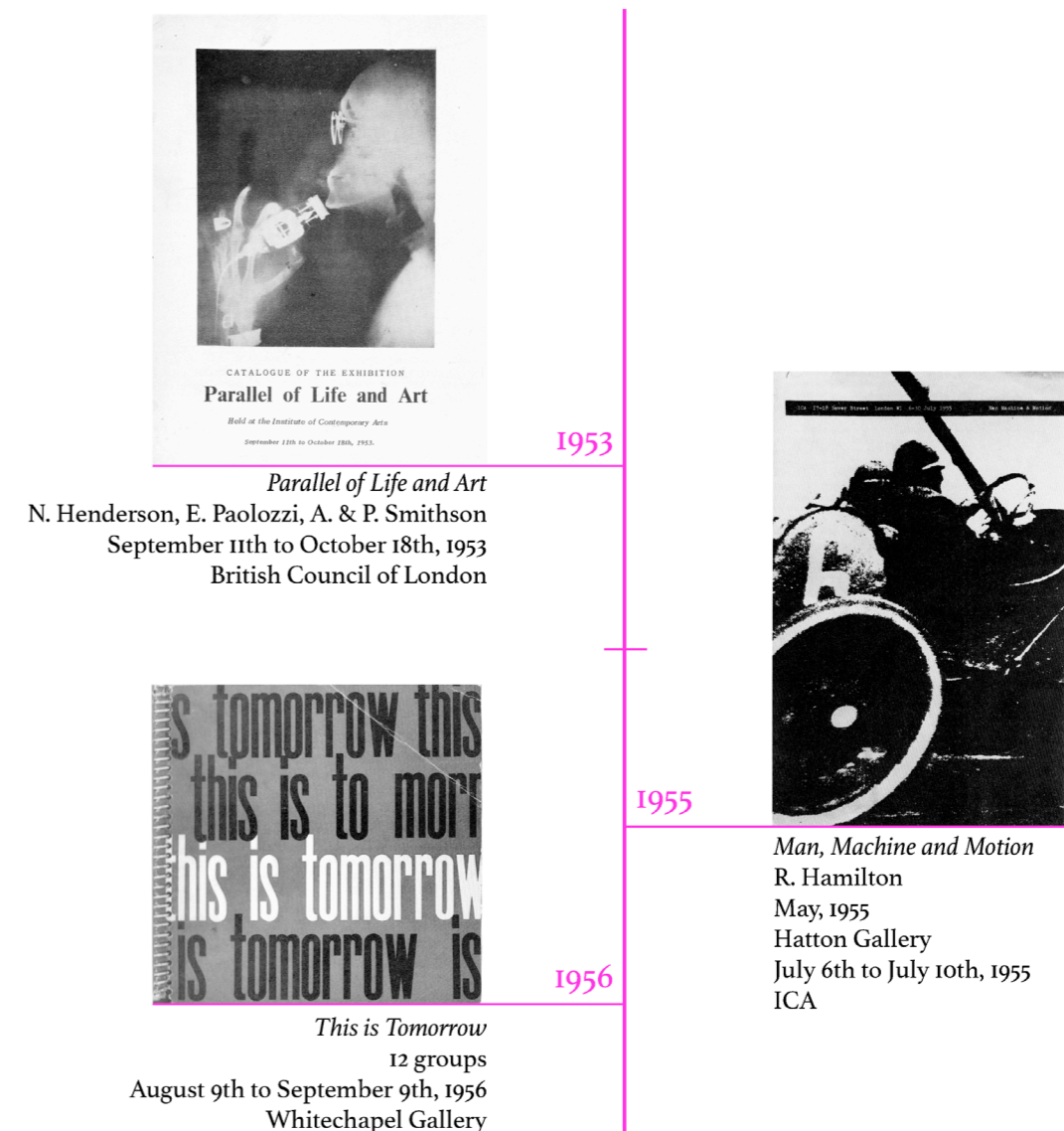


Figure 8: Exhibition timeline
Images from the Catalogue of each exhibition

5.1. *Parallel of Life and Art* (1953)
 N. Henderson, E. Paolozzi and A. & P. Smithson
 First experiment of the term *As Found*

Organized by photographer Nigel Henderson (1917-1985), artist Eduardo Paolozzi (1924-2005), and architects Alison (1928-1993) and Peter Smithson (1923-2003), exhibited at ICA in the fall of 1953. They had the financial support of the engineer Roland Jenkins for the approval of the ICA.

According to *Documents 53*, manifesto written by A. and P. Smithson for the exhibition, this was conceived as a proclaiming element of the second great creative period that succeeds Modern Architecture. The exhibition showed images of everyday life, accessible to all, enlarged and superimposed in such a way that they denied hierarchies and blurred the boundaries between disciplines. The exhibition shows scenes from life, nature, industry, construction, and arts. The relationships established between them were not linear, they crossed the fields of art and technique offering diversity of associations and forcing the viewer to make an effort to find these analogies, in search of meaning beyond form.

This experience aroused different interests among its organizers. For E. Paolozzi it was a collection of general interests, for N. Henderson a study of the visual similarities between nature and artificiality and for the Smithsons a field of experimentation with the idea of *As Found*⁷, where art is related more to the act of selection than to design. This concept is based on recognize the qualities of the ordinary, a sensitivity inherited from the teachings of Charles and Ray Eames. The Smithsons comment on several occasions that this term arises after observing Henderson's photographs, which have a perceptive recognition of reality and take a second look at everyday life. The pre-existing as a carrier element of a story, is a concept that architects often take as a premise, the previous observation of the environment is essential to have a starting point in the project. But not only referring to the adjacent buildings, but to all the signs that constitute the memories of the place. A clear example of incorporation and enhancement of pre-existing in the work of the Smithsons is *Upper Lawn Pavilion* (1959-1962), their weekend home, where the ruins of the previous construction are incorporated as a base very efficiently. The existing wall and the remains of the fireplace constitute the starting point of the two floors house (Fig. 13)

We will return to the strategies of this house and other works of the Smithsons in which the term *As Found* was applied in the chapter dedicated to sample six of *This is Tomorrow*, where we will approach this and other architectural works of the couple.

⁷ *As Found* remember what Duchamp called "ready-made", which refers to the elevation of the everyday object to a work of art; finding spirituality in everyday objects.

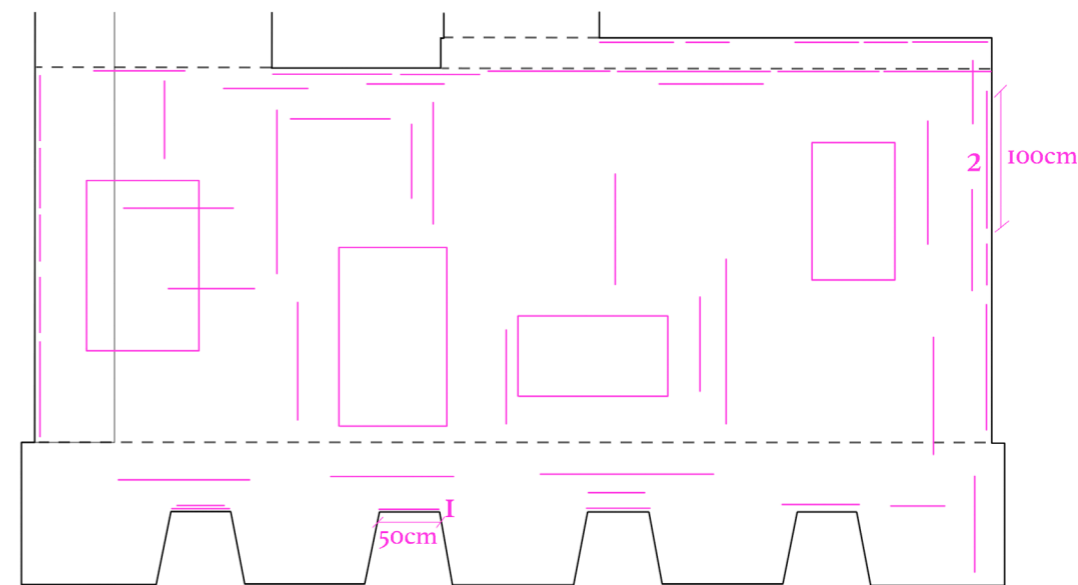


Figure 9: Recreation top view of *Parallel of Life and Art* exhibition
 British Council of Londo Gallery

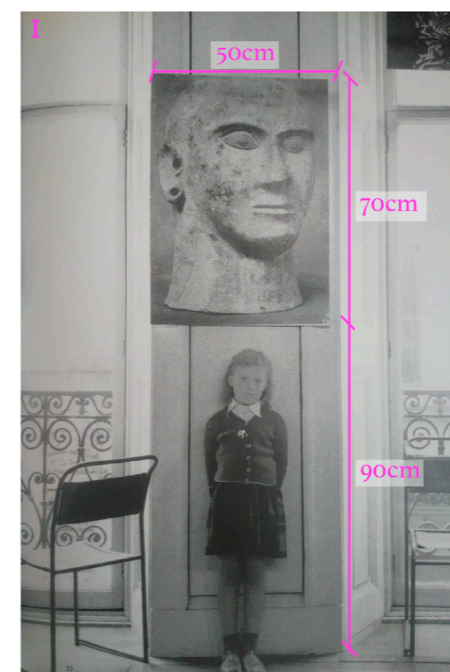


Figure 10: Etruscan funerary vase
 50x70 cm



Figure 11: Erbil, ancient Assyrian city over
 4,000 years old (air view) 100x100 cm

No plans from the exhibition have been found.
 All the drawings are reproductions from the photographs.
 The size of the canvases that appear in the images has been taken as a measure.

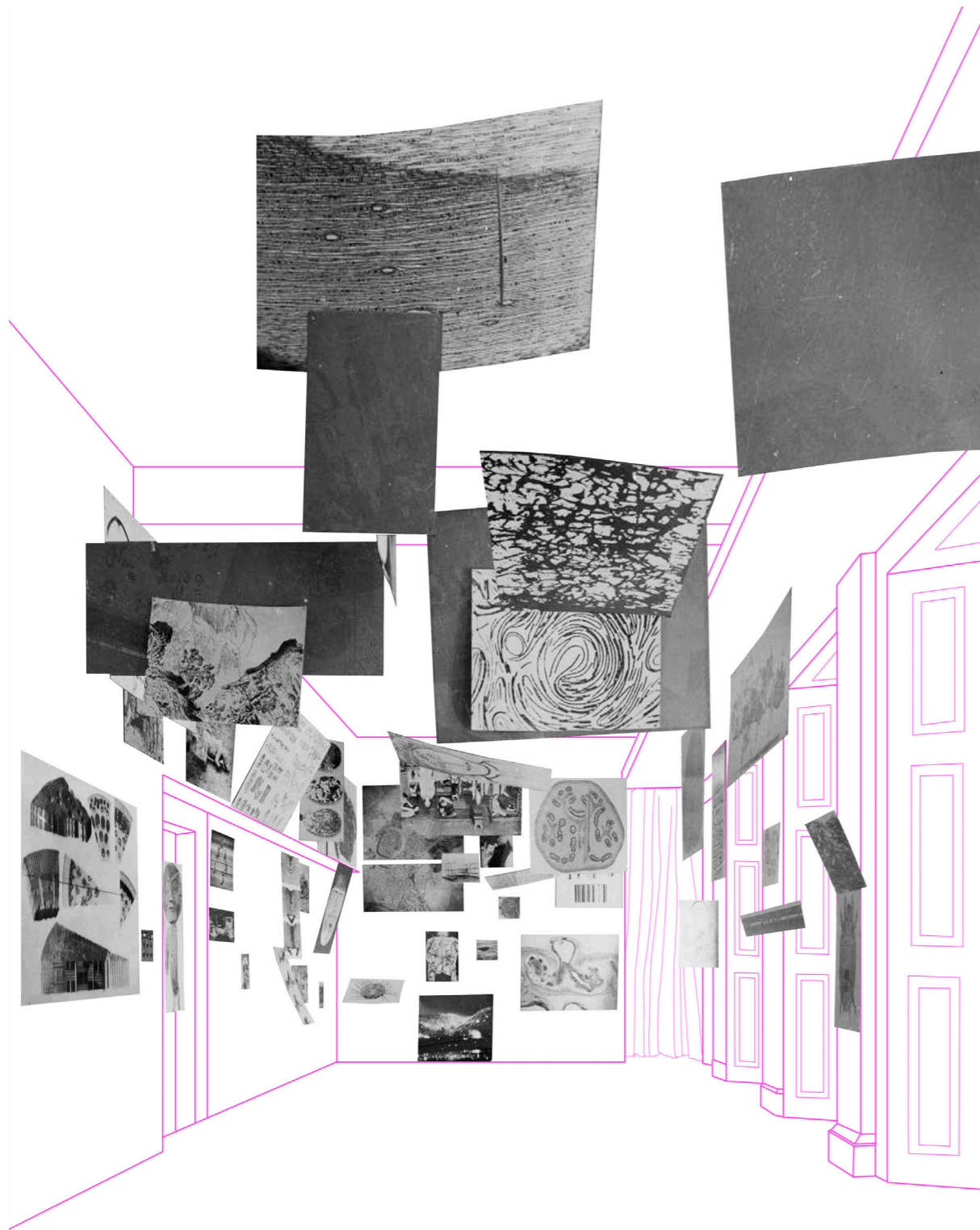


Figure 12: Recreation view of *Parallel of Life and Art* exhibition

The images define the space by involving the viewer in an infinite number of pictorial associations. The images were classified into the following categories: Anatomy, Architecture, At, Calligraphy, Landscape, Movement, Naturem Primitive, Scale of man, Stress, Football, Science fiction, Medicine, Geology, Metal and Ceramic. However, they were placed with apparent randomness so that the spectator was in charge of making associations.

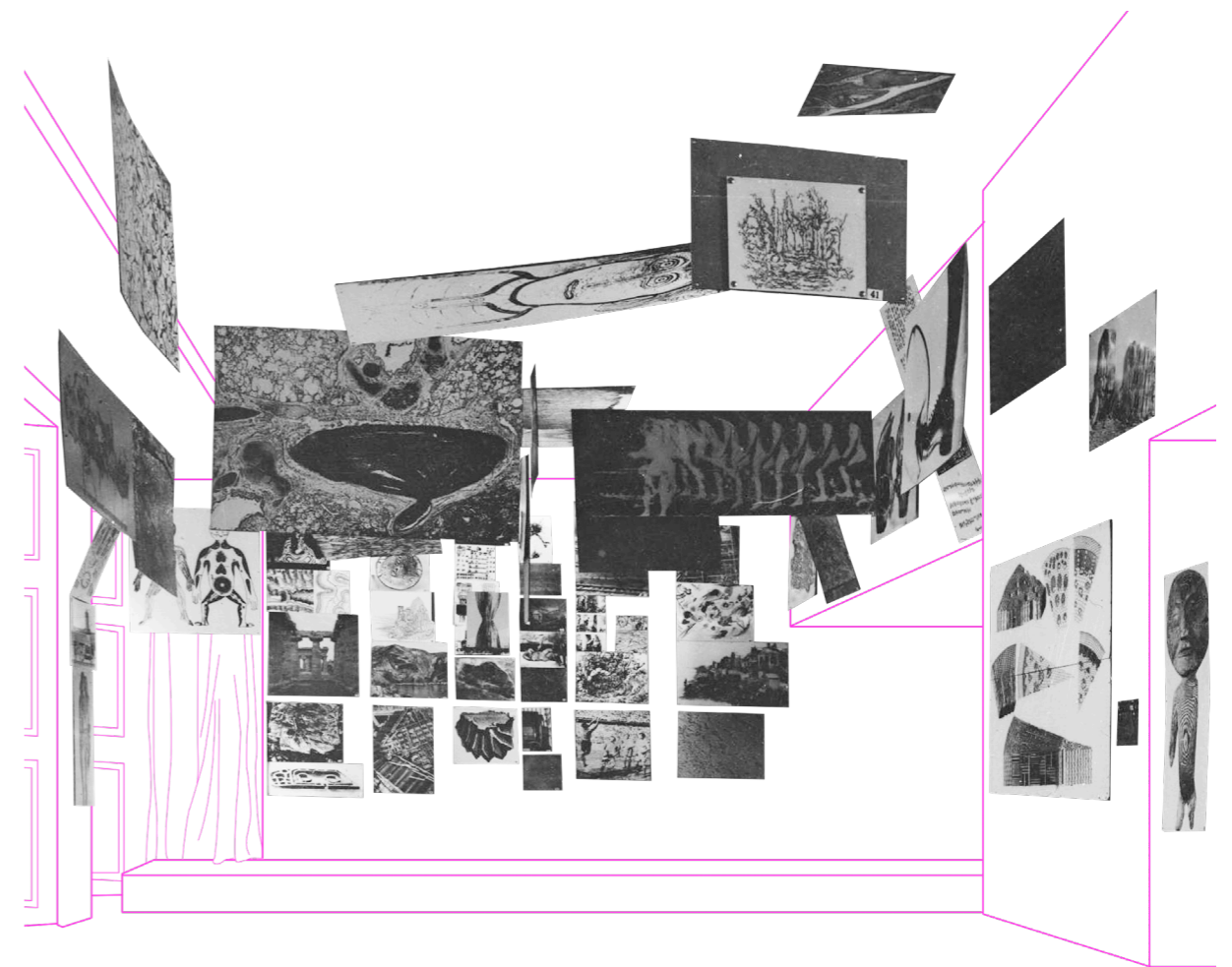


Figure 13: Recreation view of *Parallel of Life and Art* exhibition

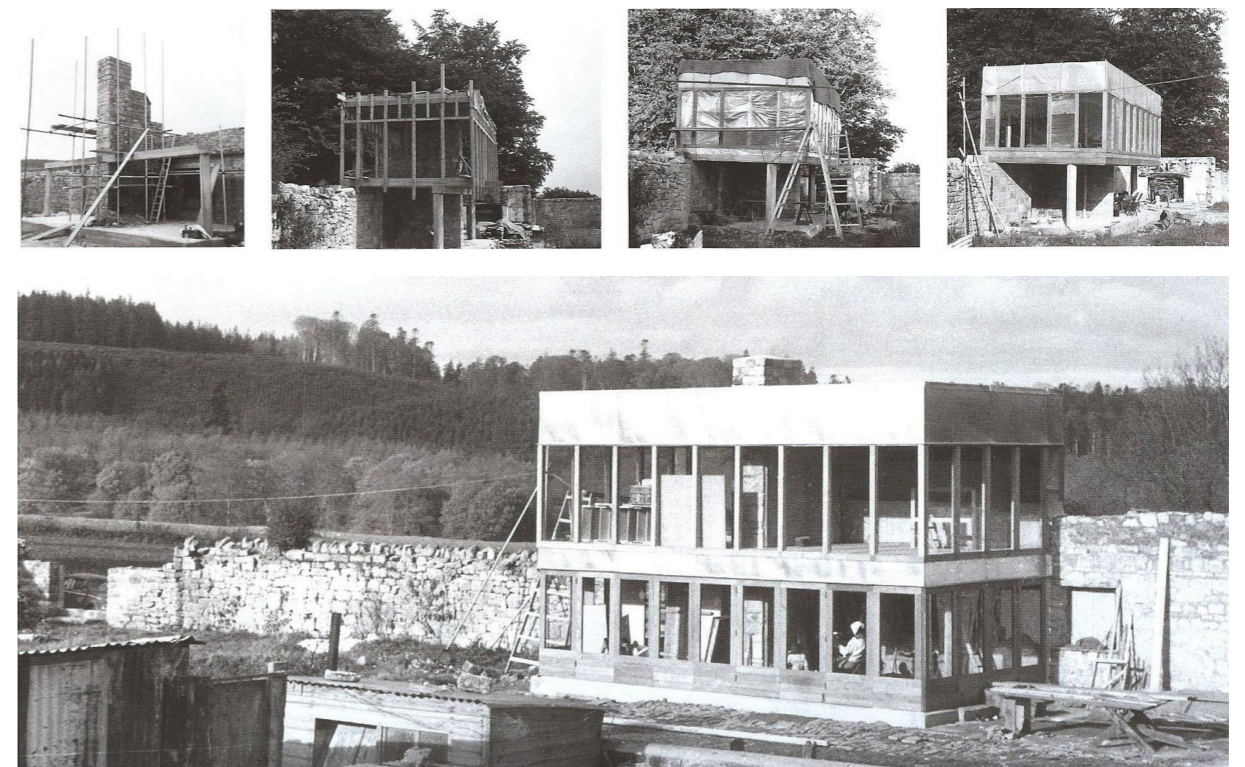


Figure 14: *Upper Lawn Pavilion* (1959) A. & P. Smithson. Reuse of the wall as an application of the term *As found*

5.2. *Man, Machine and Motion* (1955)
 R. Hamilton
 Serial production in architecture



Figure 15: brochure of *Man, Machine and Motion* exhibition

Organized by Richard Hamilton at a stage in his career where his work revolved around movement, especially related to technology and linked to man, thanks to the influence of Hollywood car chases and his own experience as a traveller. The exhibition included 223 photographs illustrating the mechanical conquest of time and distance thanks to man-made structures.

Despite not having been organized by any architect, I consider important to mention this exhibition because it deals with a very specific topic of the society in which pop art was developed: technological innovation and the introduction of mass-produced elements. This is a recurring theme in the architectural production of different stages of history since technology began to be an element that simplifies our lives. It is worth mentioning Le Corbusier and his term "*machine of inhabiting*" as an architect with whom we are very familiar, but you would hardly relate to the idea of pop art that has a priori in mind. In fact, Le Corbusier was a figure who strongly influenced Hamilton's work, he was even the one who inaugurated his *Growth and Form* exhibition (1951) at the ICA in London. For all this and for what is subsequently exposed, I see it necessary to mention him in this section.

In *Man, Machine and Motion* Hamilton wondered why automobiles were so absent from the art world, having so transformed the world in which we live. This introduction of the human figure is read as a sign that machines are a triumph over Nature, something inherent in our time. Le Corbusier admitted the great importance of them, they amazed him and he even treated the house as the machine of habitation, he himself said "I admire perfection since I saw the Parthenon. And, in our civilization, that perfection is automatically provided by the machine, which is not a horror or something horrible, but an extraordinary tool of perfection"⁸. Le Corbusier compared on many occasions, especially in its first stage, the machine with the home, he even said that "If the houses were industrially built, in series, like the chassis, aesthetics would be formulated with supreme precision ..." His field of experimentation with this idea was the *Maison Citrohan* (1927, Stuttgart, Germany) who, together with *Maisons Monol* and *Dom-ino*, explored series-built housing and new industrialized, universal and cheaper forms. The search for minimum measures of equipment to dump it on the living space, the concept of inhabiting the house as in that of moving in the car.

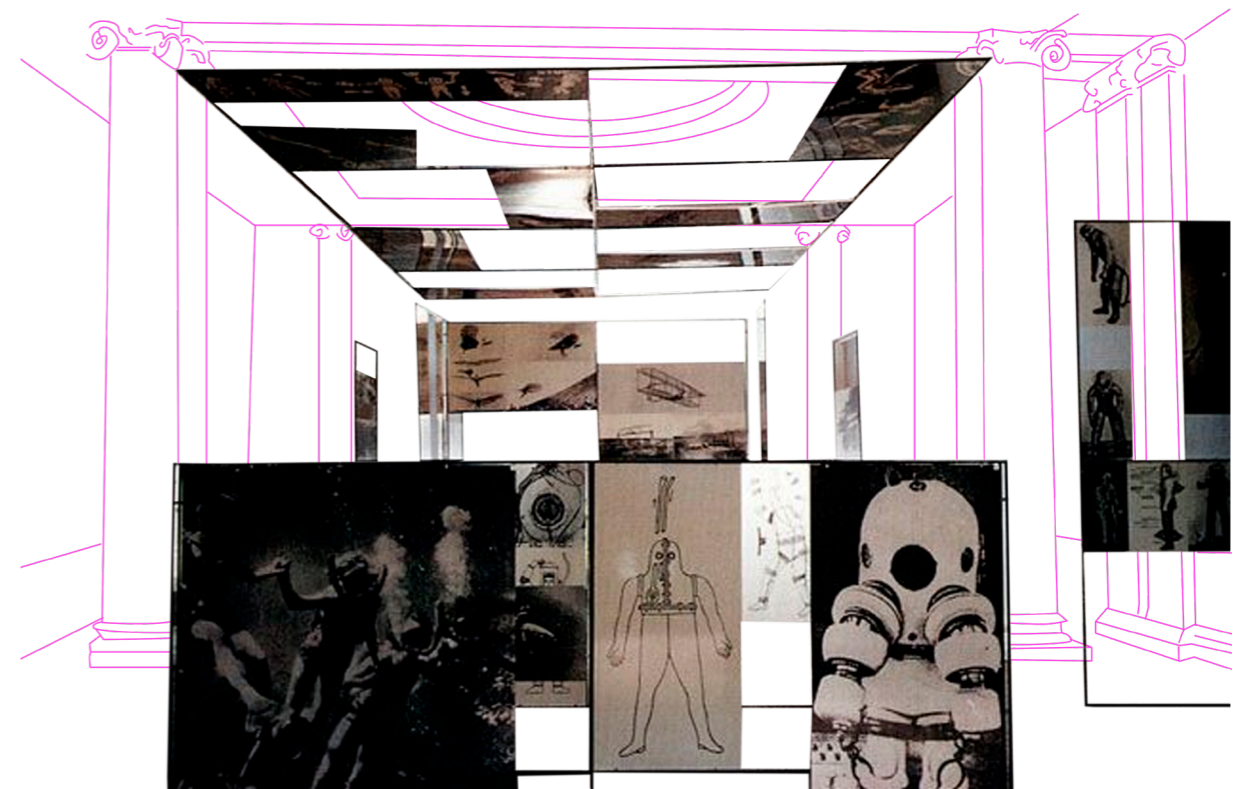


Figure 16: Recreation of *Man, Machine and Motion* exhibition

In this case, it has been difficult to find images of *Man, Machine and Motion* in its first exhibitions at the Hatton Gallery or ICA. However, due to its exhibition support, the space is not as relevant as in *Parallel of Life and Art*. While in the first one the objects used the room to be hung, in this one, the structure is part of the exhibition, therefore it does not dialogue so much with space. This may be one of the reasons why this second has been recreated many times in several galleries.

⁸ Several Authors, Catalog of the Exhibition on Le Corbusier at the Reina Sofia Center p. 74 (Madrid 1987)

As discussed at the beginning of the chapter, although you may miss this leap in time, I find it interesting to introduce the figure of Le Corbusier as a sign that what was done at this time had already been worked on previously. Pop art gave its name to the movement, but the influence of its ideas goes further than this work reflects. Le Corbusier is mentioned as a forerunner of the Modern Movement, which was highly criticized by the IG, but which nevertheless worked on similar issues. In turn, his name was mentioned on several occasions in the group's discussions, in fact, the first IG session revolved around *Civiltà delle macchine*, where Le Corbusier's merely functionalist attitude towards the machine was discussed. Likewise, it served as inspiration for architects like Alison and Peter Smithson, especially in their design of the city. Building on the *CIAM Grid* presented by Le Corbusier in 1949, where the importance of the various activities of social groups in a community was recognized, the Smithsons went a step further by identifying the hierarchical nature of social relations and their interaction, and they did in a more visual way by placing everyday images of Henderson in the same structure. In conclusion, Le Corbusier was a reference figure for the IG, but they criticized its uniquely functionalist aspect, to which they tried to apply one more layer of meaning linked to man.

On the other hand, taking up the exhibition its background is interesting, it is not presented as a simple compilation of machines, but it took care of every detail adding layers of meaning to each image: the gadgets were in movement showing their true value and a crucial aspect, in all of them a recognizable man appeared. The viewer could witness a catalogue of machines or, as in *Parallel of Life and Art*, inquire into its deeper meaning that linked aspects such as social level and sexuality to the object. The machine was humanized and displayed in the service of man, an artefact made by and for him. This technique is increasingly used in today's architectural photography. The inhabited house, a portrait of the house as it is used, in its true essence, just like a moving car.

It is also interesting to make a comparison of the structure of the exhibitions themselves, their arrangement and the influence that each curator tried to have on the viewer. Logistically, this exhibition contrasted with *Parallel of Life and Art*. Against the apparent disorder of the first, where the samples were carried by almost imperceptible threads, this time the supports were perfectly designed: elegant steel structures where Fornica's sheets with printed photographs were fitted on. In this way, in the first the exhibition space is only delimited by the walls wrapped with images, being able to walk through the entire room, while in the second there are some routes influenced and limited by the position of the structures. A similar technique was used by Hamilton in his previous exhibition *Growth and Form*, where the support was a grid as an image panel support. On the other hand, the method of selection of photographs was also distant from that of 1953. Hamilton's delicate selection that rigorously follows the premise of the title of the work, contrasts with the diversity of images and their almost casuistic relations of the first one. However, in all three the act of selection is fundamental, despite the fact that in Hamilton's the central topic is more evident.

		TITRE I																		TITRE II	
		10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.								
LES 4 FONCTIONS	HABITER																				
	TRAVAILLER																				
	CULTIVER LE CORPS ET L'ESPRIT																				
	CIRCULER																				
DIVERS																					

Figure 17: *CIAM Grid*, Le Corbusier (1954) CIAM VII, Bèrgamo. Structure of the four functions based on the letter of Athens.



Figure 18: *theoretical urbanism Grid*, A. & P. Smithson (1953) CIAM IX, Aix-en-Provence. Photographs from N. Henderson. House, street and its relationships.



Fig. 19 *Growth and Form*, Hamilton (1951)
- Support design
- Grid system
- Delimited route
- Selection of images



Fig. 20 *Parallel of Life and Art* (1953)
- Hanging from walls and ceiling
- Apparently random order
- Not delimited route (free space)
- Selection of images



Fig. 21 *Man, Machine & Motion* (1955)
- Support design
- Grid system
- Delimited route
- Selection of images

5.3. *This is Tomorrow* (1956) Interdisciplinary work

Between August and September 1956, an experimental exhibition linked to many of the IG members, takes place at the Whitechapel Gallery in London. The exhibition explores art on a large scale, where the boundaries between architecture and plastic arts dissipate, creating a new visual world with a more complete image.

To achieve an interdisciplinary exhibition where the integration of the arts was evident, each one of the groups that made up the exhibition was made up of at least an architect, a painter and a sculptor. In total, they gave a result of 12 independent settings at the service of the visitor, who had a high burden on the visit –as in *Parallel of Life and Art*–, since he himself had to find the meaning of each work from an individual perspective. As the critic Lawrence Alloway announced in the introduction to the exhibition catalogue “The freedom of the artist and interested architects is communicated to the viewer, who cannot trust the learned responses called by an image in a frame, a house on a street, words on a page.”

The exhibition had a large number of visitors due, in part, to the arrangement of the displays, the two located at the entrance had images of popular culture and helped drag the public inside. In addition, the inauguration was opened with the speech given from inside Robbie the Robot⁹, which attracted a generic audience that was familiar with what, at first glance, was seen from the exhibition.

Its organization had many comings and goings, although in this excerpt we will not focus on this, it is noteworthy that the first idea of an exhibition that demonstrated the collaboration between architects, painters and sculptors was by Paule Vézelay¹⁰, representative in London of the Groupe Espace¹¹, who, through the London Country Council, she ended up working with Colin St. John Wilson. Finally, it was Theo Crosby¹² who, after some artistic differences, carried out its culmination. The exhibitors were clearly divided into two trends: The Constructivist, with works that sought purity of form and abstraction –including reproductions of works by Malevich and Gabo as an exaltation of this tendency– and Independent Group ideas, which focused on symbol versus form. We will study this second group.

⁹ Main character in the 1956 American science fiction film *Forbidden Planet*. He subsequently appeared in numerous successful movies and television shows.

¹⁰ Paule Vézelay (1892–1984), British artist, active member of the Parisian avant-garde and one of the pioneers of 20th century abstract art in England. Their disagreements about the TIT exhibition led her, along with the other artists, to be expelled from the Groupe Espace. At which point they decided to continue this initiative on their own.

¹¹ Founded in France in 1951 by André Bloc and Félix Del Marle, the Groupe Espace was a group of artists influenced by Constructivism and Bauhaus philosophy who worked on the idea of space according to the principles of order and functionalism.

¹² Theo Crosby (1925-1994) architect, publisher, writer, designer, and sculptor. Founding partner of Pentagram (1972), an independent design firm that integrates different disciplines. Crosby has assumed the important influence that his TIT experience had on the company.

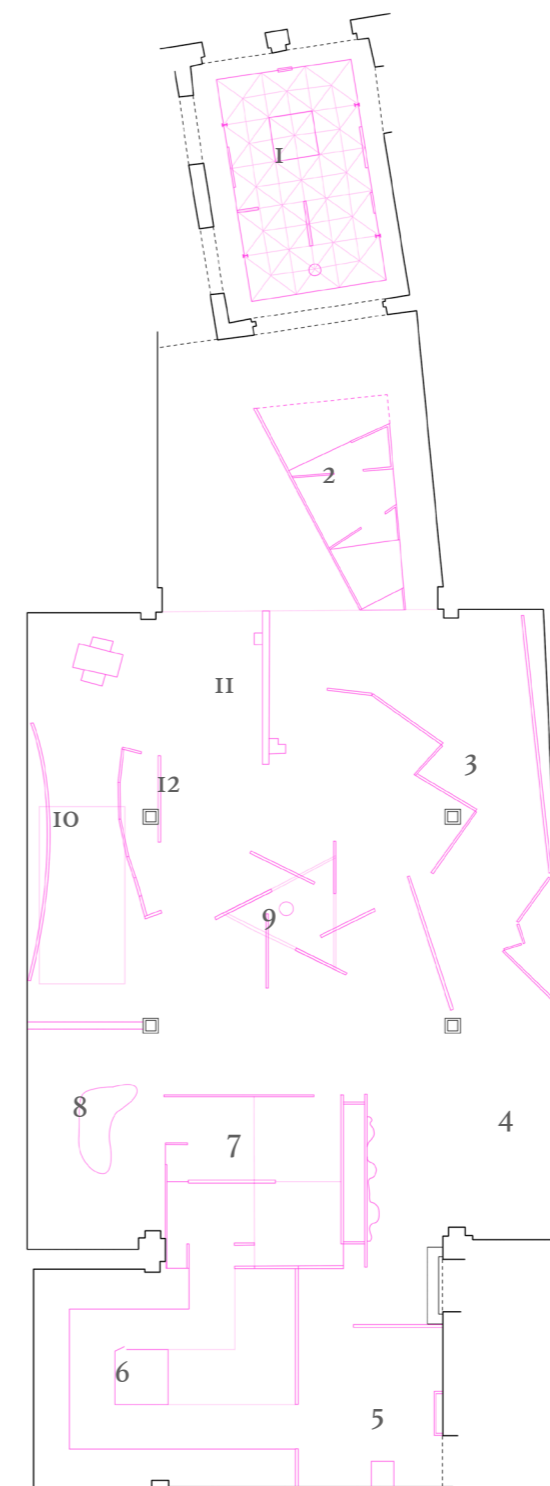


Fig. 22: *This is Tomorrow* top view and location of each group

Group One: Theo Crosby, Germano Facetti, William Turnbull and Edward Wright

Group Two: Richard Hamilton, John McHale and John Voelcker

Group Three: J. D. H. Catleugh, James Hull and Leslie Thornton

Group Four: Anthony Jackson, Sarah Jackson and Emilio Scanavino

Group Five: John Ernest, Anthony Hill and Denis Williams

Group Six: Nigel Henderson, Eduardo Paolozzi, Alison and Peter Smithson

Group Seven: Victor Pasmora, Ernő Goldfinger and Helen Philips

Group Eight: James Stirling, Michael Pine and Richard Matthews

Group Nine: Kenneth Martin, Mary Martin and John Weeks

Group Ten: Robert Adams, Frank Newby, Peter Carter and Colin St. John Wilson

Group Eleven: Adrian Heath and John Weeks

Group twelve: Lawrence Alloway, Geoffrey Holroyd and Toni del Renzio

As we have said, the IG did not make exhibitions as an organization, but its members did participate under the issues discussed in their meetings. On this occasion there were six groups more or less related to the group (one, two, six, eight, ten and twelve). The analysis will start from a global understanding based on graphic reconstructions of the environment where the exhibition was held –the Art Gallery Whitechapel, in the East End of London– to understand the exhibition as a whole, despite being independent samples. We will end by focusing on three groups whose work in *This is Tomorrow* was influential in architecture and which will be used as the basis to extract the conclusions of the article.

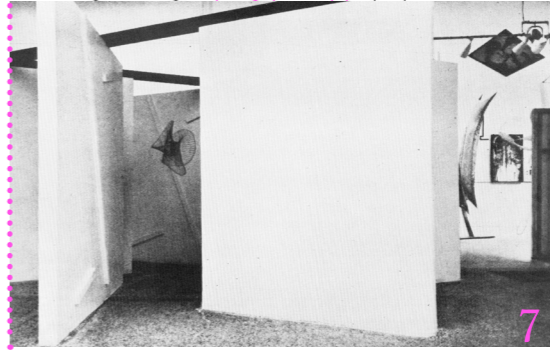
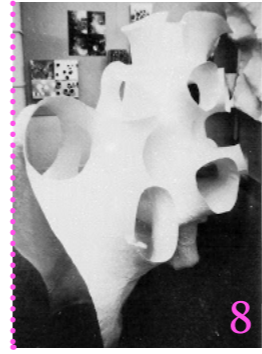
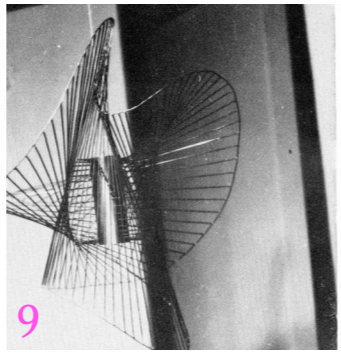
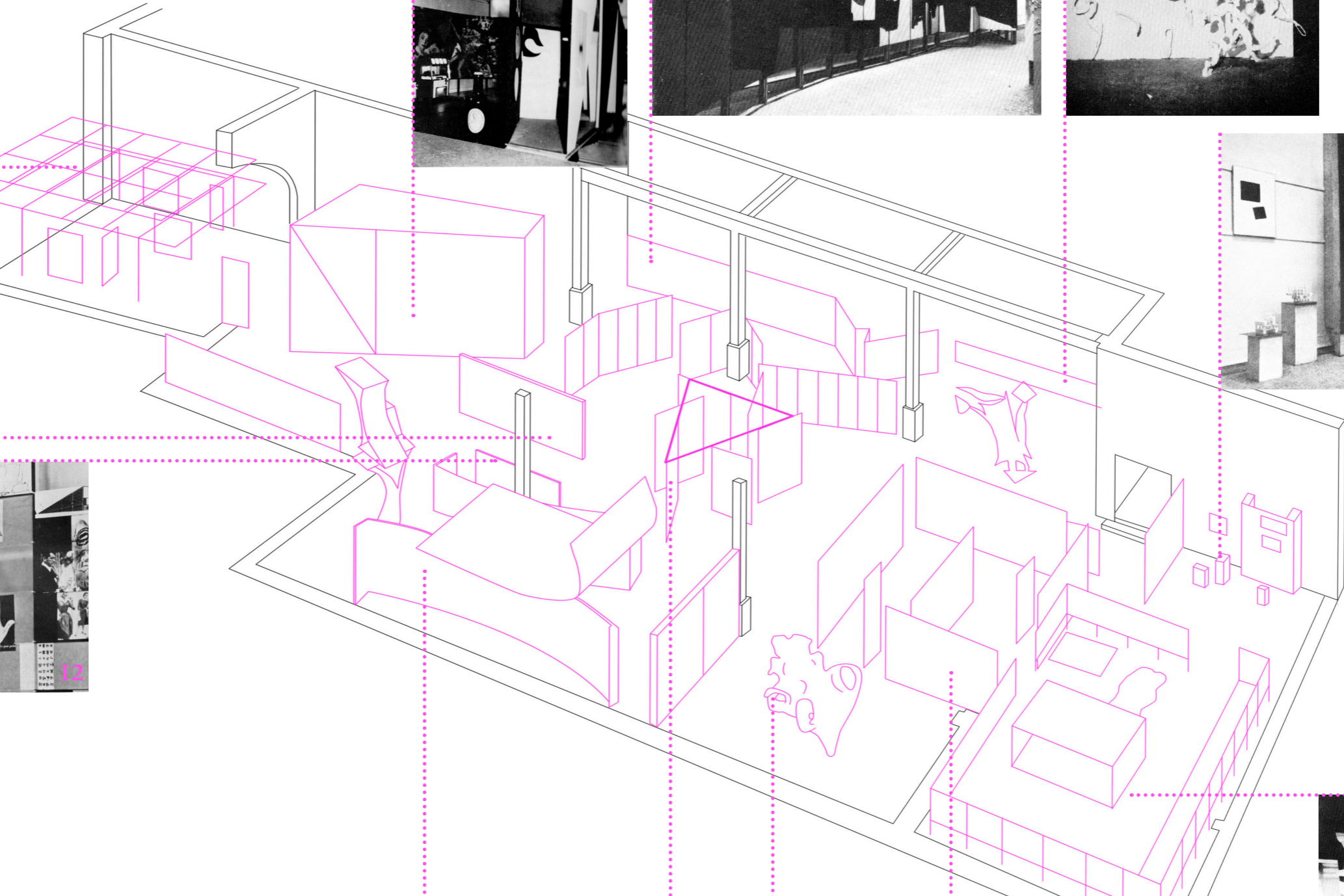
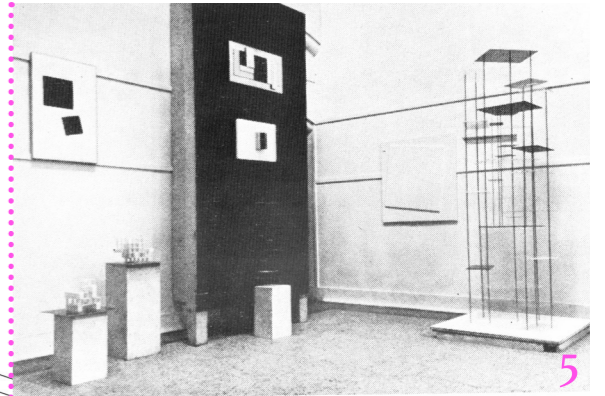
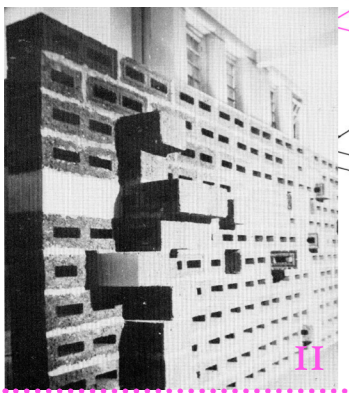
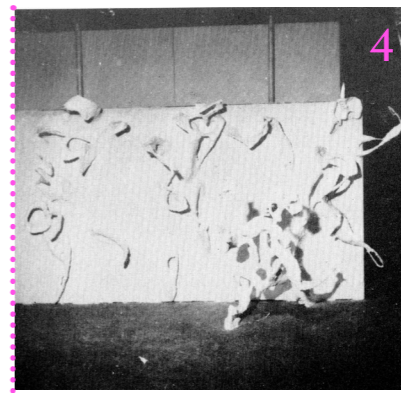
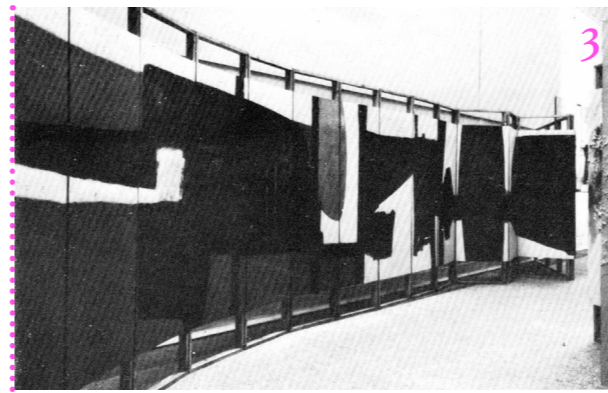


Fig. 23: This is Tomorrow view

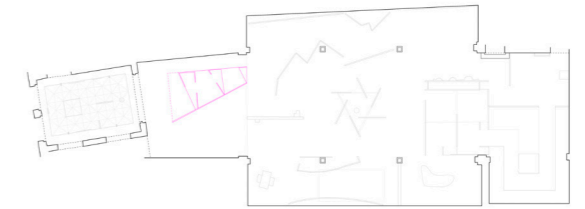
5.3.1. Group two: R. Hamilton, J. McHale and J. Voelcker
Cedric Price, flexibility and interaction

Organizers: Richard Hamilton, John McHale –artists– and John Voelcker –architect–.

The exhibition presented objects and images of popular culture without aesthetic concessions, as they are found –As *Found* as Peter and Alison Smithson call it–. Two fields were explored, visual and sensory perception. The first was stimulated in two ways, perception, optical illusion, through a corridor covered in dazzling black and white stripes, recreating Marcel Duchamp's rotoreliefs; and what we perceive at the moment, showing images of popular culture, especially cinema and science fiction. On the other hand, the senses were excited through a soft floor that smelled like strawberries when stepped on, creating a bewildering sensation. John McHale claimed that the group's goal was "to alter people's conventional frames of orientation. Alter their perceptions... of space, time."

The exhibition was titled *Fun House*, an immersive experience that undoubtedly influenced the work of architects such as Cedric Price (who, in turn, would later influence Archigram), where the visitor goes from passive to interactive user. Price had already visited *Man, Machine and Motion*, where he had a first contact with Hamilton and the alternatives to static architecture that were put into practice in *Potteries Thinkbelt* (1964-1966) as a protest against the traditional university system. A rail network where the wagons were converted into mobile teaching units complemented by inflatable conference rooms. This structure allowed to combine the units according to the needs of the moment. It also remained its primary function, so that it transported people while also serving as a teaching space, exploiting it in the same economic way.

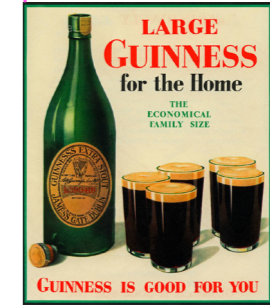
Price's most representative work is quickly reminiscent of the exhibition at *This is Tomorrow*. The *Fun Palace* (1961-1972), where ideas of design flexibility and interaction with the visitor and environment are highlighted. Predecessors and tests prior to this work, such as the *Inter-Action Centre* (1972-1977), already worked on mutability, expansion and interaction, built with prefabricated materials and ephemeral spaces under a large unifying structural truss. He bet on the idea of an architecture that would evolve at the pace of society, like the members of the IG, he did not deny the reality of the moment, but accepted it and worked to design spaces capable of adapting to new situations. He understood architecture as a collaborative work between technologist, sociologist and designer, an issue that is reflected in his collaboration at the *Fun Palace* with a theatre director. The architect as a superior being must overcome himself to join other disciplines and, collaboratively, face social, political and cultural aspects, the elitist sphere must face the questions of the contemporary society in which they live.



Juke box



Forbidden Planet, science fiction film



Guinness bottle



Rotoreliefs, Duchamp

Figure 24: Recreation of Group two exhibition, *This is Tomorrow*

5.3.2. Groups six: N. Henderson, E. Paolozzi, A. & P. Smithson. Alison and Peter Smithson, the objects and pleasures of life.

Organizers: Nigel Henderson –artist, photographer–, Eduardo Paolozzi –sculptor, artist– and Alison and Peter Smithson –architects–.

The members of the group had already collaborated before, *Parallel of Life and Art* was made by them. Just like group two, and as they already did in said exhibition, the participant is challenged to find its meaning.

The idea of the *Patio & Pavilion* exhibition was to provide a symbolic habitat, a space created by architects with the potential to be occupied and objects produced by the artists who occupy it. The materialization was simple, in the first instance there was a closed patio, the wall as an element that creates privacy and protection, in this case it added the mystery factor. Once inside, the space was delimited by reflective aluminium plates that multiplied the space and created games of light, the viewer's reflection made him participate in the work, the inhabitant. The space was delimited by some elements that dissolved the limits. It was not a new strategy to include mirrors as a method of expanding space, however, the distortion and the anticipation of being used by users on the move were novel. It hid a reused wooden structure with a plastic roof that allowed a glimpse of what was inside. It sought to define the basic needs of the human being –space, shelter and intimacy–, showing a common way of inhabit where they carry out basic activities as well –movement, contemplation, reflection–.

The objects that filled the pavilion represent human activity, images in which the visitor could recognize himself, making relationships for himself. The floor of the installation was covered with sand, above it, tiles, bricks, stones, like relics of the past. At the end, behind the pavilion, a collage that belonged to *Parallel of Life Art* was discovered under it. This image emphasizes the close relationship of this sample with that of 1953, the apparent randomness of the objects tries to force reflection on them, looking for the reality behind the appearance. The objects represented the appropriation of the space by the inhabitant, as was described in the analysis of sample two, give sense to the place and are linked to the identity of the individual. A pavilion with such a simple structure, makes sense as soon as it is humanized through these elements.

The pieces that were placed did not have any type of modification, they were placed as they were found, under the premise of the previously mentioned *As Found*, a term that had a crucial role in the work of Alison and Peter Smithson. As we mentioned in *Parallel of Life and Art*, the fact of selecting the material, prevails over the design, you just have to learn to recognize the inherent qualities and recognize the positive of the pre-existing. The ordinary becomes extraordinary. For this reason, we consider that the ones previously aforementioned, together with sample two, were exhibitions that had a high level of burden on the spectator, since what they are trying to do is evoke concepts. To understand them beyond what is seen with the naked eye, the form, the visitor must carefully observe and reflect on their deep meaning, it is a more sensitive perception.

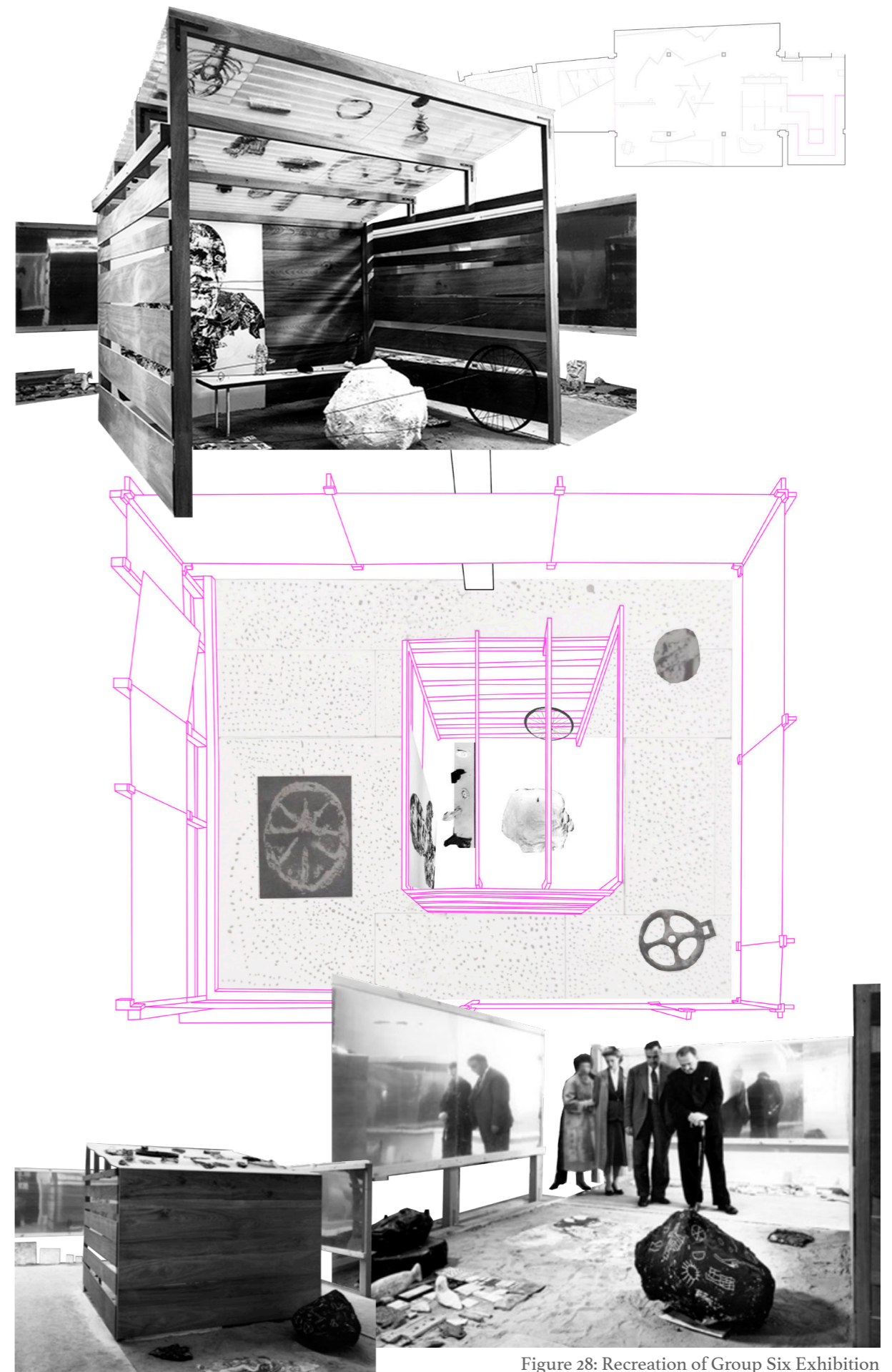


Figure 28: Recreation of Group Six Exhibition

Upper Lawn Pavilion (1959-1962), Smithson's own weekend home, is a good example of applying the *As Found* and has sometimes been seen as the result of the experience drawn from *Patio & Pavilion*. The pre-existences served as the basis for what was built: the 18th century wall that closed the yard and the remains of a small house. Their summer house is conceived as a retreat, the wall that surrounds it, as in the sample of *This is Tomorrow*, isolates the space for reflection of the couple. In the same way, the house is a minimum box for human activities, a volume of two floors, similar in size to the old one, attached to the ruins. It uses the wall to form the structure, the wooden beams rest on it, and inside, a large concrete beam is anchored to the wall of the old fireplace. Materials are treated frankly, as found: debris from pre-existing walls, combination of wood, concrete, and old masonry.

As in their exhibitions, in both *Upper Lawn Pavilion* and their prototype of the *House of the Future* (1956), Alison and Peter Smithson allowed fluid movements, which lead to the progressive discovery of the work and that its modification implied certain reinterpretations of the space, allowing different points of view for new understandings. In them, the wall accompanied and guides the visitor in his discovery of the central piece, but his role always has a second different added value in each one. While in the *House of the Future* it protects a piece of nature around which the house is organized, in its summer house and in the exhibitions it constitutes a protective element, such as a wall, adding the maximum degree of value in *Patio & Pavilion* where it becomes a participant in the exhibition experience and acquires a leading role. The intermediate space takes relevance in the work of the Smithsons through small strategies that try to enrich them, called by themselves *Empooling*¹³, which reinforce the relationships between the interior and the exterior.

Learning to value the perception of things is a primary goal for the Smithsons, active contemplation. In the two exhibitions mentioned, the ability to form an individual criterion is valued and they incite the viewer to inquire into their intellect. The *As Found* concept speaks of knowing how to find meaning beyond form. Like the pavilions they designed, with simple structure, in the case of *Patio & Pavilion* built from old pieces of wood, the *Upper Lawn Pavilion* is built on ruin, which remains intact as the essence of what it once was. The elements that are simpler could trigger small moments of pleasure in life. The Smithson's *Small pleasure of life*¹⁴ scheme, perfectly evokes this idea, a representation of the small details that generate pleasure, actions such as seeing the landscape while sitting, looking out the window without being dazzled, being able to sit down comfortably to read, to have good thermal conditions or to work in front of a window surrounded by vegetation are some of them.

In conclusion, Alison and Peter Smithson tried to humanize architecture by integrating everyday objects—including the new forms of popular culture—into architectural spaces.

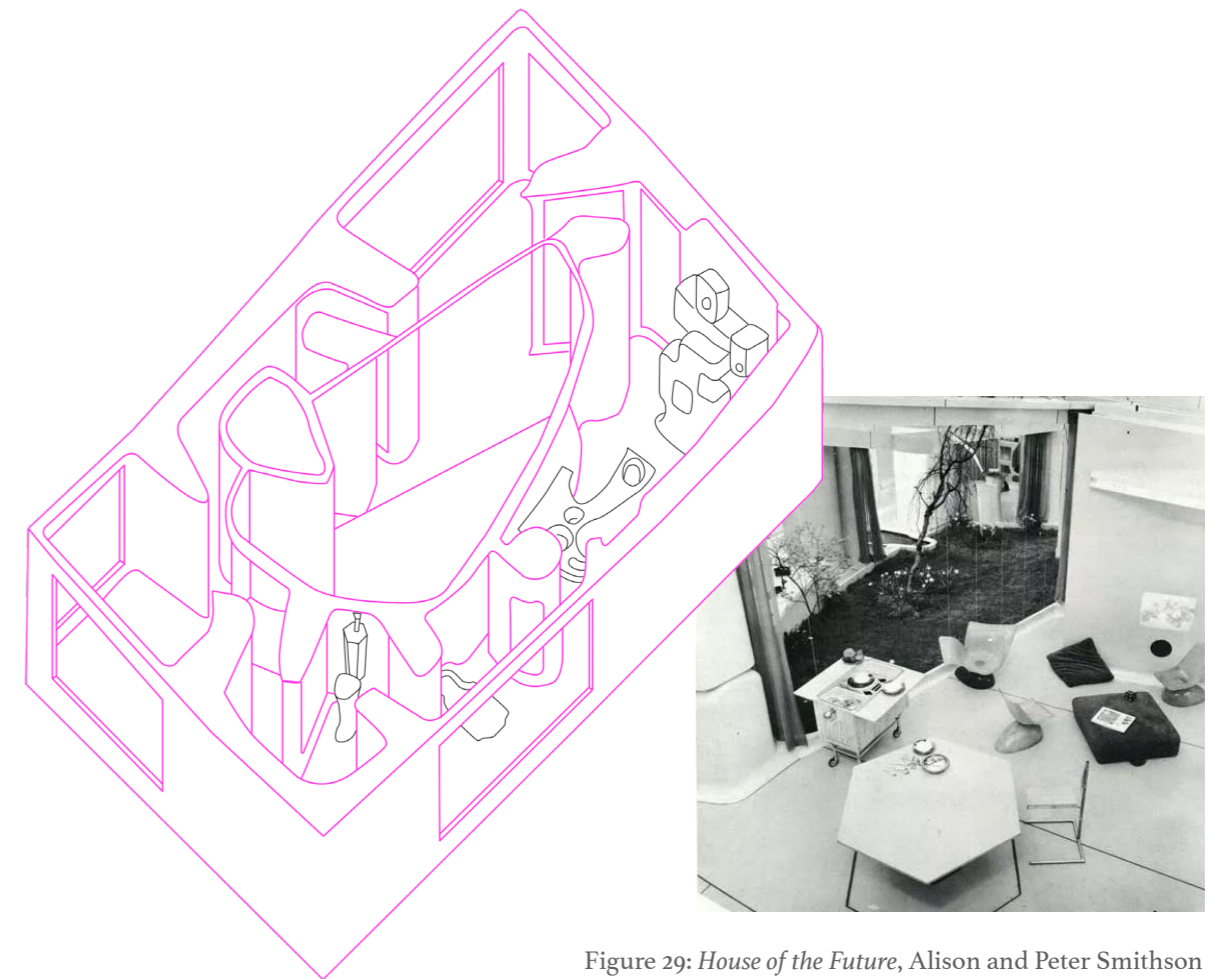


Figure 29: *House of the Future*, Alison and Peter Smithson
The wall as an element that guards the heart of the house, a piece of nature

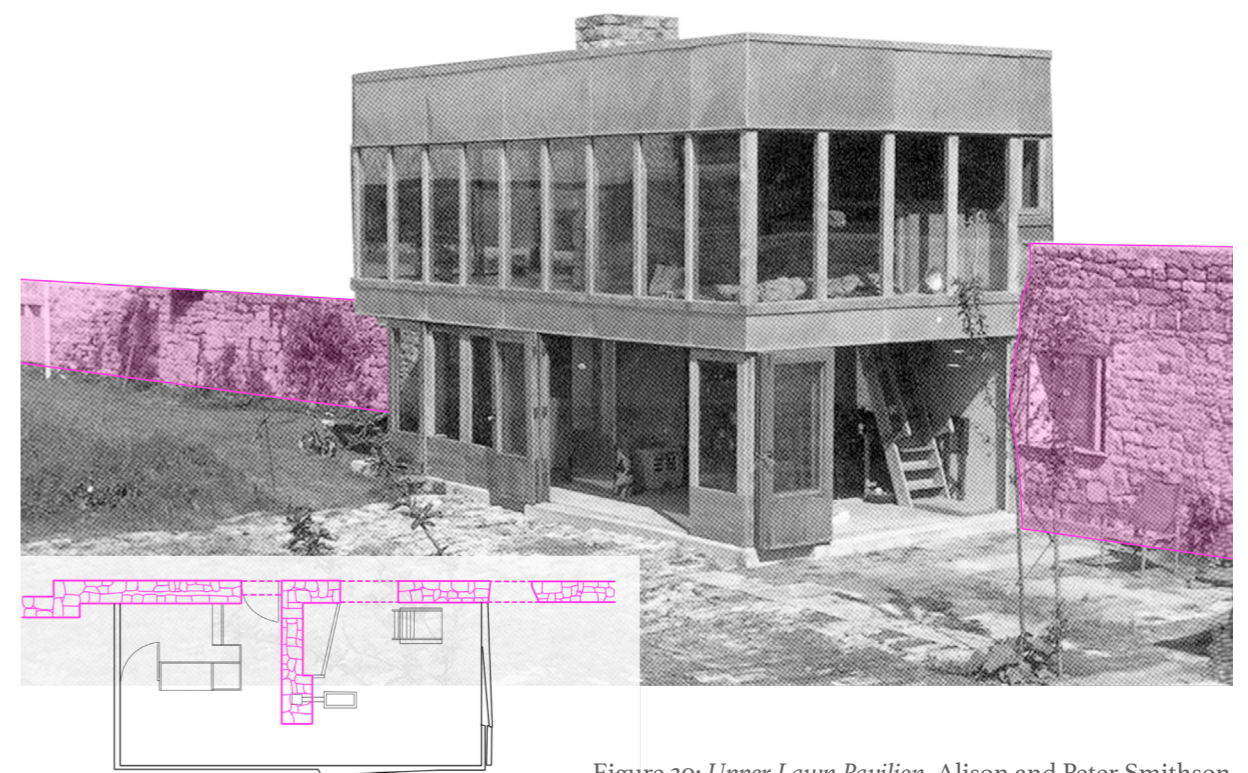


Figure 30: *Upper Lawn Pavilion*, Alison and Peter Smithson
Using the ruins as a construction base, the same wall that protects the home

¹³ *Empooling*: Term presented in April 1997 at a lecture by Peter Smithson under the same title.

¹⁴ Alison y Peter Smithson, *Cambiando el arte de habitar*. (Barcelona: Gustavo Gili, 2001)

5.3.3 Group twelve: L. Alloway, T. del Renzio and G. Holroyd Eames & Geoffrey Holroyd architecture as life experience

Organizers: Lawrence Alloway —critic—, Toni del Renzio —artist— and Geoffrey Holroyd —architect—.

The group twelve sample represents the basis of collaboration between architects and artists as part of general human activity and not only as a reconciliation of aesthetic systems. It is a study on communication as a means of speaking about human behaviour without concessions to disciplinary fields.

The exhibition was based on a notice board as a support to show the research that the group had carried out on signs and communication. The system designed by Holroyd was simple: a panel that formed a grid made of wooden stakes and props that served as the base element for the coloured Plexiglas panels that contained the information. This system allowed the exchange between panels in such a way that they offered different possible relationships as a rejection of any hierarchical structure, similar to the exhibition *Parallel of Life and Art*, where no image prevailed over another. An effort from the spectator is also required, who had to find the analogies between the images located in the left panel through the mental and linguistic systems exposed on the right. The modern visual continuum was organized according to the decisions of each individual.

The choice of images was also a crucial point in this case, an act that was carried out carefully by Alloway and Holroyd, strongly influenced by the ideas of Charles and Ray Eames in *A Communications Primer* —both of whom had participated in their presentation at the ICA in 1956—. It was about a film as a communications manual to interpret current ideas to architects and encourage their use in the design process. This concept, in combination with Alloway's ideals about the "continuum between fine arts and popular art"¹⁵, were decisive for the choice of images in the exhibition.

The topics covered in the exposed figures were classified into three topics grouped by colour as a way to facilitate a quick relationship. The blues represented space-time, yellows adaptability, and reds object-based relationships.

The initial idea for the exhibition was inspired by the *House of Cards* designed by the Eames in 1952. It was a set of slotted cards with photographs of scenes and common elements printed on them, that could be assembled to create structures. Like the notice board of group 12, where the images of everyday life formed the structure, although it was finally simplified in the wooden lattice.

The final objective of the group was to encourage the viewer to make an appreciation of the meaning of communication with the intention of breaking down the barriers between disciplines.

¹⁵ "Continuum between fine arts and popular art" concept defined by Alloway that placed elite culture and mass culture on the same level.

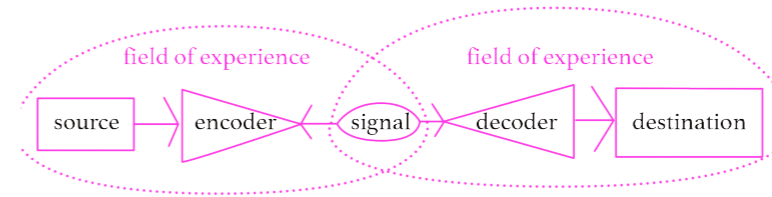
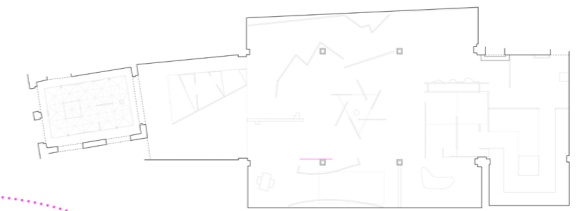


Figure 31: Notice board 2012

Figure 32: Notice board 1956, TiT Exhibition



Figure 33: Images from *A Communications Primer*, Eames

Figure 34: *House of Cards*, Eames

6. Conclusions

The conclusions drawn from the work are disaggregated throughout its development. We start from the hypothesis: “pop art influences architecture” and we take a specific scenario as the nucleus of the analysis: The Independent Group, whose members discussed the term in all areas of production.

The IG carried out its activity in accordance with the culture with which it lived, without rejecting the conditions of the moment and using forms available to the viewer. According to the definitions of pop art that were discussed in the first chapters, they assumed an anthropological definition of culture, all kinds of human activity are subject to aesthetic judgment.

From the analysis of the exhibitions in which some members of the IG were involved, we extract the direct applications in the architectural field of these ideas. In the first instance, it is noteworthy the group's obsession with breaking down barriers between disciplines, engineers, sculptors, painters, architects... participated in its debates. So it is evident that all of them flowed from the same ideology that they applied to their work, influencing and collaborating mutually. The exhibitions shown are the work of collaboration between different disciplines and tried to convey the need for collaborative work.

Transferring popular culture to the exclusive galleries of the decade with accessible language was a key objective of pop art and one of the group's great achievements. In exhibitions such as *Parallel of Life and Art* or the sample of Group 12 on *TiT*, the possibility of involving the viewer through the effort of relating everyday images without hierarchical distinctions is offered. Elements of popular culture, such as Robbie the Robot, were incorporated, thereby generating much criticism from the British intellectual sphere, though ironically it was what drew most of the general public to the 1956 exhibition.

The incorporation of images from everyday life is very evident and is an aspect that we can closely relate to the work of Alison and Peter Smithson. They tried to recognize the qualities of the ordinary, *As Found*, in the sense of finding meaning beyond form, the simplest elements can be the triggers of pleasure in life. His work involves the visitor, creating spaces that offered different points of view for new understandings.

Assuming the reality of the moment and building in accordance with it, led to the question of the durability of the work (the object of consumption was ephemeral), so architects such as Cedric Price, began to incorporate the concept of flexibility and to make an architecture with the ability to adapt to new situations.

It is impossible to understand the architecture of a time without putting it in relation to the context, precisely the aim of pop art was to incorporate the understanding of the moment in which it was produced into the work. Therefore, they will inevitably have some obvious points in common related to the socio-cultural aspects that we discussed in the second chapter.



Figure 35: P. Smithson, E. Paolozzi, A. Smithson and N. Henderson

On the other hand, this new trend was strongly promoted by the IG, a group that defended disciplinary collaboration, therefore, it is not surprising that this idea was transferred to the architectural work as well. For many architects, such as Alison and Peter Smithson, the artistic exhibitions they made that closely related to pop art were a field of experimentation where they put into practice concepts that they would later apply to their architectural work. For others, such as Cedric Price, these exhibitions represented, as their authors expected, a space for reflection and inspiration for their production.

Ranging from the exhibition space, through the artistic work itself, right up to the Smithson houses, the integration of the context in service of the spectator or inhabitant is sought. It seeks to collect everyday things as they are, to find in them what is not seen and can be discovered through reflection, thanks to a shared language. It aims to facilitate the understanding of language, whether architectural or artistic, to break disciplinary barriers.

We can speak of the relationship between pop art and architecture as something inevitable, since both deal with issues inherent to the human being in the same context. A collaborative process in which both disciplines nurture each other.

7. Bibliography

ALARCÓN GONZÁLEZ Luisa; MONTERO-FERNANDEZ, Francisco. *Reflejos y multiplicidad: los empooling de Peter Smithson*. A: Palimpsesto, Spring 2019, n. 19, pp. 4-6. Available on: <https://upcommons.upc.edu/handle/2117/134638>

ROBBINS, David (ed.): *El Independent Group: la postguerra británica y la estética de la abundancia*. Valencia: IVAM Centre Julio González, 1990. ISBN 84-7890-083-7

COEN, Riccardo: *Alison y Peter Smithson: de la casa del futuro a la casa de hoy*. DC. Revista de crítica arquitectónica, February 2009, n. 17-18, pp. 317-318. Available on: <https://upcommons.upc.edu/handle/2099/9349>

DE MOLINA, Santiago: *Collage y Arquitectura: la forma intrusa en la construcción del proyecto moderno*. Sevilla: Recolectores Urbanos, 2014. ISBN 978-84-940196-5-4

GARRIGA GIMENO, Queralt: *Arquitectura en exposición: trascendiendo el paradigma clásico*. Doctoral Thesis UPC, Department of Architectural Projects, 2015. Available on: <https://upcommons.upc.edu/handle/2117/95661>

LICHTENSTEIN, Claude; SCHREGENBERGER, Thomas (ed.): *As found, the discovery of the ordinary*. Switzerland: Lars Müller Publishers, 2001. ISBN 3-907078-43-8

MORELLI, Marta. *El 'arte de habitar': aproximación a la arquitectura desde el pensamiento de Alison y Peter Smithson*. DC. Revista de crítica arquitectónica, February 2009, n. 17-18, pp. 273-284. Available on: <https://upcommons.upc.edu/handle/2099/9326>

R. LIPPARD, Lucy: *Pop Art*. Barcelona: Ediciones Destino, 1993. ISBN 84-233-2255-6

SCOTT BROWN, Denise: *Learning from pop*. Casabella December 1971, pp. 359-360.

SMITHSON, Alison; SMITHSON, Peter: *But today we collect ads*. London: Ark. Magazine, November 1956, n.18.

SMITHSON, Alison; SMITHSON, Peter: *Cambiando el arte de habitar*. Barcelona: Gustavo Gili, 2001. ISBN 9788425218361

Other sources

BANHAM, Reyner: *Reyner Banham Loves Los Angeles: The Father Of Pop*. London: AA School of Architecture, 1 January 1979. Available on <https://www.youtube.com/watch?v=xkMcgrjGkWA>

British Pathé: *Face of Tomorrow*. London: Whitechapel Art Galery 1956. Available on: <https://www.britishpathe.tv/>

HARRINSON, Martin; SMITHSON, Peter: *As Found: The Discovery of Ordinary (Part 4)*. London: AA School of Architecture, 2 November 2001. Available on <https://www.youtube.com/watch?v=VH9mHFIC7xE&t=1533s>

ICA: *ICA Archive*. [Consulted Jun, 2020] Available on <https://archive.ica.art/>

MACBA: *Learning and research: Archive*. [Consulted Jun, 2020] Available on <https://www.macba.cat/en/learn-explore/archive>

MASSEY, Ann: *Independent Group*. London, 2007-2013 [Consulted Jun,2020] Available on <http://independentgroup.org.uk/>

8. Figures references

Fig. 1: Retrieved from: ROBBINS, David (ed.): *El Independent Group: la postguerra británica y la estética de la abundancia*. Valencia: IVAM Centre Julio González, 1990 p. 83.

Fig. 2: Collage of the author. Images retrieved from: Imperial IWM War Museums web | Australian War Memorial web | Tate Archive | ROBBINS, David (ed.): *El Independent Group: la postguerra británica y la estética de la abundancia*. Valencia: IVAM Centre Julio González, 1990.

Fig. 3: Frame of the Karel Reisz Documentary: *We Are the Lambeth Boys*, 1959

Fig. 4: Collage of the author. Images retrieved from: Nation Portrait Gallery of London web | Offer Waterman web | Guggenheim website | Free Social Encyclopedia for the World

Fig. 5: Analysis of the autor. Images and information retrieved from: STONARD, John-Paul: *Pop in the Age of Boom: Richard Hamilton's 'Just what is it that makes today's homes so different, so appealing?'*. London: The Burlington Magazine n 149, September 2007.

Fig. 6: Timeline of the author.

Fig. 7: Retrieved from: LICHTENSTEIN, Claude; SCHREGENBERGER, Thomas (ed.): *As found, the discovery of the ordinary*. Switzerland: Lars Müller Publishers, 2001 pp. 64-65.

Fig. 8: Timeline of the author. Images from the Catalogue of each exhibition retrieved from: ROBBINS, David (ed.): *El Independent Group: la postguerra británica y la estética de la abundancia*. Valencia: IVAM Centre Julio González, 1990 pp. 124, 131, 150.

Fig. 9: Image of the author.

Fig. 10: Retrieved from LICHTENSTEIN, Claude; SCHREGENBERGER, Thomas (ed.): *As found, the discovery of the ordinary*. Switzerland: Lars Müller Publishers, 2001 pp. 34-35.

Fig. 11: Retrieved from LICHTENSTEIN, Claude; SCHREGENBERGER, Thomas (ed.): *As found, the discovery of the ordinary*. Switzerland: Lars Müller Publishers, 2001 pp. 55.

Fig. 12: Collage of the author. Images retrieved from: TATE Archive. Available on: <https://www.tate.org.uk/art/archive>

Fig. 13: Collage of the author. Images retrieved from: TATE Archive. Available on: <https://www.tate.org.uk/art/archive>

Fig. 14: Retrieved from pinterest, provenance book not found.

Fig. 15: Retrieved from: <http://includemeout2.blogspot.com>

Fig. 16: Collage of the author. Images retrieved from: ROBBINS, David (ed.): *El Independent Group: la postguerra británica y la estética de la abundancia*. Valencia: IVAM Centre Julio González, 1990 p. 130.

Fig. 17 & 18: Retrieved from <https://transculturalmodernism.org/>

Fig. 19: Retrieved from Artishock Revista de Arte Contemporáneo web.

Fig. 20: Retrieved from LICHTENSTEIN, Claude; SCHREGENBERGER, Thomas (ed.): *As found, the discovery of the ordinary*. Switzerland: Lars Müller Publishers, 2001 pp. 34-35.

Fig. 21: Retrieved from: ROBBINS, David (ed.): *El Independent Group: la postguerra británica y la estética de la abundancia*. Valencia: IVAM Centre Julio González, 1990 p. 132.

Fig. 22: Image from the author.

Fig. 23: Collage from the author. Images retrieved from: ROBBINS, David (ed.): *El Independent Group: la postguerra británica y la estética de la abundancia*. Valencia: IVAM Centre Julio González, 1990 pp. 148-149

Fig. 24 & 25: Collage from the author. Images retrieved from: The Art Story Visual Arts web.

Fig. 26 & 27: Image from the author. Base retrieved from: MOMA web.

Fig. 28: Collage from the author. Images retrieved from: ROBBINS, David (ed.): *El Independent Group: la postguerra británica y la estética de la abundancia*. Valencia: IVAM Centre Julio González, 1990 p. 140. | Gizmo Architectural Review Web

Fig. 29: Axonometry from the author. Image and base retrieved from: Wikiarquitectura.

Fig. 30: Top view from the author. Image and base retrieved from: Wikiarquitectura.

Fig. 31: Imagen retrieved from: AD&A Museum UC Santa Barbara.

Fig. 32: Images retrieved from: ROBBINS, David (ed.): *El Independent Group: la postguerra británica y la estética de la abundancia*. Valencia: IVAM Centre Julio González, 1990 p. 146.

Fig. 33 & 34: Collage from the Author. Images retrieved from: Eames Official Site.

Fig. 35: Retrieved from: TATE Archive web. Available on: <https://www.tate.org.uk/art/archive>