



THE IMAGINED CITY. FUTURISM, UTOPIA AND ARCHIGRAM

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Abstract

Starting from established fundamental principles such as rigidity, stability and durability, both Futurist and Archigram architecture claimed, founded on the economic, social and cultural changes of their time, new housing alternatives based on mobility, flexibility, adaptation and obsolescence. The main aim of this study is to reveal the links established between two conceptions of architecture which, despite having very different formal aspects, share a fundamental common characteristic: they both belong to an imagined, even dreamlike, world rather than a real world, and represent the ideal vision of their particular notion of the city of tomorrow. By contrasting the main manifestos of futurist architecture with the most representative projects imagined by the members of the Archigram group, this article aims to demonstrate to what extent the development of technology and mass culture, on the rise since the second half of the 20th century, would provide the Archigram movement with the necessary tools to give continuity to the futurist ideology using a contemporary, sensationalist and provocative language.

Keywords: adaptability, mobility, technology, evolution, utopia.

1. INTRODUCTION, BACKGROUND AND OBJECTIVES

“A roaring automobile, which seems to run on shrapnel, is more beautiful than the Victory of Samothrace” (Marinetti 1909: 1). This statement, which Filippo Tommaso Marinetti published in 1909 in the newspaper *Le Figaro*, later became the leitmotif of Futurism and a true statement of intent about what the movement was intended to be. When, more than fifty years later, Peter Cook stated that “packaged frozen food is more important than Palladio” (Cook 1967), an invisible link was in effect established between the Futurist movement - as far as its architectural side was concerned - and the Archigram Group, showing to what extent the ideology of Marinetti, Sant’Elia and their heirs was still valid when a group of English architects took the baton of that movement whose philosophies would end up following parallel paths.

Indeed, just as the Futurist movement was based on premises such as the rejection of the past and traditions, the exaltation of technology, movement, speed and the detachment from nature, the slogans of the architects of Archigram were in turn based on a critique of the architectural culture of their time. In this way, a reflection was established on the relationship between architecture and technology, the dissociation of the ecological problem and of human beings from nature. Through the assimilation of the consumerist model and through a chaotic visualization of the future, they proposed architectural and urbanistic models that should allow the incorporation of all useful technology, using synthetic, disposable and industrial materials and creating mobile, assemblable and even obsolescent structures.

The studies that have been carried out around the Futurist movement are undoubtedly very numerous. Of particular note is Cristina Jarillot’s (2010) analysis of the role of Futurist manifestos as a work of creation, rather than as a programmatic text; “Futurism” the book by Caroline Tisdall and Angelo Bozzolla (1978), which offers a comprehensive overview of the Futurist movement, covering its roots, development and its impact on various artistic disciplines, including architecture; “Futurism : the explosion of the avant-garde” (Ghignoli & Gómez 2011), offers a tour of the various disciplines addressed by the Futurists, in order to recognize this legacy that today survives in advertising, cinema, radio,

photography, poetry or on stage. In this sense, we should also mention works such as “Le due avanguardie: Studi sul Futurismo” (Calvesi 1971), which analyzes the relationship of Futurism with contemporary artistic movements and its projection onto other current ones. Of particular interest for the present work are the studies focused on the architectural side of Futurism (Pizza 2016; Mancebo 2008 and Crispolti 1983).

As far as the Archigram Group is concerned, the bibliography is also very extensive. In addition to the compilation of their works and projects, edited by one of its founding members (Cook 1999), we find the collective work (Chalk et al. 2018), which offers an insider’s view of the architects themselves, with essays and reflections on their projects and their impact on architecture. We can also highlight in particular works such as the Doctoral Theses “Archigram Group 1961-1974. Una fábula de la técnica” (Costa 2001); ‘La metáfora del organismo en las arquitecturas visionarias de los años sesenta: la obra del Grupo Archigram como reinención de un nuevo habitar’ (Santos 2008), and works such as ‘Archigram: Architecture without Architecture’ (Sadler 2005) or *Beyond Archigram* (Steiner 2009).

The synchrony of both movements with contemporary culture and art, in addition to their evident influence on all kinds of later artistic manifestations are, as mentioned above, aspects extensively dealt with in the works cited. The article “Futurism and neo-avant-garde” (Cozzi 2014) thus offers a reflection on the relationships between Futurism’s ideas of architecture and city and avant-garde movements such as Metabolism and Archigram that were active in the second half of the twentieth century.

These works do not undertake, however, the objective of demonstrating, as in our case, the link established between the Futurist theoretical discourse and Archigram’s expressive graphic resource. We also intend to carry out an exercise of confrontation between the graphic representations contained in the Futurist manifestos and the projects of the Archigram group, analyzing the way in which they use graphic language to express their imagined architecture. In short, it is a question of studying the way in which the influence of visual culture contributed to the development of a graphic language with a greater degree of maturity and greater expressive possibilities.

2. METODOLOGY

The methodology used in this study consists of contrasting the theoretical basics contained in the manifestos of futurist architecture with the work of the Archigram group, establishing the possible links between them and the projects of the English architects and exposing the existing correspondences in their main works. By contrasting their theories and their graphic representations, we have analyzed the way in which Archigram's projects respond to the ideology contained in the Futurist manifestos, attempting to demonstrate how the influence of technology and visual culture has contributed to the development of a graphic language with a greater degree of maturity and greater expressive possibilities. To this end, we have made a selection of those manifestos of futurist architecture and some of Archigram's main projects in which we have been able to detect a greater correspondence between the theoretical discourse of the former and the imagined development of the latter. Antonio Sant'Elia's Futurist architecture marked the beginning of the movement in its architectural aspect and laid the foundations of the theoretical discourse of later authors. Vincenzo Fani, for his part, promoted a radical vision of architecture with his particular version of the Futurist house, fundamental in the theoretical framework of the movement as a whole. In turn, the architectural language of Cesar Augusto Poggi, which integrates elements taken from aeronautics, is reflected, as we shall see later, in designs derived from technological development, while Marinetti and Mazzoni sought in their manifesto of aerial architecture to transform the way in which cities and buildings were conceived, adapting them to an era dominated by technology and aviation. Based on these precedents, five opposing groups have been established:

- Futurist Architecture (Antonio Sant'Elia and Mario Chiattoni)-Plug-in City (Peter Cook).
- The Futurist House (Vincenzo Fani)-Drive in Housing and the Cushicle (Michael Webb and David Greene).
- Futurist Architecture (Cesar Augusto Poggi)-Living Pod (David Greene).
- Aerial architecture (Marinetti, Mazzoni and Somenzi)-Instant City (Archigram).
- Futurist precepts in general contained in its main manifestos-Walking City (Ron Herron).

3. MANIFESTOS OF FUTURIST ARCHITECTURE. ANTONIO SANT'ELIA, UMBERTO BOCCIONI (1914) VS PLUG-IN CITY. PETER COOK (1964)

The exhibition of Antonio Sant'Elia and Mario Chiattoni's designs in 1914 laid the foundations for their project of the città nuova, whose ideology was later expressed in their Manifesto of Futurist Architecture. In the same year, Umberto Boccioni also promulgated his proposals for the architecture of the future in a new manifesto that shared common aspects with the previous one.

Sant'Elia's città nuova (Fig. 1) aimed to be a city in which all the resources of science and technique were assumed "nobly satisfying every need of our customs and our spirit", disregarding tradition and ornament, and "creating new forms, new lines, a new harmony of contours and volumes, an architecture which finds its justification only in the special conditions of modern life and which finds correspondence as an aesthetic value in our sensibility" (Sant'Elia 1914: 2).

The futurist city was a dynamic city of ephemeral architecture in constant construction and evolution, which would reach its maximum splendor at night, when natural sunlight would be replaced by electric power sources. It was about human beings' technical triumph over nature as part of the Futurist concept of beauty, where progress placed them above their physical and material needs.

With regard to the sketches that illustrate the project, it is difficult to find an unquestionable continuity with the Futurist theoretical discourse, since, although one of its main premises stands up for a form subordinated to function, its architecture seems in debt to the dynamism of the vertical and diagonal lines that it exaggerates in an exacerbated manner, to the point of becoming a victim of its own monumentality.

It put faith in a bare, light architecture, but its designs show cities with huge walls that turn them into heavy, immobile machines. It seems impossible to renew an architecture that conveys a monolithic image, apparently built to last.

The graphic evolution of the sketches where the monolithic character of the city is reflected can be seen in the different techniques used. An evolution that goes from the application of chiaroscuro, developing light and shadow, to the

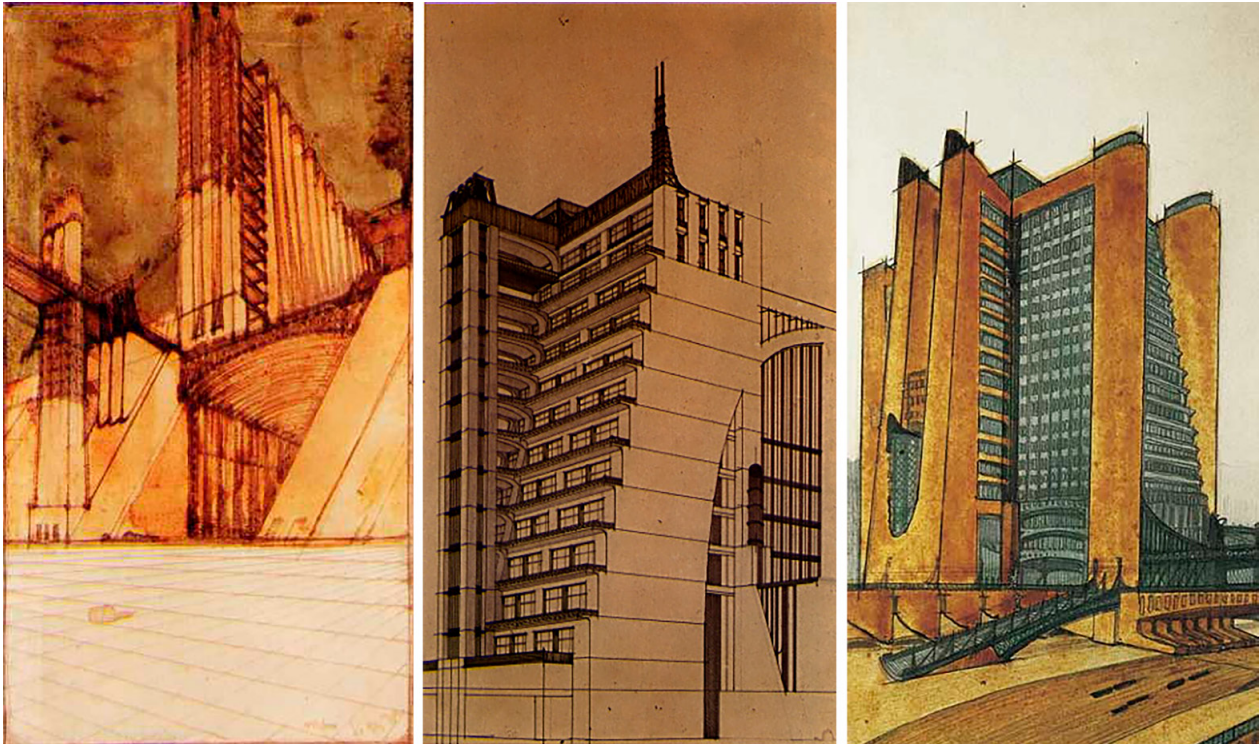


Fig. 1. Studies for the città nuova. Antonio Sant'Elia, 1914. (Sant'Elia family private collection).

application of color to get closer to a fictitious reality (Da Costa Meyer 1995).

On the other hand, the Plug-in City, designed by Peter Cook in 1964 (Fig. 2), is one of the projects with the greatest repercussions in Archigram's productions and develops the concept of the mega-structure that will be so recurrent in their architecture. It is an urban model interconnected

by means of a grid of communication systems which, in the words of its authors, is reminiscent of the operation of a computer. The buildings are structures to which are connected independent capsules that constitute the dwellings.

Plug-in City “survives by permanently transforming itself, discarding and substituting its own parts, so that indeterminacy is identified with the notion

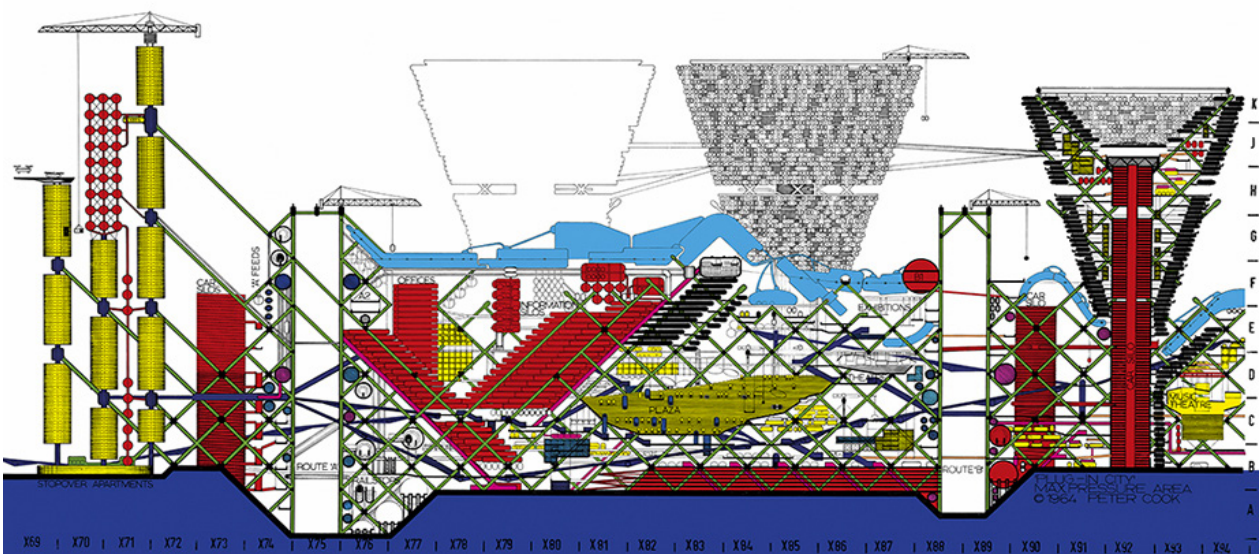


Fig. 2. Plug-in city. Peter Cook, 1964. (Archigram Archive).

of substitution and consumption” (Costa 2002: 208). The drawings that illustrate the project show enormous structures linked by infinite networks of pipes. Buildings in which form truly plays a secondary role, generated for the sake of a functionality that becomes the fundamental leitmotiv. The dwellings are enormous living machines made up of a hardware or central structure to which the software, or the capsules that make up the dwellings, are attached (Cook 1964). The illustration that accompanies the text moves away from the collage technique, so present in their projects. In this illustration, the components of Archigram use a wide variety of colors to distinguish the different prefabricated materials, as well as graphic schemes, rather confusing, for the connection between the different independent capsules that complement the project (De Molina 2014).

Comparing some of the premises of the futurist city with the particularities of the urban planning that Peter Cook proposed exactly fifty years later, we find some particularly interesting correspondences that should not go unperceived:

The ideal futurist modern house must be “similar to a gigantic machine” (Sant’Elia 1914: 2). The building’s spaces should provide maximum performance, just like an engine.

In Peter Cook’s drawings illustrating the Plug-in City project, its different elements are communicated through a mesh of information and circulation circuits.

The urban space is planned as a single building reminiscent of a operating computer, in which the hardware is assimilated to the fixed structure of the city and the software is made up of mobile, interchangeable architectural units.

In contrast to a futuristic bare architecture, in which the exaltation of the structure is manifested, Cook proposes a tentacular city built from a network shaped mega-structure.

Both Sant’Elia and Boccioni praise the expressiveness and possibilities of concrete, glass, iron, textile fibre and materials that allow maximum elasticity and lightness. Boccioni calls them fast materials. The Plug-in City is characterized by the use of prefabricated materials inspired by space stations and robotics.

While Citta Nuova stands for renewable architecture, Cook’s project is based on an

incremental and transformable city planning, according to the needs of its inhabitants. This is a truly obsolescent architecture.

The Futurists proclaim the exaltation of oblique lines and elliptical lines as dynamic forms, “with an expressive power a thousand times greater than that of horizontal and perpendicular lines, which form a dynamically integrating architecture” (Sant’Elia 1914: 3). They affirm that “the future brings us an infinite sky of architectural frames” (Boccioni 1914: 8). Likewise, as we can see in Cook’s own designs, the Plug-in City is made up of a network of information and communication circuits arranged in an oblique reticular mesh as a kind of an exon-skeleton that envelops the city.

In Sant’Elia’s words, “the fundamental characteristics of futurist architecture will be the expiration and transience. Houses will last less than we do. Each generation will have to build their own city” (Sant’Elia 1914: 4). Other premises are dynamic needs, evolutive architecture, mass production and the autonomy of the parts of the building. Peter Cook’s city is designed with interchangeable architectural elements that are connected into fixed spatial structural elements. These are smart architectural units, such as the capsule dwelling, transportable and connectable in different cities. The project stands for industrialized, flexible production and aerospace technology (Cook 1964).

4. THE FUTURISTIC HOUSE. VINCENZO FANI “VOLT” (1919) VS DRIVE-IN HOUSING. CUSHICLE. MICHAEL WEBB, DAVID GREENE (1964-1966)

In January 1918, Vincenzo Fani published in the magazine *L’Italia Futurista* his essay “Del funambulismo obbligatorio” or “let’s abolish the floors in houses”, a humorous essay in which he stands up for the cult of asymmetry as one of the precepts of Futurist architecture and for the abolition of the floor plan, while introducing the concept of domestic funambulism. According to this idea, “the convenience of means of locomotion brings with it the disadvantage that humans significantly reduce muscular exercise” and to solve the problem he proposes “to force citizens to do in their homes the exercise they save while being transported from end to end of the city” (Fani 1918: 9). To this aim, the houses will have their rooms at different heights, a system of

ropes and poles will be necessary to access the bedrooms and the stairs will be replaced by slides and roller coasters.

A year later, in the newspaper Roma Futurista, he published a new article, in a more academic tone, with the title La casa futurista (Fig. 3), in which he proposed an independent, mobile, detachable, mechanical and amusing dwelling (Fani 1920).



Fig. 3. The futuristic house. Vincenzo Fani, 1919. (GRI Digital Collections).

From 1965 on, the Archigram group’s projects left the study of the city and their mega-structural urban plans in the background to focus their attention on the design of the house. The aim was to develop a certain type of autonomous residential unit, opposed to monumentality and with maximum flexibility, practicality and adaptability. These were spaces that could exist independently of the mega-structures and other permanent support systems. As a result of this new concern, projects such as the Cushicle (Fig. 4) and the Drive-in housing (Fig. 5) by Michael Webb and David Greene arose between 1966 and 1967. These were two housing prototypes that brought

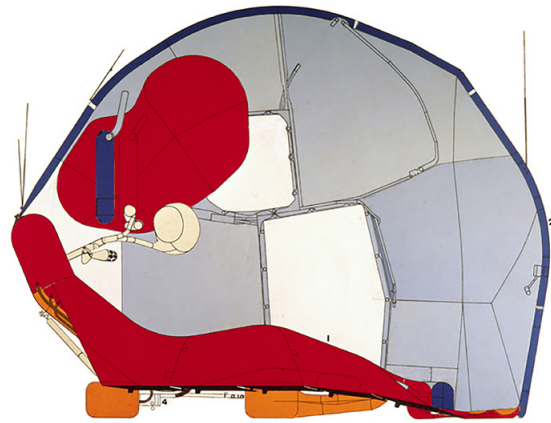


Fig. 4. Cushicle. Michael Webb, David Greene, 1966-1967. (Archigram Archive).

together some of the particularities for which Fani bet for the future fifty years earlier.

The manifesto of the futurist house argues that static architecture is in decline. It intercedes for the inauguration of dynamic architecture. Locomotives, airships, dynamos, mechanical lathes, printing presses and heavy oil engines, which will be the inspiration for drawing the lines of houses on speed. Webb and Greene’s Cushicle provides a solution that is perfectly adapted to another of the demands formulated by Fani (1919) when he states that “mechanical nomadism will become the rule of social life” (Fani 1920: 14). It consists of a transportable housing unit that enables a traveller to carry with him a habitable micro-environment with a high level of thermal comfort. Moreover, it is foldable and closed, it can be carried by the traveller in his car or carried on his back. It also has an inflatable and reclining seat and is equipped with communication systems.

Fani states “we will kill the cube, the geometric incarnation of weight. We will build conical, spherical, pyramidal, polyhedral, star-shaped, funnel-shaped, spiral-shaped houses and, in general, houses without any pre-established shape” (Fani 1920: 15). The Cushicle is made up of a chassis of folding frames and a membrane that envelops and protects the environment. The drawings made by Webb are characterized by the use of color as a differentiating element between the different rooms of the house. The color in Archigram’s drawings is a great element that allowed it to distinguish itself from other drawings made by contemporary groups of architects (De Molina 2014).

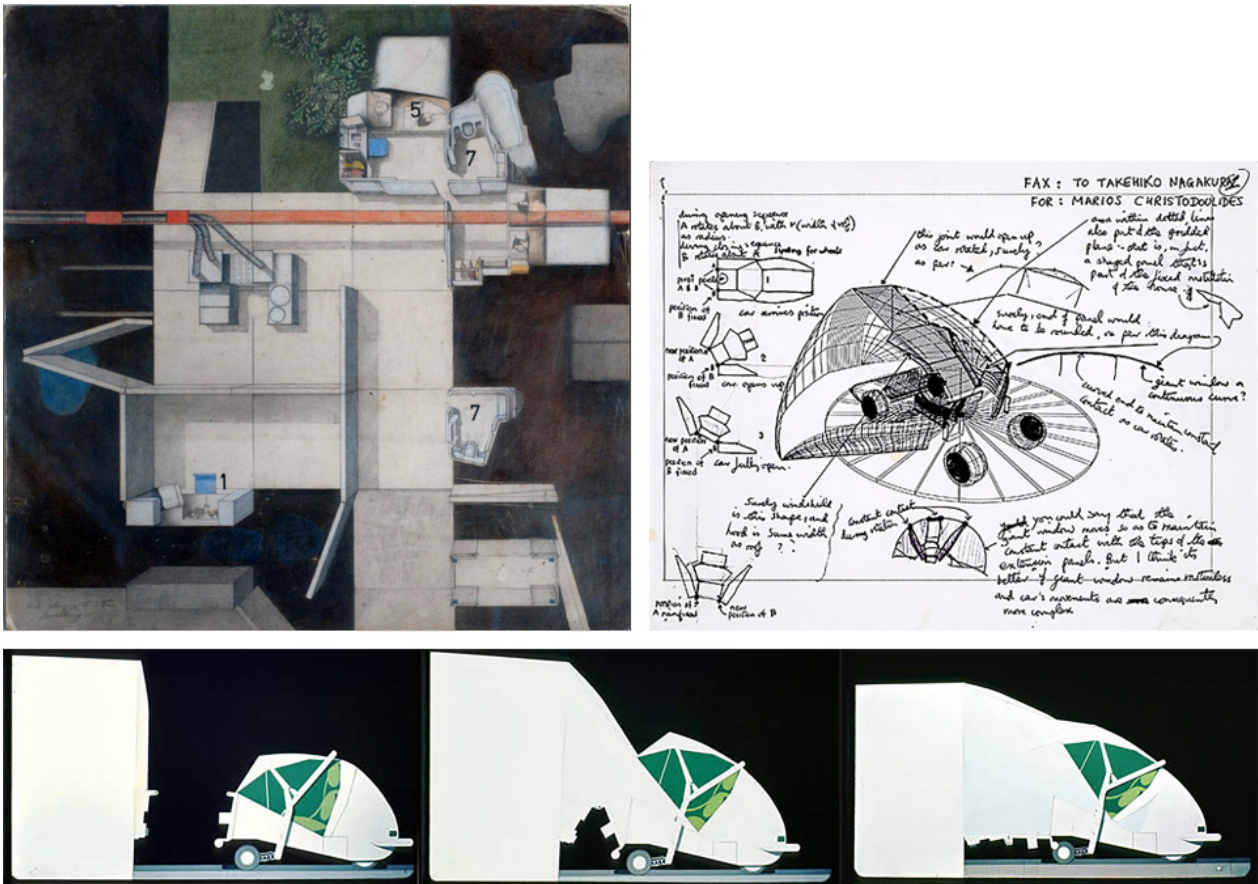


Fig. 5. Drive-in housing. Michael Webb, David Greene, 1966-1967. (Archigram Archive).

According to the Italian, humans of the future will no longer live in houses rooted in the ground. The houses, equipped with formidable engines, will run, sail and fly, replacing all current means of locomotion (Fani 1920). The Drive-in housing is a house connected to the automobile, which is proposed as a means of transport and of living.

The futuristic house will be independent, mobile, detachable, mechanical and fun. The health houses will spin around themselves on pivots, always facing the sun on the same façade, like huge sunflowers. The Drive-in Housing is made up of modular panels that can be folded out and placed on a supporting structure. The internal divisions would be made by means of pivoting panels, retracted during the day and open at night. These are mono-functional and ergonomically defined spatial components (kitchen kit, bathroom kit, etc.) (Costa 2002).

The dwelling proposed by the futurist architect aims at the destruction of rhythm and the elimination of the façade. The structure is

exalted. It will be the function of the house that determines its form.

Whichever way you look at it, the futurist house will have different forms. Fani further states that “the stately villas will go up and down the slopes of the mountains depending on the season or the temperature” (Fani 1920: 14). According to this model, the larger houses will have rooms that can move from one façade to another like coaches, or rise from the ground floor to the roof like wide lifts. These rooms could, if necessary, be detached from the building and loaded onto special trains, or attached to the cab of a Zeppelin. He concludes his manifesto by stating that “the harmony of the Futurist style will be the synthesis of a thousand dissonances”. (Fani 1920: 16). Webb and Greene’s housing is arranged according to the program planned for each family. The most functionally conditioned areas are fixed elements, the living areas are flexibly enlarged or reduced by means of a system of folding panels whose constructive module is also the geometric module that generates the spatial network and which is

the only permanent reference of the organization in relation to which the other components will be located. In this way, the available space will be free of any internal restriction, and also susceptible to grow in any external direction (Costa 2002). Thus, new housing units can be added, so that the volume of the house will be directly proportional to the number of people living in it.

5. POGGI FUTURIST ARCHITECTURE. CESAR AUGUSTO POGGI (1933) VS LIVING POD. DAVID GREENE (1965)

The end of the World War and the disappearance of Sant'Elia and Boccioni, two of the most important figures of early Futurism, cleared the way to a second period of the movement in the 1930s. This was a period of reconstruction, still led by Marinetti, and conditioned in a very direct way by the dictates of the Fascist party in government. Volt, Mario Carli and Primo Conti distanced themselves from the work of Sant'Elia and Chiattoni. In architecture, it was Virgilio Marchi who led the movement in both graphic and theoretical production. The regional Futurist movements emerged, with Angiolo Mazzoni and Cesare Augusto Poggi as the main exponents in Florence (Mancebo 2008).

Poggi rejected the skyscrapers and vertical constructions that his predecessors praised so highly (Fig. 6) and presented the concept of anti-war architecture. Influenced by the recent armed conflict, he proposed an architecture designed for the species and his own preservation, based on "defence against war and bacterial attacks and against telluric and meteoric phenomena" (Poggi 1933: 25).

Another of the projects developed by the Archigram group in response to the study of new housing unit typologies is David Greene's Living

Pod (Fig. 7). It was a capsule house that could be inserted into a plug-in urban structure or transported and set up anywhere autonomously.

Poggi's futuristic architecture proposes a rational use of materials. Waterproof, armoured, rotating, mobile, stainless steel laminated constructions. With hermetic closures and slender shapes, without edges, with rounded, ellipsoidal joints and parabolic roofs.

The Living Pod is a structure designed from two kinds of components: a continuous envelope, executed in reinforced plastic (GRP, glass-fibre reinforced polyester resin), and a fragmented assembly of aggregate machines. An airtight and comfortable capsule - or pod - with internal compartments for multiple uses.

Another of the characteristics that, according to Poggi, the houses of the future should have, is the use of polychrome colouring for mimetic purposes. Polychromes that imitate the colours of the surrounding landscape. In addition, the foundations will be laid on concrete slabs and supported on hydraulic shock absorbers (Mancebo 2008). The Living Pod has external support elements in relation with the ground (four sets of automatic feet) so it can be carried from one place to another.

The Italian's anti-war architectures are machine-houses, solid and light. Anti-bacterial, anti-seismic, anti-gas mechanical constructions. With chambers impermeable to noise and heat, equipped with neutralizers, heating and cooling systems, electrical, with fans and ozonisers. Made with light and tubular beams of drawn steel or duraluminium. With aerial and underground communication pipes for provisioning, passages, etc. Rotation to conveniently orientate and take advantage, in peacetime, of the illumination and thermo-radioactive properties of the sun, and to

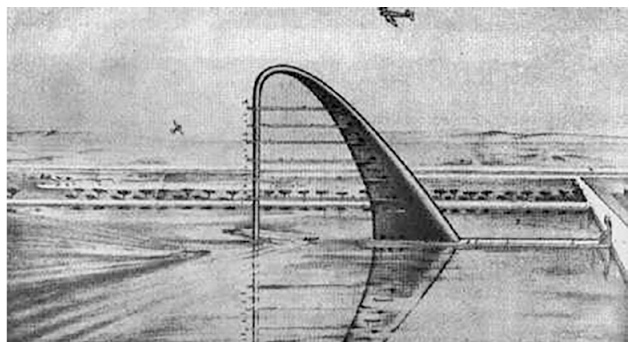


Fig. 6. Sports pavilion in the sea. C. A. Poggi, 1933. Radio lighthouse arch for Marconi, 1940. (Rome E-42 Exhibition).

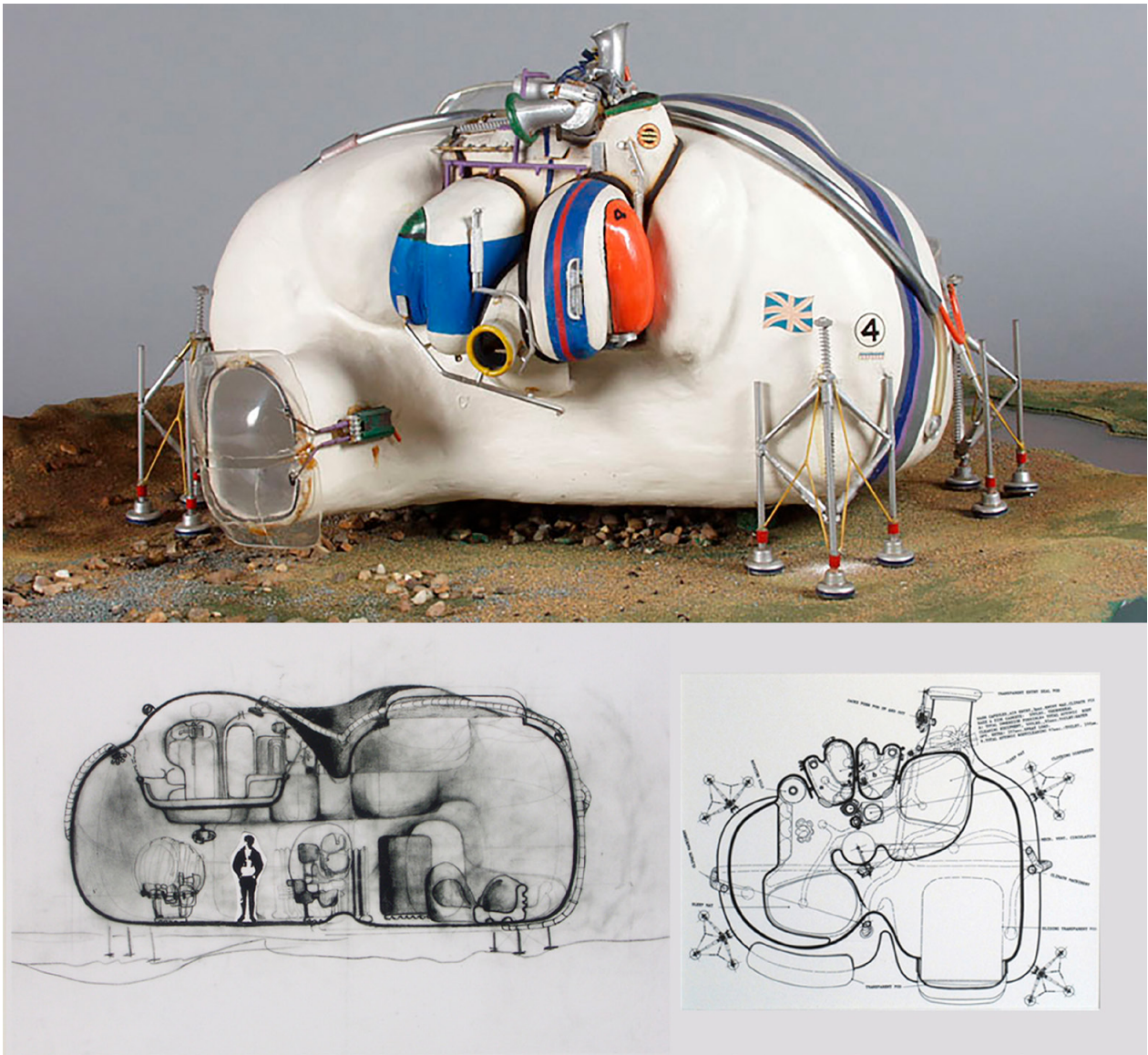


Fig. 7. Model and designs of the Living Pod. David Greene, 1965. (Archigram Archive).

achieve, in wartime, defence and anti-aircraft offensive. Its openings will be small and fitted with high-strength, unbreakable double and triple glazing, with hermetic seals with fibre, rubber, copper or aluminium gaskets (Mancebo 2008). In the house designed by Greene, the machinery attached to the main structure is equipped with the latest appliances (air conditioning systems, hydraulic systems, and other equipment such as food machines) transforming the environment into a perfect living machine. It is a house planned to be implanted even at the bottom of the sea.

According to Poggi, it is necessary to be “lyrical but, above all, practical” (Poggi 1933: 25). To this end, he proposes the adoption of aesthetic-logical forms to preserve the species. Resistant

crustacean-like structures: a supporting shell made of sheet metal with reinforcements. Solid, lightweight shells against any attack and any danger. Greene’s house is a hybrid architecture made up of the space itself and the machines attached to it. It is the perfect fusion of organic architecture and technology. Its pod-like form is obtained from a moulded space, generated from the inside, like the house made from its inside out. Its plastic and opaque forms, its atomic-age artificial cave interior, with soft floors and inflatable furnitures, are not incompatible with darkness and secrecy. The Living Pod is based on the ideal of an updated plastic version of such primitive gestures as digging a shelter, seeking the protection of the cave’s shade. It is a real moulded architecture which “reflects its author’s

fascination by the products and images of the aerospace industry, his interest in formal aspects with a surrealist bent, and his attraction to free and organic forms. The result is a deliberately hybrid ensemble, which points to the coexistence between mechanical and organic references that is not sublimated by the architecture, but left as self-evident. Neither complete fusion between organism and machine, nor overcoming of one by the other” (Costa 2002: 173).

6. FUTURIST MANIFESTO OF AERIAL ARCHITECTURE. MARINETTI, MAZZONI, SOMENZI (1934) VS INSTANT CITY (1969)

In 1934, Filippo Tommaso Marinetti, together with Angiolo Mazzoni and Mino Somenzi, signed the Futurist Manifesto of Aerial Architecture, which was published in issue number 3 of the magazine *Sant’Elia* (Marinetti et al. 1934: 3). Characterized by a patriotic and warmongering vehement discourse and aligned with fascist ideology, Marinetti set out a vision of the futurist city designed to be contemplated from the air (Fig. 8). A city at the service of the incipient aerial communication networks around which its inhabitants developed their lives.



Fig. 8. Project for a linear city of aerial architecture. F. T. Marinetti, 1934. (Archive of affinities).

On the other hand, the Instant City project (Fig. 9), signed by the Archigram group as a whole, is based on an earlier idea by architect Johana Mayer. It consists of a series of itinerant infrastructures that are transported to different locations

distant from large cities with the aim of offering events and cultural activities with the support of technology. These are ephemeral installations made up of canvases raised by balloons and aerial devices, under which pneumatic structures, mobile support units connected to cars and trucks, entertainment machines, lighting sets and a series of audiovisual equipment are arranged. “A kind of instant city. An architecture of the event, which would emerge out from nowhere, interacting with some communities and then vanishing” (Da Silva & Solon 2004: 23). To reflect this “instant city”, Archigram resorts to the collage technique. They cut or extract images from their primitive context of heterogeneous fragments for their subsequent reorganization and gluing on a final surface of unitary character with new meaning (Linares, 2018). A technique that they would employ to develop many of their ideas.

It is evident that, like the rest of the futurist manifestos, aerial architecture is not really a true commitment to researching new ways of designing, building and even inhabiting, but rather a theoretical-philosophical approach.

The designs that appear, in this case, in the manifesto of aerial architecture, seem to have the sole intention of subtly illustrating the theoretical content of its discourse, without delving into the development of the project. This is demonstrated by Marinetti’s sketch, which depicts a city in a forced conical perspective seen from the air. A city configured on the basis of great communication paths as an integral part of a planetary network of interconnecting points destined for air traffic.

Archigram, on the other hand, reaches his highest point of expressive maturity with the images created to illustrate his Instant City, through the use of mixed techniques based on collage, and with a language strongly influenced by pop culture and some of the main social and cultural references of that time. As Agudo-Martínez states “They used new materials and new technologies to emphasise, in an obvious way, their rejection of the heavy burden of history that preceded them (...) Otherwise, their prolific and lively graphic production, with drawings saturated with storyboards, onomatopoeias and collages, resulted in a mere dissemination of ideas without any real possibility of materialization, that is, a simple utopia distanced from the reality of the time, essentially because it suggested unconventional situations (Agudo-Martínez 2013: 9).

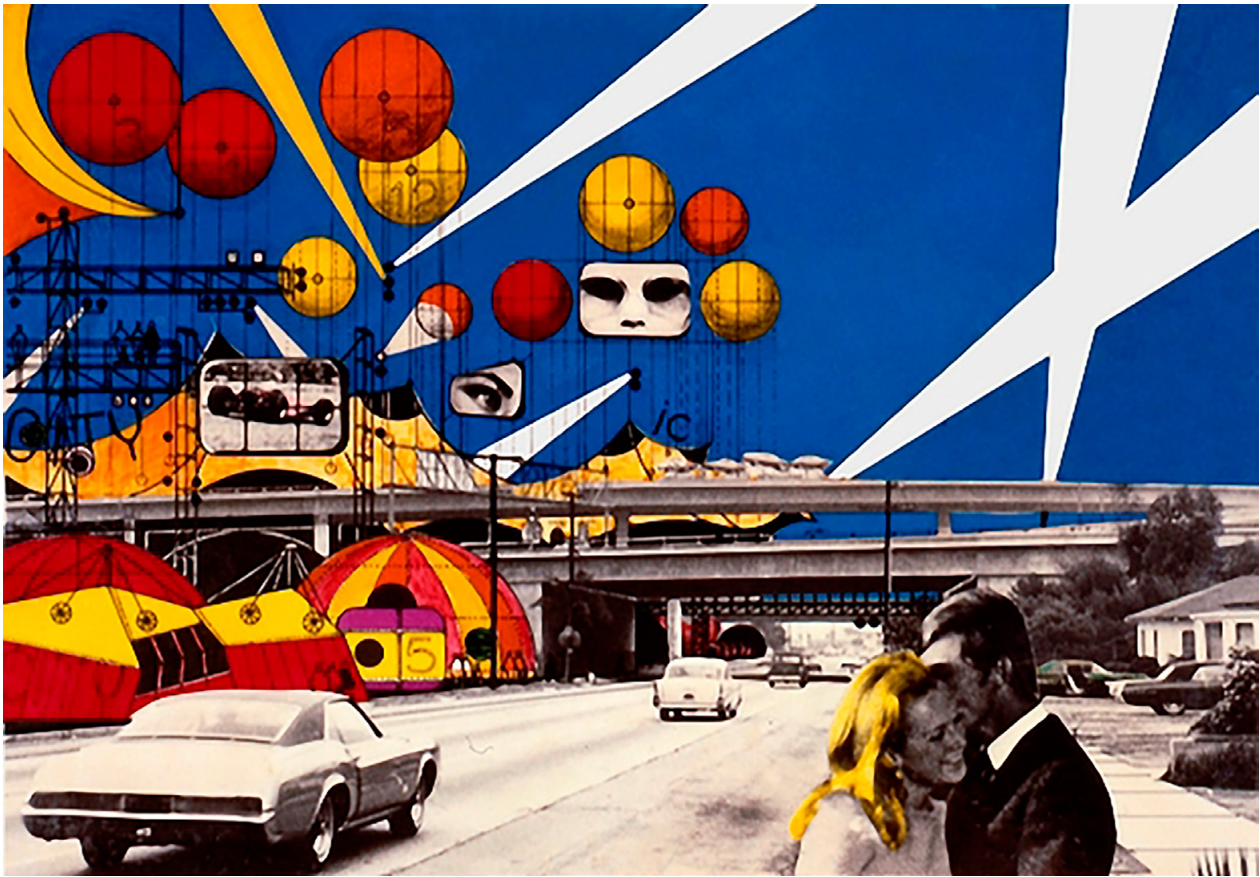


Fig. 9. Instant city. Archigram Group, 1969. (Archigram Archive).

However, although it is true that their proposals continue today belonging to the field of architectural fiction and, despite the apparent frivolity of their graphic representations, we must not forget the critical discourse that, exploring their own repertoires drawn from popular culture, art and science, pulsates within it.

It is difficult to find in these projects formal parallels as evident as those we have seen above between the Futurist theoretical discourses and the conceptions of the Archigram architects, since the cities proposed by Marinetti and Mayer are based on totally different concepts. However, there are similarities with regard to two main issues on which their discourses are based. Firstly, it should be pointed out that both projects share the incorporation of the vertical dimension of space, that is, the aerial dimension in the approach to their aesthetic criteria. Secondly, they also share the use of the temporal dimension, the time factor and movement, in their architectures. So-called aerial architecture is intended to be contemplated from the air, in movement. It is therefore an architecture that changes at every

moment depending on the point of view from which it is contemplated. The Instant City, on the other hand, is a mobile, transitory architecture that changes at every moment and in every place it passes through, a complementary system that articulates and dynamizes an urban social and cultural process.

Aerial architecture suggests a rejection of the traditional city, made to be contemplated from the ground. It proposes cities to be seen in flight, with airfields, and refuelling stations that will modify the layout of the plains, the hills and the mountains. Equipped with mobile, armoured ports and underground airports (Marinetti et al. 1934). In the Instant City there is an insistence on artificially produced movement, through the intervention of mechanical forces and technological resources. These are structures raised by means of balloons and dirigibles which, by landing on innocent sleeping cities, irreversibly transform their physiognomy, including them in an active metropolitan system.

The unique futuristic city of continuous lines will show the sky its parallelism of blue, golden

and orange airways, its glowing aero canals and its long mobile surface refuelling stations, which will communicate with the highest planes literary, plastic and journalistically through multi-material harmonies of metals, neon, rockets and with a gradual expulsion of multicoloured smoke. Straight and infinite roads (Marinetti et al. 1934). Archigram's visiting metropolis generates a network of information, establishing a system of cities connected to each other at the time of the event. Interconnection of architecture with transport and communication and information systems.

As large, multicoloured, dynamic sculptures, the refuelling complexes will aesthetically incorporate rivers, lakes, hills, mountains and glaciers into their unity. The night will be eliminated with spotlights or artificial suns. Sleep will be distributed scientifically. The airways and their refuelling stations will eliminate all regionalism, chauvinism and ruralism, and will give Italy a unique city of continuous lines of speed, health and pleasure of living (Marinetti et al. 1934). The Instant City aims to create a process of instantaneous metropolisation. To contaminate the monotonous life of small towns and suburbs with the most vibrant contemporary urbanity through the

perceptual activation of its inhabitants, through the use of audiovisual devices, leisure facilities, exhibitions, etc.

7. FUTURISM VS WALKING CITY. RON HERRON (1964)

In November 1964, Ron Herron's Walking City project appeared in issue 5 of Archigram magazine, Metropolis Issue (Herron 1964: 18). A double-page collage showed huge mobile structures, inside which are located the equipment normally found in a city, walking over the sea towards New York City. These are giant, autonomous, pod-shaped robotic constructions organised into two types of units. On the one hand, special units, which would contain facilities such as hospitals, schools, etc., and on the other, standard units, which would contain housing and offices. Both would be equipped with telescopic supports and arms through which connections are established to enable the supply of resources and the transfer of means, people and information. Their form derives from a combination of insect and machine in a literal interpretation of the aphorism of the house as an habitable machine (Fig. 10).

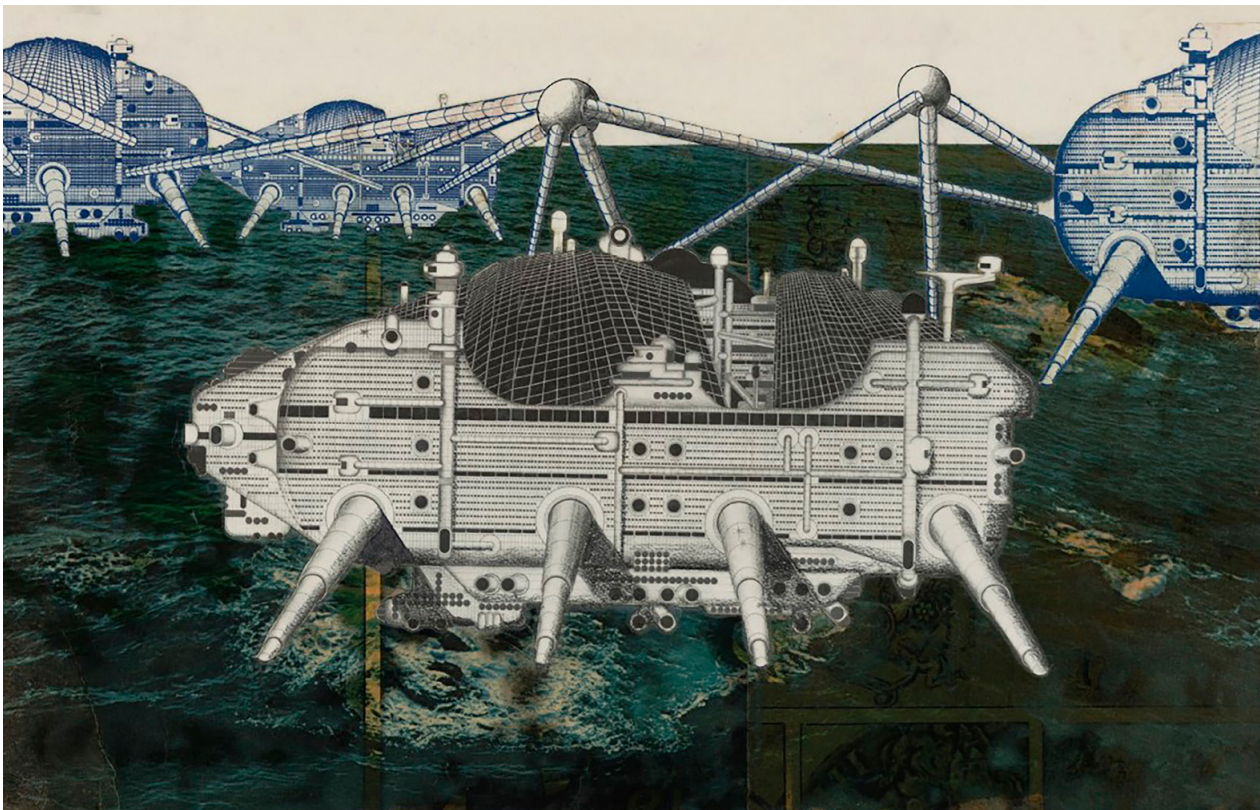


Fig. 10. Walking city on the Ocean. Ron Herron, 1966. (MoMA Museum).

The images that illustrate Walking City reflect the dichotomy of the expression of an idea lodged in the realm of fantasy, compromised in turn, through its projectual details, with a certain intention of verisimilitude. In this way, a kind of bridge is built between symbolism and reality, suggesting a new point of view for architecture. The aesthetics of Herron's collages evoke both the iconography of science fiction comics and the mechanical devices produced by science and technology, such as underwater and oil platforms. According to Costa "Walking City has its roots in the prosthetic culture of science fiction, and the image of the mechanical monster is itself the embodiment of a certain fear of the machine, and a feeling of ambivalence towards technology. Herron's design is an exploitation of this ambivalence, between man and machine, between true nature and manufactured nature" (Costa 2002: 201).

Ron Herron's project reveals some of the fundamental strategies in Archigram's rhetoric, so it is to some extent a compendium of the premises that characterise the group's work. In this sense, Walking City is not exactly a model of city, but rather an attempt to produce, literally, a comprehensible representation of the processes of transformation to which, in Archigram's opinion, the city should be subjected. For this reason, confronting some of its main characteristics with those of the futurist manifestos we have seen above, will provide us with a basis for establishing some of the conclusions of this study, which we have summarised in five points:

Technology and mechanics. Sant'Elia's manifesto of futurist architecture proposes that the ideal modern futurist house should be similar to a gigantic machine. Poggi also advocates machine-houses, anti-bacterial, anti-seismic, anti-gas mechanical constructions (9). Prampolini, for his part, refers to "mechanical landscapes in front of our eyes" (Prampolini 1928: 22). The Walking City is made up of large mechanical container-vehicles, whose outer perimeter is defined, but whose interior is configured according to the Plug-in City type of flexible and additive layout. The entire city works as a single building as an integral part of an urban mega-structure.

Adaptability, evolution. According to Prampolini, the future house and futurist architecture will be an abstract consequence of the atmospheric elements and space forms originated by the evolution of needs intrinsic to futurist human life

(Prampolini 1928). Boccioni also advocates the dynamic necessity of architecture, coining the term evolutionary architecture, which is also used by Sant'Elia, who glimpses the city of the future as a renewable architecture, with a dynamic need. Herron conceives his model of city as a mega-system adaptable to continuously changing environments, which can adopt any configuration according to circumstances. This is the evolution of the term of the idea of a city as a mutating entity that responds to the immediate needs of its inhabitants, towards the indeterminacy of the place (Costa 2002).

Mobility. Vincenzo Fani establishes the terms "dynamic architecture" or "mechanical nomadism" which will govern social life and, according to which, the futurist house will be independent, mobile, dismantlable, mechanical and fun. The humans of the future will discard living in houses rooted to the ground (Fani 1920). Mobility is precisely one of the fundamental premises that characterise Herron's model. It is an architecture without foundations or roots. A nomadic city, which does not belong to any specific geographical place or time, which intends to walk not only over the earth and the sea, but also over the history of other cities, existing and imagined. It is a model that bases its organisation and function on total mobility, which implies the questioning of any stable relationship with its location as a necessary condition for the human way of inhabiting (Costa 2002).

Shape. In Fani's futurist architecture (1918) the houses will not have a pre-established shape, but it will be determined by their function. Poggi (1933) refers to the resistant crustacean-type structures, with supporting shells made of sheet metal with reinforcements. Solid and light shells against all attacks and dangers. Prampolini, for his part, talks of "thousands of rectangular and multiform eyes wide open to the universe, spectators and interpreters of the constant human dynamism, distributed on vertical and horizontal planes between powerful plastic bones in movement" (Prampolini 1928: 22). The Walking City is the evolution of the concept of the megastructure, in which the organic form of its enormous moving insects responds to the idea of ambivalence between humans and machines, between nature and technology. It is also a critique of the rigidity of urban planning as a layout, questioning the concept of zoning

set out in the Athens Charter signed in 1933 (Le Corbusier & Sert 1933).

Interconnection, communication. Marinetti's aerial architecture is articulated around the refuelling stations, which are mobile surfaces, and which communicate with the highest aeroplanes in literary, plastic and journalistic terms by means of multi-material harmonies. The cities will be joined together to become a single city of continuous lines (Marinetti et al. 1934). Poggi imagines his cities full of aerial and underground communication pipes for supplies, passageways, etc. Fani (1919) exalts the great flowing cities, which will expand to infinity, embracing the smaller cities. The Walking City pods are both independent and parasitic, as they could be connected to stations to exchange occupants or supply themselves with resources. Through their telescopic conduits, they are able to set up a communication network between the different units that would make it possible to cross the planet and create a new world capital. In Costa's words, "they vehemently express the potential of technology to deconfigure established limits, and to question the own structures of interpretation and use of inhabited spaces" (Costa 2001: 201).

8. CONCLUSIONS

It seems undeniable that both Futurist architecture and Archigram architecture share the same starting point, taking into account that both movements arise in periods of profound changes that are unfailingly reflected in their theoretical approach, which has as its starting premise the breakup with pre-established culture and art.

Starting from the fact that the architectural side of futurism is confined to the territory of ideas, to theoretical approaches without a development that can be settled on real projects, capable of being executed and even, in certain cases, imagined, it is Archigram's work the one that assumes the dynamizing and evolutionary role of futurist theories. Indeed, unlike the latter, whose expressive means show shortages that are reflected in the absence of tangible aesthetic references in line with their own precepts, the architects of the Archigram group do manage to demonstrate, thanks to the legacy of technology and aesthetic references typical of a much more developed media culture, a level of expressive maturity that allows them to translate their ideas in an efficient and imaginative way, regardless of their technical feasibility (Lus 2014). Although it is true that there is no aesthetic correspondence between the two movements, we can see a certain continuity in their theoretical discourse, to the point of affirming that Archigram's graphic production responds more effectively to futurist canons than their own representations (Fig. 11). In this sense, as we have seen above, there are five fundamental aspects in which both movements share common characteristics:

Technology and mechanics. Both futurist architecture and that developed by the English group claim the use of new materials, mechanics and technology as a means of overcoming traditional construction systems.

Adaptability, evolution. Housing must be able to adapt to the changes of human beings, transforming and evolving with them.



Fig. 11. Photomontage Walking City- Studies for the città nuova. (Image by the authors).

Mobility. Housing must no longer be a static entity, linked to a place, so that it can change its orientation and even its location in order to adapt to climatic changes and take advantage of natural resources, participating in a new way of life of continuous flows in which there are no borders.

Shape. It is necessary to break with the architecture of pre-established shapes. Function must determine shape.

Interconnection, communication. In a universal context, the flow of resources, information and inhabitants is fundamental. In this sense, cities

will be part of a global network that links them through roads, conduits and infinite channels of communication.

We thus establish a starting point that aims to suggest a reflection about the true purpose of architectures such as futuristic architecture and Archigram architecture, dream architectures that take on their full meaning precisely in their transcendent ideality, in their impossibility, and that demonstrate that will is the engine that keeps us alive and in constant movement.

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