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New Trends in Housing

The House of the Future in the Movies

Synopsis

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Introduction

The goal of this paper is to identify New Trends in Housing. Films with focus on the future are the basis of the analysis.

As for the importance of studying Housing, since the beginning of Mankind, shelter has been a paramount aspect of life. The first dwellings were simple, being only regarded as a haven, for protection and cover. However, throughout times, with the evolution of building materials and techniques and the evolution of human needs and ideals, housing has had several important changes. Those changes were particularly significant throughout the 20th Century, when many architects studied the problem of housing, making important contributions for its evolution. Now, as then, architecture in general and housing architecture in particular have been leaning towards experimentation, trying to establish new housing types/typologies. Hence, it is vital to investigate the subject further, and try to identify the new trends for future housing. To substantiate the investigation, futuristic films were chosen. This because, bearing in mind the cinema-architecture symbiosis, the visions of directors and art directors could provide a good glimpse, on one hand, of the way future architecture could go, and on the other hand, of the way some of the contemporary architecture is already leading. Furthermore, cinema offers bold and astonishing views of the future and, having fewer restrictions, allows for a bigger experimentation.

Books on Architecture, Cinema, History of Architecture and of the Arts, the problematic and evolution of Cities and Housing as well as films from early 20th Century up to today were researched and chosen as the basis for this investigation. From the gathering of films, three of them were selected as case-studies.

Apart from the introduction, the body of the paper is divided into 4 major chapters: Theoretical Framework, Case-Study Analysis, The City and Home of the Future, Conclusion.

Theoretical Framework

This chapter focuses on 'futuristic' films from the beginning of the 20th Century and throughout. The vision of the future concerning the city and the dwelling is analyzed and influences are specified – i.e. influences the architecture at the time had in the film and influences the film may have had in architectural conception and drawing.

The films chosen to be part of this examination are: *Metropolis*, by Fritz Lang, 1926 (considered the first futuristic movie); *Just Imagine*, by David Buttler, 1930; *Things to Come*, H. G. Wells, 1936; *Brazil*, by Terry Gilliam, 1985; *Solaris*, by Steven Soderbergh, 2002; *The Island*, Michael Bay, 2005 and *Code 46*, Michael Winterbottom, 2003. A brief reference to *The Matrix* trilogy is also made, as well as a reference to 1960's series *The Jetsons* and *Thunderbirds*.

Parallel to this, other two movies by Jacques Tati are analyzed: *Mon Oncle* (1958) and *Playtime* (1967). These two films have a different significance than the previous. While the

movies in the first group were important as a testament of the views of the future throughout the 20th Century, *Mon Oncle* and *Playtime* consist of a satire and criticism of architecture, namely modern architecture. Thus, in *Mon Oncle* Tati compares life in a traditional neighbourhood to that in a modern one, ridiculing the modern house – its architecture and its character. In *Playtime*, Tati once again criticises modern architecture, now denouncing its uniformity and standardization which results in a lack of identity of cities.

Case-Study Analysis

As stated before, only three films were selected as case-studies: *The Fifth Element*, *Equilibrium* and *Blade Runner*. The selection was based on criteria such as timeframe (movies whose future is distant) and a focus on dwelling (movies that provide a great deal of information on the dwelling or for which architectural definition is vital to the characterization of characters or plot). The year of release was also important, having been chosen films as contemporary as possible, so as to guarantee a more consentaneous and coherent analysis of future trends. This because the social, political and architectural context at the time they were made influences their visions of the future.

Although *Blade Runner* is the oldest of the three (1982), for this analysis preference was given to the more recent version – The Final Cut – dated 2007. This cult movie is extremely relevant since it encompasses one of the most detailed and astounding designed futures, especially at the time it was first released, having later influenced other movies, television series, video-clips and even architects.

In this chapter and appended to the analysis of each film, a gathering of contemporary (or historically important) projects that relate to the cinematic ones can be found.

The Fifth Element

Produced in 1997 and directed by Luc Besson, it is set in the future year of 2259.

Its plot is based on the notion that water levels are substantially lower, thus transforming New York in a promontory-like settlement, whose steep banks have been transformed into tiers of buildings. In addition, 400 storeys have been excavated, in search of habitable space, transforming it in a 600-storey-city and turning today's sidewalks into elevated promenades. In spite of all these transformations, most of the buildings that exist today have been maintained, as well as significant landmarks as the Tower of Liberty.

The entire city is dominated by sky-scrappers and flying cars in an intense traffic. The now ground-floor is derelict: dark (sometimes with no natural light), abandoned by the people and filled with garbage.

As for the housing examples, the film shows us two very different types.

The first one, shown partially and belonging to the character Cornelius, is situated in an apartment building probably from the late 19th Century and is organized much like today's dwellings, having the same functional zoning, it has one large room that accommodates living

and dining room as well as kitchen. It is also characterized by a fairly large gross area and great amounts of natural lighting.

The second one, pertaining character Korben Dallas, greatly contrasts with the latter. It consists of an individual cell, with reduced habitable area, similar to a *bunker*, made in metal and rectangular in plan. Being extremely small, it has hidden storage and furniture (for instance, the bed), retractable at wish, as well as built-in cupboards, drawers and shelves. It is fully automated, including the entrance (through a sliding automatic door), and is equipped with advanced technology. Being an individual cell it can be compared to a nowadays' studio – all living functions co-exist in the same physical space: bedroom, kitchen, workroom, bathroom and living room – but with even less area. The 'bedroom' consists of only a retractable and automated bed; the kitchen has nothing more than a coffee-maker and microwave oven, both built-in the structure, and a fridge that moves downward unveiling a shower. It contains only the essential and is studied to the fullest so as to not squander valuable area. The eating area is coincident with the working one and consists solely on a table/counter opposite the entrance and against a wall with an opening to the outside, with no glassed window, just an opaque metal panel much like the door, where flying fast-food stands park against. The parking area consists of an identical cell (plan and area), adjacent to the living one. From the exterior point of view, the building corresponds to its interior organization, and one can easily infer each living/parking cell from looking at it.

Although it is set in a distant future, with great modernity, *The Fifth Element* shows us a future city that allows both the old and the new and maintains some of its historicity, also in terms of dwelling typologies.

As for similar projects to Korben Dallas's dwelling, some can be named:

- . Nagakin Capsule Tower (1972), by Kisho Kurokawa, in Ginza, Japan – a 14 storey-high tower built to accommodate business man during the week. Each capsule was an individual room and was movable and replaceable;

- . *One-Square-Meter-House* (2003), by Didier Fiúza Faustino, in Paris – a single person dwelling reduced to a 1sqm plan;

- . *Container City* (2002), by MVRDV – a city which buildings are made with containers;

- . *Containing the City* (2003), by Ana Moreira and João Cadaval – a competition for UIA under the subject Celebration of Cities, that used containers to address the problematic of habitation and parking in Lisbon;

- . Keetwonen (2005/06), Amsterdam – a student residence made with containers.

Equilibrium

Produced in 2002, directed by Kurt Wimmer, this film is based on a more 'fantastic' plot and it creates a future as a consequence of a III World War, where a dictatorial society without feelings and emotions prevails and where life is led in a new city – *Libria* – whereas the old sensorial city – *Nether* – has been abandoned. Between the two cities a wall exists, making a barrier, keeping the *Librians* in and the *Netherans* out. This barrier, as the historical background

of the movie and Libria's architectural aesthetic, is in a certain way a metaphor for Nazi Germany, especially Berlin, with its wall dividing the city in two.

Libria is a grey city, with tall, austere and robust buildings, resembling totalitarian architecture (such as Hitler's, in Germany, or Salazar's, in Portugal), with order, symmetry, orthogonality and rhythm as ideals.

As for housing, the family dwellings, in collective buildings, are almost identical, having very distinctive elements, thus reinforcing the prohibition of individuality or identity. In an organizational point of view, these houses have a central corridor which distributes to the various living areas. Characteristically wise, the houses are sober, strait lined, having white as a dominant color, few furniture or decorations (reinforcing its austerity) and natural lighting (windows with an opaque pellicle that allows the light to get in but keeps people from looking out to the city).

Presenting an alternative future (depending on the III World War), *Equilibrium* shows us a city with solid, fairly rigid and robust architecture, that help characterize the oppressed society that lives in it. It is also curious that some of the city views were inspired by drawings of future cities by Hugh Ferriss, made 70 years earlier. As the city, housing is shown as too organized and clean, minimalist and aseptic.

Similar contemporary architecture examples to this type of dwelling can be found, such as projects by John Pawson (John Pawson Houses, De Camaret House and Ghent Apartment), Claudio Silvestrin (Kanye West Loft, Miro House and Girombelli Apartment), Tadao Ando (as well as other Japanese architects), Peter Zumthor, Alberto Campo Baeza, David Chipperfield (mostly regarding interiors), or Souto Moura.

Blade Runner

Produced in 1982, directed by Ridley Scott, *Blade Runner* was based on the novel *Do Androids dream of Electric Sheep?* (1968), by Philipe K. Dick. It is set in the year 2019, in a Los Angeles of advanced technologies and a mixture of cultures and styles. The future LA is also characterized by extremely tall buildings, sky-scrapers and majestic buildings (as Tyrell Corporation that resembles a Mesopotamian Ziggurat) and seems to be always very dark, as if there is no sunlight. It is a city where publicity plays a big part – *neons* and advertisements in building façades and flying vehicles. There are derelict buildings (those shown are older, probably from the early 20th Century, which could indicate that there is no respect for history or tradition) and garbage all over.

Concerning housing, three types are presented: Deckard's house, Sebastian's house and Tyrell's house.

Deckard's house is the most important one. It is located in a tall, collective building and is zoned (in terms of functions) much like nowadays' dwellings. Having a relatively reasonable area, as the city it has little natural lighting. Aesthetically, it owes its wall treatments to Frank Lloyd Wright's Ennis House (every interior wall reproduces the stone covering of Ennis House) and its kitchen and bathroom design to airplane interiors.

Other than Ennis House, other references to iconic LA buildings are made – Union Station (the train station is, in *Blade Runner*, the police headquarters) and the Bradbury Building, where Sebastian’s house is located. This dwelling resembles an antique apartment, with a multitude of interconnected spaces, big ceiling height and areas, having also stucco mouldings decorated ceilings and tall windows and doors.

The third house is located in Tyrell Corporation and consists of a penthouse, with a very classical decoration and functional organization (contrasting with the building in which it is housed). It has also big ceiling heights, very big areas (some spaces are also multifunctional) and floor to ceiling double doors. Aesthetically, it differs completely the rest of the city, being characterized by a baroque revival.

To sum up, *Blade Runner* envisions a robust city, with a big emphasis on artificial lighting (in buildings, advertisements and *neons*), of tall, modern buildings. And, as in *The Fifth Element*, shows a coexistence of old and modern: eventhough the old is portrayed as abandoned it still exists. Regarding housing, there is a clear contrast between the three dwellings: the difference between the old and abandoned, the revival and the modern.

Whilst for the other films a parallel with modern architecture was possible, for *Blade Runner* is more difficult to do so, this because two of the dwellings were based on existing buildings (Deckard and Ennis House, Sebastian and Bradbury Building), and the other one (having a more decorative characterization) consists of a revival. It is however possible to claim that *Blade Runner’s* aesthetic was innovative at the time, having influenced architects and their projects (like Toyo Ito and his Egg of Winds, 1990/91, Tokyo).

City and Housing of the Future

In this chapter, the visions of all films (early films and case-studies) concerning the city and housing are summarized and trends are presented.

For the city, one major trend is evident – the urbanization of the world (pinpointed by all films and visible nowadays in cities like New York, Chicago, Tokyo and the newly developed Asian cities as well as in statistics regarding the percentage of urban population). Subjacent to this major trend, two main trends protrude: the *Metacity* and the *Tabula Rasa*.

Metacity

Concept introduced by François Ascher, used to characterize the future city, defined as a vast, dense, discontinuous, heterogenic and polinuclear territory. For this author, the notions of limit, scale and distance in this future city need to be questioned, as the city expands to its peripheries. With it, the notion of neighbourship is also altered.

Furthermore, the *metacity* is diverse, multicentral and has polyvalent facilities and good transports. These characteristics are shared by Richard Rogers’ ideal city (as defended in the book *Cities for a Small Planet* – dense, polycentric, multifunctional and diverse with big emphasis on public transport).

Being diverse, the *metacity* incorporates different styles and ages, mixing history and tradition with modernity. This characteristic brings this type of city close to that envisioned in *The Fifth Element* and *Blade Runner*. In both films, the cities are presented as territories composed of various historical tiers. In addition, both Ascher and the visions of these two films envision a city as a territory in constant change, which is also similar to the process of evolution of Japanese cities, which renew themselves in short time spans (20 years).

In constant change and promoting mobility, the *metacity* and its citizen have in the dwelling the most important aspect and the only fixed point. Housing is thus seen as a key element in the city and in the life and stability of its inhabitants.

Tabula Rasa

Being recurrent, the notion and concept of *Tabula Rasa* never loses interest or modernity as it presupposes a great liberty and hope in the future. Its application was greatly discussed during the Modern Movement, especially by Le Corbusier (and his *Plan Voisin*). However, it was abandoned as other concepts in the Athens Charter took place.

After the Modernism, and as a reaction to it, from the 1950's onward, new groups and architects revived the concept with utopian projects for the city: the Metabolists, Japan; GEAM (Group d'Espace et de L'Architecture); Archigram, England; NER (New Element of Urban Environment/Novye Element Rasselenia), Soviet Union; Buckminster Fuller and Frei Otto. In common, they shared the notion of a dense, multifunctional, evolutive and expansive city with new principles, materials and techniques. Some of their projects evidence some of the characteristics of the *Tabula Rasa*: one, which is inherent to it, is the deletion of the existing cities, creating new urban fabrics; the other one is the possible endless and infinite extension/expansion of the city (a characteristic similar to the loss of limits of the *metacity*).

More recently, in the 90's, a new contribute to *Tabula Rasa* was made by Rem Koolhaas and his office, OMA, both in the form of a project and an essay. The project consists of a competition for the Great Axis of Paris, at La Défense, in 1991, and proposes to remove all insignificant buildings older than 25 (except the iconic or sentimental, the Grande Arche, the CNIT and Fiat Tower). In his book, *S, M, L, XL*, Koolhaas questions the European mentality regarding consolidated urban fabric and its conservation, criticizing it.

As for the essay, Koolhaas theorizes about a future city – a Generic City. One of its fundamental characteristics is the lack of identity (which Tati criticizes in *Playtime* and Adolf Loos considers inherent to urbanization). Other characteristics are: the lack of centre (no difference between city and periphery); the lack of history and tradition; being endless and having as the sole typology the skyscraper.

Regarding the analyzed movies, *Blade Runner's* LA could partly be considered a Generic City, as it has no identity, but results of a collage of cultures, and looks infinite. However it is not a true *Tabula Rasa* city (see reasons named in the *Metacity* subchapter) as the ones in *Things to Come* and *Equilibrium*. Both were erected removing or overlooking existing cities. The one contradiction in *Libria* is the fact that it is limited by a wall and therefore finite.

These are the two trends for the city that, in spite of the differences, converge in some aspects: the dilution of urban limits, high density, the change in the notion of centre and the notion of constantly changeable territory. And, although *Tabula Rasa* seems to pertain to a more distant future, there can be found some examples of its use: the universal exhibitions worldwide (Expo '98, Expo '92, Expo '10 or even the Portuguese World Exhibition in 1940) and the adding of land in the Netherlands, Macao, Taipa and Coloane and other Asian cities.

In terms of housing, the *Metacity* could tend to the conservation of the existing housing types (which could indicate typologies like the ones in *Blade Runner* and *Equilibrium*) while the *Tabula Rasa* will tend to deny the old and traditional housing types and establish new ones (as seen in *The Fifth Element*). So, also in what concerns housing, two trends emerge: *Habitation as a 'Cell'* and *Minimal Habitation*.

Habitation as a 'Cell'

The cell is the smallest unit of an organism, where its vital functions occur.

One of the trends for future housing is the reduction of the habitation unit to its minimum, namely in what concerns area and function, making the space flexible through overlapping functions. This is the trend pointed out by *The Fifth Element* (Korben Dallas' dwelling) and supported by films like *Solaris* and *The Island*.

Historically, the search for a type and a pattern to be reproduced originated in the Modernism, with Le Corbusier and his quest for the serial house. After that, as seen in the case-studies chapter, it was further developed.

An important characteristic of this trend is the acceptance of prefabrication as a constructive basis, which, while simplifying and rendering faster the constructive process, can result in a certain uniformity of architecture. Nowadays, there are several companies that offer this kind of prefabricated houses, based on composable modules and that can expand or retract at wish.

This trend also entails relevant reflections upon the essential functions, the habitation zoning and the role of living areas. In the future is a kitchen needed? Is a lobby or a living room? According to *The Fifth Element* and *The Island*, the essence of the dwelling is in the function of rest – the bedroom – predicting the end of the kitchen and the living room. In present times, the most similar structure to this is a hotel room or a room in a students' residence. In both examples, the space is only used for sleeping and working. Thus, habitation tends to attain the value of lodgment. This consists in a revolution on the way we perceive housing and the functions it holds.

Minimal Habitation

The trend indicated in *Equilibrium* and *Blade Runner* is that of the maintenance, at functional and organization level, of the typologies that exist today. So, conventional typologies are maintained, as well as interior compartmentalizing according to function – living room,

kitchen, bedrooms, etc. Moreover, Equilibrium shows the tendency for minimalism – formal reduction (straight lines and simple geometric shapes), neutral and uniform colour, cleanliness and lack of decorations, embellishments or excessive furniture. Here, minimalism and uniformity mesh, since there is no distinctive element between the different houses, no exceptional pieces or architectural elements.

Hence, Minimalism is a movement that advocates geometric purity, the use of simple and straight volumes, ornamental depuration, a monochromatic palette and predicates a universal language, without local variants. At its origin lay movements like the Modernism, Russian Constructivism, Bauhaus and Dutch Neoplasticism, but also Adolf Loos and his manifest *Ornament and Crime* (1918), where he defended the end of decorative elements and the return to simplicity. Also very important were Mies van der Rohe and Le Corbusier. The first was made famous by his motto 'Less is More', while the latter defended purity, white interiors and pure surfaces.

Conclusions

To conclude this paper, a sum of housing trends is made, after which one is indicated as prevalent.

Two housing trends were identified: *Habitation as a 'Cell'* and *Minimal Habitation*.

Despite the differences, both trends agree that future housing will be inserted into collective buildings and that these will mostly take the form of towers. Besides this, both regard simplification as fundamental. Nonetheless, simplification doesn't necessarily mean mischaracterization or global uniformity, which this may seem to contradict one of the fundamental characteristics of *Tabula Rasa* – the lack of identity – but it doesn't (Tabula Rasa's lack of identity relates to *genius loci* and doesn't assume that every city has to be identical).

As defended regarding Tabula Rasa cities, the trend *Habitation as a 'Cell'* seems to belong to a more distant future and will undoubtedly make sense in an over urbanized and overpopulated world, where space becomes a precious and valuable asset (which nowadays happens in some overpopulated Chinese cities, where housing is small, having only the essential). Nevertheless, it can coexist with other housing types, while it doesn't set itself as predominant.

If indeed this is the way of future housing, and although the *Metacity* could shelter this type of housing (since it predicts a certain amount of nomadism and sees the dwelling as the one fixed point in a changeable structure), it is most probable that the future city is that of *Tabula Rasa*.

On the other hand, *Minimal Habitation* has already a great number of built examples and is, as the Metacity, more easily implemented as it doesn't represent a big scission with the typologies we are accustomed to.

Which is, then, the trend that could be foreseen as predominant in the future?

If we take into account the broad intellectual and drawing production concerning modular and cellular habitation, we can assert that it will be the *Habitation as a 'Cell'* the one

that has more significance in the future. To support that, other than the architects' enthusiasm, other factors can be stressed:

- . the alteration of family composition (presently and increasingly more so, society tends to individuality and families tend to get smaller – fewer kids, one parent household or single people);

- . the increasing mobility (a global world promotes the possibility of living in one place and working in another and being able to change both easily; nomadism);

- . the consumerism society (that of the disposable, which needs simple and economic structures of easy implementation, with reduced life span or easily changeable. It's the architecture with an expiration date);

- . and paradoxically, the increasing importance of sustainability (flexibility of spaces in terms of functions and economy in terms of area).

From another point of view, that of habitation functional requirements, *Habitation as a 'Cell'* also prevails as a future type, being more versatile and flexible. The evolution of society, of ways of living and working and of the information techniques is paramount to define habitation functional requirements. The housing types in *The Fifth Element* and *The Island* provide good examples of this evolution. As mentioned before, the various spaces that compose a dwelling need to be questioned. More and more (and these movies show us that in the future it will also be so), we tend to use less certain spaces, until we render them obsolete. The kitchen and the living room are examples of that, especially the kitchen. The house of the future will essentially hold its primary function – lodgement.

Aside from this, the evolution of information technologies and the transformation of working habits and requirements, the house will increasingly become a work place. And the future dwelling should reflect that tendency.

To sum up, this paper foresees that the habitation of the future will tend to spatial and functional reduction and that, as a second Corbusian revolution, it will embody the character of a true 'living machine', questioning and adapting the space to the truly necessary functions.