

Juan Luis Trillo de Leyva*

OBIEKTY I SIECI. WIRTUALNA SUPERPOZYCJA

OBJECTS AND NETWORKS. VIRTUAL SUPERPOSITION

Współczesne miasto składa się z sieci i obiektów. Nakładanie się tych sieci, oddziałujących na całe miasto, tworzy dobrze znaną, namacalną rzeczywistość. Nowa, technicznie możliwa sieć to wirtualna przestrzeń, która, wciąż się rozwijając, wkrótce obejmie miasto zmieniając naszą obecną, stereotypową percepcję.

Słowa kluczowe: sieć, rzeczywistość, rzeczywistość wirtualna, symulacja, miasto

The contemporary city is constituted by networks and objects. The superposition of these networks that affect the whole city constitutes the well-known physical reality. A new network, technically possible, is the virtual space that, still developing, will shortly get up to the city altering our present conventional perception.

Keywords: network, reality, virtual reality, simulation, city

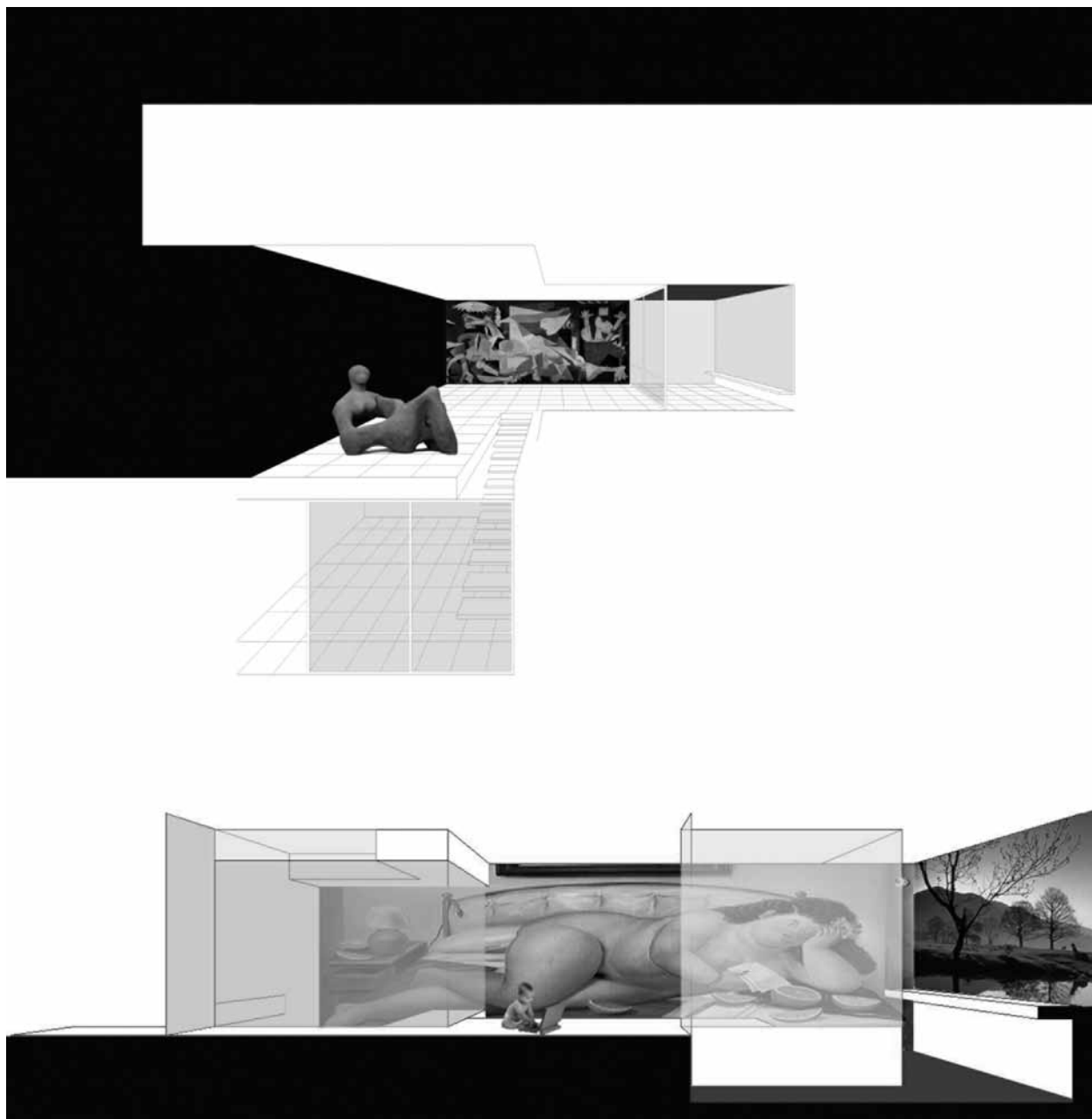
In order to know how our idea of the city has changed in the last one hundred years nothing better than to go to the cinema. From *Metropolis*, of Fritz Lang in 1927 to *Blade Runner* of 1982, the idea of how our future will be has changed substantially. Fritz Lang shows us a future without past, a future in which the present has been erased without any object of reference. As if there had been a point of inflection instead of a continuous evolution. One second condition of the *Metropolis*'s future is the emptiness and the asepsis, images more hospitable than domestic, a tendency that could be brought up the utopia of the Modern Architecture, against the excess of objects and decoration of the architecture of nineteenth century. In the fiction, undergone the formal manifestos of the architecture probing in small buildings and interiors spaces are taken to the city. *Blade*

Runner, however, shows us the crisis of the modernity, the society has advanced but no longer we believe in an utopian progress like the one imagined by Aldous Huxley in a *Brave New World*, 1932. The future of *Blade Runner* advances to us the complexity and confusion of the contemporary city, very similar to the great Eastern cities, where they mix most evolutioned and sophisticated computer science with the recycling of the well-known objects.

Later cinema industry has offered us new visions about the city of the future that come closer to the complexity displayed by Ridley Scott that to the asepsis of Fritz Lang. In the future, already past, of *2001: A Space Odyssey*, of 1968, Stanley Kubrick superposes to the physical reality the potentiality of the computer science world, a film full of symbols and warnings on our future existence. Although in

* Trillo de Leyva Juan Luis, prof., Escuela Tecnica Superior de Arquitectura de Madrid.

Mieszkanie eksperymentalne. Antonio Martínez García y Juan Luis Trillo de Leyva / Experimental dwelling. Antonio Martínez García y Juan Luis Trillo de Leyva



a smaller level, *The Fifth Element* of Luc Besson, of 1997, film in which the superficial traffic of a street is superposed by layers prolongues this complexity of a recycled city where past and future are superposed. Just as it happens to the monumental and fantastic stage scenes created by James Clyne.

Nowadays, all our cities already own sufficient vestiges on the superposition of networks that represent the urban reality. Each object occupies a certain place in a structure of connections of all types: dimensional, formal, functional, technical or territorial. They become, the objects, in a door that gives us access to the beginning of a trip and, mainly, to a knowledge of whatever surrounds us, what we called reality. In our streets exist a lot of "objects": posts, great and small, rubbish bins of all types and sizes, multiplied by the action of the recycling, benches, advertisements, posters, signals, kiosks, flowerpots stands, bus-stops, mailboxes, spending machines of tins and food, wastebaskets, telephones, fences... Each one of them objects introduces us in a network of activities that includes all the city, each object is a knot of a network, a crossing of specialized relations that when are superposed help us to understand the complexity of that greater object than we called contemporary city. If we considered each activity, for example collect household rubbish bin and recycling, like a bidimensional network of the public space, the other networks would constitute the third dimension. I think that an explanation of the artistic game practiced by Marcel Duchamp with his "ready made", is the attempt to turn into three-dimensional an object that moved in a unique network. The wall urinal turned into "fountain", in a museum object, it is an example of the possible three-dimensional of the many structural network that compose our urban and cultural reality. The city, through its objects, reveals abstract plots, similar to the lifes of each one of its citizens. Behind the banal and repetitive images of urban places there are creative games, it is enough with choosing and selecting materials, activities, plots and objects, to discover

superposed realities, to know a new city in our own city.

Like we have seen in the future of fiction in the movies, to the superposition of equipments, communication structures, infrastructures..., the virtual reality is added in the contemporary city, a reality that until now has been limited by a frame: the one of the pictures, the one of the tv screen or the one of a window that frames a distant landscape. Nowadays the computer science possibilities allow us to coexist with a reality projected that is superposed to the physical reality, to our physical reality.

In the work of Le Corbusier we find many examples of these projects that manipulate the light and the feelings and perceptions of the spectator. In 1957, under the name of *Boîte à miracles* projects, in the Museum of Tokyo, a technical box prepared for any representation or simulation. The ephemeral Philips Pavilion, in the exhibition of Brussels of 1958, seems to set a final point to this search of a space able to synthesize the knowledge of the man and the arts, in its interior took place an electronic poem, both the content and the continent were created for a team constituted by Le Corbusier, Xenakis, Varese and Tak; engineers, musicians and architects pawns on creating a dreamed space.

In this accelerated search of examples on the "magical box" announced by Le Corbusier, we find an important and peculiar experience in the last work of Marcel Duchamp. After a long period of artistic silence, in 1966 MD surprises with a work think to a *voyeur*. He locates the beholder outside the box and forces him to pry into from the peephole of an old Spanish door how no?; inside the box, a theater stage scene leads us to the observation of an erotic scene that is developed in a simulated natural landscape. The installation was called *Étant Donnés*.

About one first approach to the virtual closing like substitute of the opaque walls and on which our old furniture are placed, we can think about its disappear-

ance by means of the projection of natural scenes like a sea or a forest, that without next limits introduces us in the immensity of the open spaces, starting off of an architectonic and domestic space limited to the size of a room. The external images can be those that contribute the illumination of the space, would be absurd to switch on a lamp in the interior of this type, we can assure that in a short time all of them, light bulbs will disappear replaced by projected light. A movie of a landscape can take with himself the noise, handled from the room, and the natural light, so that we can be informed into the hour of the day by the position of the sun, also we could add blinds voluntarily or luminosity controller. Another possibility is the one to produce false perspective that extend the space where we are, something similar to the perspective tricks used by some renaissance and baroque architects, by means of the own architecture or the pictorial murals. We can imagine that one of the lateral ones of our room extends until a space double or triple, empty or pertaining to a certain time or style, from our dormitory we can share the *Patio de los Leones de la Alhambra*, in Granada.

The following step is the one of the simulation, exist yet simulator of cars or cabins that exactly reproduce the alternatives of a flight and which they allow us the learning without risk. In the film *Level 13*, filmed in 1999 by Josef Rusnak, the leading actor travel from the present to 1937, and there to the future, year 2024, not by the use of the machine of the time

invented by H.G. Wells but as a result of a simulator. Everybody could be in the middle of the crowd in a scene of *The Battleship Potemkin*, by Sergei M. Einsestéin, year 1925, we can to move to the October revolution, or to take a walk on the African prairies with Meryl Streep in the small plane of *Out of Africa*. At present any technical impediment does not exist that it prevents to realize all this, that is to say to turn all our more intimate rooms into magical boxes, in a *Boîte à miracles*.

To the superposition of the virtual reality to the physic one can collaborate the new materials and the technological reaserch, that also allow the real substitution of the opacity of the walls that conform our spaces. As an prolongation of the use of the glasses that determined the shape of the architecture of century XX and which, still today, comprises essential of the architecture avant-garde, we can indicate to the translucent concrete (Litracon), consisting of a concrete mixing with optical fiber that transfers the silhouettes from a side to another one of the concrete wall, with this technique we can make transparency walls of concrete of the thickness and resistance which we want, we even can transfer images to the place that we wish.

The futurist stage scenes of Frederick Kiesler are reality jet, the architectonic work will have the responsibility to spread it and to give form to the future.