

# Time in the domestic space Reflections during a pandemic

*El tiempo en el espacio doméstico:  
Reflexiones durante una pandemia*

*Tempo no espaço doméstico: Reflexões  
durante uma pandemia*

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## Abstract

Different disciplines, based on various assumptions, focus their attention on a variety of layers of time. In relation to architecture, time can be considered from different meanings and the way in which we link it to spaces. We usually talk about Physical Time, it is astronomical, mathematical, and quantitative. But there is also Ontological Time, psychic and lived. Emotional Time is eminently subjective, variable, unstable and qualitative, and we can define Mental Time as abstract and intellectual.

The House is a fundamental instrument for living. It must provide us with shelter and security, accommodate our memory and allow our dreams; It must be flexible to incorporate various improvised functions, enable our privacy and happy coexistence with those we live in; it must keep us alert to the subtle changes in our environment; in short, it must contain different layers and manifestations of time.

The situation experienced during the pandemic may suggest new forms of living space, different from the ones we were used to. We have all experienced how our perception of time has changed at this stage, and how the house has been adapted, out of necessity, to include functions that were usually performed outside of it. Space is the raw material to create an architectural experience, and if we add time as an extra dimension, space becomes dynamic. Concepts such as change, growth, evolution, adaptability, memory, and interaction must come into play in our projects. Through examples from our recent past, the article shows how time used as a project tool, in its different considerations, can help us create more friendly, dynamic and flexible domestic spaces, to easily adapt to the current era.

**Keywords:** physical time, ontological time, emotional time, mental time, house, home, pandemic, flexibility, adaptability, memory.

## Resumen

Las diferentes disciplinas, partiendo de presupuestos diversos, enfocan su atención en una gran variedad de estratos del tiempo. En relación con la arquitectura, se puede considerar el tiempo a partir de significados distintos y la manera en que lo vinculamos a los espacios. Habitualmente hablamos del tiempo físico; es el tiempo astronómico, matemático y cuantitativo. Pero también existe el tiempo ontológico, psíquico y vivido. El tiempo emocional es eminentemente subjetivo, variable, inestable y cualitativo, y podemos definir el tiempo mental como abstracto e intelectual.

La casa es un instrumento fundamental para vivir. Debe proporcionarnos refugio y seguridad, alojar nuestra memoria y permitir nuestros sueños; debe ser flexible para dar cabida a diversas funciones improvisadas, posibilitar nuestra privacidad y convivencia feliz con los que habitamos; debe mantenernos atentos ante los cambios sutiles de nuestro entorno; en definitiva, debe contener distintas capas y manifestaciones de tiempo.

La situación vivida durante la pandemia puede sugerir nuevas formas de espacio vital, diferentes a las que estábamos acostumbrados. Todos hemos experimentado cómo ha cambiado nuestra percepción del tiempo en esta etapa, y cómo la casa se ha ido adaptando, por necesidad, para reunir funciones que habitualmente se realizaban fuera de ella. El espacio es la materia prima para crear una experiencia arquitectónica, y si agregamos el tiempo como dimensión extra, el espacio se vuelve dinámico. Conceptos como cambio, crecimiento, evolución, adaptabilidad, memoria e interacción, deben entrar en juego en nuestros proyectos. A través de ejemplos extraídos de nuestro pasado reciente, el artículo muestra cómo el tiempo empleado como herramienta de proyecto, en sus diferentes consideraciones, puede ayudarnos a crear espacios domésticos más amables, dinámicos y flexibles, para adaptarse fácilmente a la época actual.

**Palabras clave:** tiempo físico, tiempo ontológico, tiempo emocional, tiempo mental, casa, hogar, pandemia, flexibilidad, adaptabilidad, memoria.

## Resumo

As diferentes disciplinas, a partir de considerações diferentes, concentram sua atenção em uma grande variedade de estratos de tempo. Em relação à arquitetura, o tempo pode ser considerado a partir de diferentes significados e da forma como o vinculamos aos espaços. Costumamos falar de tempo físico, é tempo astronômico, matemático e quantitativo. Mas também existe o tempo ontológico, psíquico e vivido. O tempo emocional é eminentemente subjetivo, variável, instável e qualitativo, e podemos definir o tempo mental como abstrato e intelectual.

A casa é um instrumento fundamental para viver. Deve nos dar abrigo e segurança, acomodar nossa memória e permitir nossos sonhos; deve ser flexível para acomodar várias funções improvisadas, permitir nossa privacidade e uma coexistência feliz com aqueles em que vivemos; deve nos manter atentos às mudanças sutis em nosso ambiente; em suma, deve conter diferentes camadas e manifestações do tempo.

A situação vivida durante a pandemia pode sugerir novas formas de viver, diferentes daquelas a que estávamos habituados. Todos nós já experimentamos como nossa percepção do tempo mudou neste estágio, e como a casa foi adaptada, por necessidade, para atender a funções que normalmente eram realizadas fora dela. O espaço é a matéria-prima para criar uma experiência arquitetônica e, se adicionarmos o tempo como uma dimensão extra, o espaço se torna dinâmico. Conceitos como mudança, crescimento, evolução, adaptabilidade, memória e interação devem entrar em jogo em nossos projetos. Através de exemplos retirados do nosso passado recente, o artigo mostra como o tempo despendido como ferramenta de projeto, nas suas diferentes considerações, pode ajudar-nos a criar espaços domésticos mais amigáveis, dinâmicos e flexíveis, de fácil adaptação à época atual.

**Palavras-chave:** tempo físico, tempo ontológico, tempo emocional, tempo mental, casa, casa, pandemia, flexibilidade, adaptabilidade, memória



## Introduction

In 2020, as COVID-19 spread around the world, governments imposed restrictions on their citizens with unprecedented speed and scale, forcing them to stay in their homes. Some spoke of the coronavirus as a “democratic” virus, as it could affect anyone, but not everyone was in the same conditions to face it and endure the consequences of the disease if they were affected. Despite this, the similarity of this experience between countries and cultures is remarkable and for almost everyone, the home became simultaneously the center of our worlds. The domestic landscape was abruptly altered. People stayed together in their homes 24 hours a day, 7 days a week.

This article aims to reflect on how the changes that occurred during the pandemic affected the dwelling, and determine how the analysis of the concept of time, in its different considerations and through projects from our recent past, can help provide more interesting solutions that are adapted to the current era.

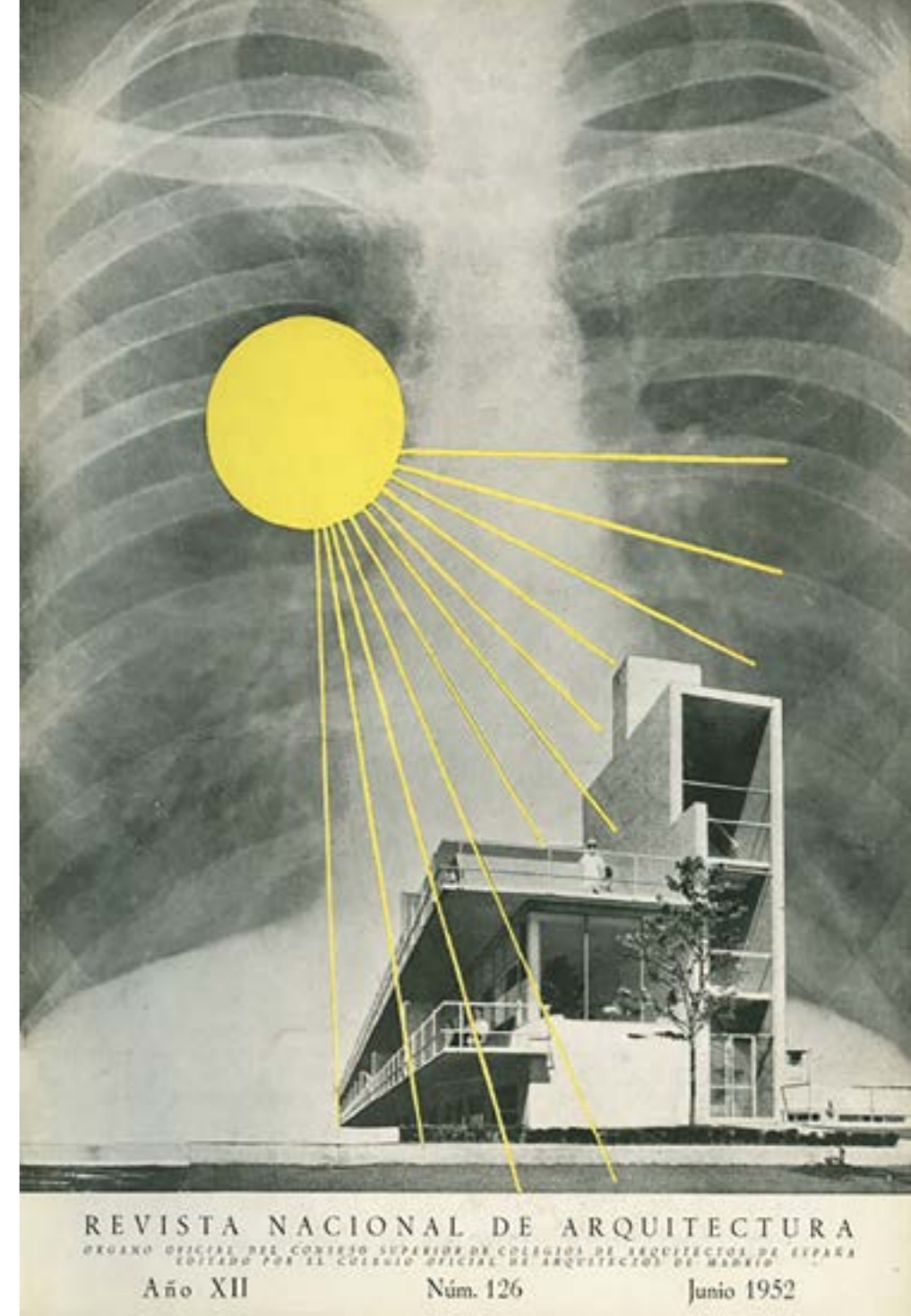
## Sickness and dwelling

It is not the first time that architecture has had to deal with pandemic situations. As José María Ezquiaga points out, there are many epidemic crisis that have left their mark on our architecture and urban planning: “The plagues that marked the Middle Ages imposed state control on cities, same as smallpox in the seventeenth century; cholera in the 19th century associated urban planning with the existence of basic structures; afterwards, in the way of understanding housing...” (López, Sota, 2020)

Thus, the IV International Congress of Modern Architecture (CIAM), held aboard the *Patris II* in 1933 on the Marseille-Athens-Marseille route, tried to lay the foundations for a new architecture that would put an end to the unsanitary conditions of houses and public spaces, born at hands

of Le Corbusier the famous Athens Charter (1942). This historical concern of architecture to adapt to current times was accentuated in the development of the Modern Movement and, as Beatriz Colomina points out, evolved in parallel with the development of X-rays. Attracted by Susan Sontag’s essay *The disease and its metaphors*, from 1978, she began to investigate this issue as early as 1980 (Colomina, 2021, p. 7). As she explains in various writings, “the architecture of the early twentieth century cannot be understood independently from tuberculosis. In fact, the principles of modern architecture seem to have been drawn directly from a medical book on this disease (...) the pilotis, the garden terraces, the glass walls, the clean air, are presented as medical devices. Even the walls are white to reveal any possible contamination” (Colomina, 2006, pp. 154, 156). This architecture, which Colomina claims to derive from the obsession to combat tuberculosis, was published in several books at the time, showing parallels between the penetration of the sun’s rays into the tuberculosis hospitals and in modern domestic terraces (Figure 1). Given that the contagion of the bacterium that causes tuberculosis occurs through air and affects the lungs, it is inevitable to draw parallels to the current situation caused by covid-19 and to analyze with interest that architecture that was trying to prevent its spread.

In recent months, there has been an increased interest on the utopian architecture of the second postwar, on some of Archigram’s imaginative proposals, such as Michael Webb’s *Cushicle* (1964) and *Suitaloon* (1967), two projects that complemented each other to create a nomadic shelter-suit that allowed the individual to selectively isolate itself from the environment. This idea, which later influenced architects and designers, has resurfaced during the pandemic in projects like “Be a Batman” (2020) by the architect Sun Dayong, a shield suit configured as a garment to be protected and kill the virus, thanks to ultraviolet radiation coming out of its surface. (Figure 2)



**Figure 1:** Cover of the National Magazine of Architecture (# 126, June 1952) with an image of the Lake County TB Sanitarium in Waukegan, Illinois, overlapped on an X-ray of the lungs. Illustration included by Beatriz Colomina in her book *Arquitectura de Rayos X* (2019).



**Figure 2:** Michael Webb, Cushicle 1966. (Milan Triennial, 1968). Archigram / Sun Dayong, Be a Batman, 2020. Penda China.



**Figure 3:** A Little Design (2019). 17.6 m2 apartment, Taipei, Taiwan. Coexistence of various functions in a small space.



### Time and home

Housing has always been object of research and experimentation in architecture. The house is the building where we live, where we carry out many of our daily activities. It is generally linked to the concept of home, acquiring emotional nuances: it is the place where we feel secured and calm, where we live with our loved ones, where we put down roots and build our identity. In our everyday routine we get out of it periodically in order to do activities such as work, leisure, sports, etc. We also eventually leave our home for longer periods, but we always return to it to seek rest and quiet. However, when for specific reasons, loss of job, illness, etc. that routine is disturbed and we are forced to remain in our homes, we feel a certain sense of oppression. When this occurs simultaneously to the entire population, as has happened with covid-19, we have to globally condense into a single space for all our activities, and this demands a mandatory reflection (figure 3).

Suddenly, our houses are transformed into offices, schools, gyms, playgrounds, social spaces, and sometimes isolation spaces for sick people. Thus, we witness a major overlap of our individual, family and work world, and we observe how the virtual world invades our physical space, breaking down the barriers of our privacy.

What is a house? What activities should we incorporate into the design of a house? The Eames answered this question with an interesting drawing that showed a couple in different activities: playing the cello, painting, growing plants, doing gymnastics, reading, sitting on the couch together, resting alone, projecting a movie, playing cards in a group, building small airplanes,... The house had to make all these activities possible. Charles Eames and Eero Saarinen were chosen to design Case Study House No. 8, to be occupied by the Eames, and No.

9, for John Entenza. Both exemplified standardization and assembly as if they had truly been done with a “mechano set”, as they were built from the same standardized elements. The initial publications of these dwellings show the silhouettes of Charles and Ray Eames and John Entenza surrounded by a set of artifacts that defined their respective lifestyles (Eames, Saarinen, 1945, p. 44). The architecture had to accommodate all these objects, which Alison and Peter Smithson would define as “signs of occupation” (Smithson, 2003). They constituted a way of appropriating a place, of making it their own, of exercising the “principle of identity”. These colorful everyday objects were “tentacles of the occupants’ lifestyle” (Smithson, 2001, p. 34). They contributed to transforming the living space, to individualizing the image of that standardized architecture from which it had started. The spaces no longer responded to a specific function, but offer small places linked from the objects themselves, to offer each inhabitant multiple possibilities of use. (Fernández, 2019, p. 91) (Figure 4)

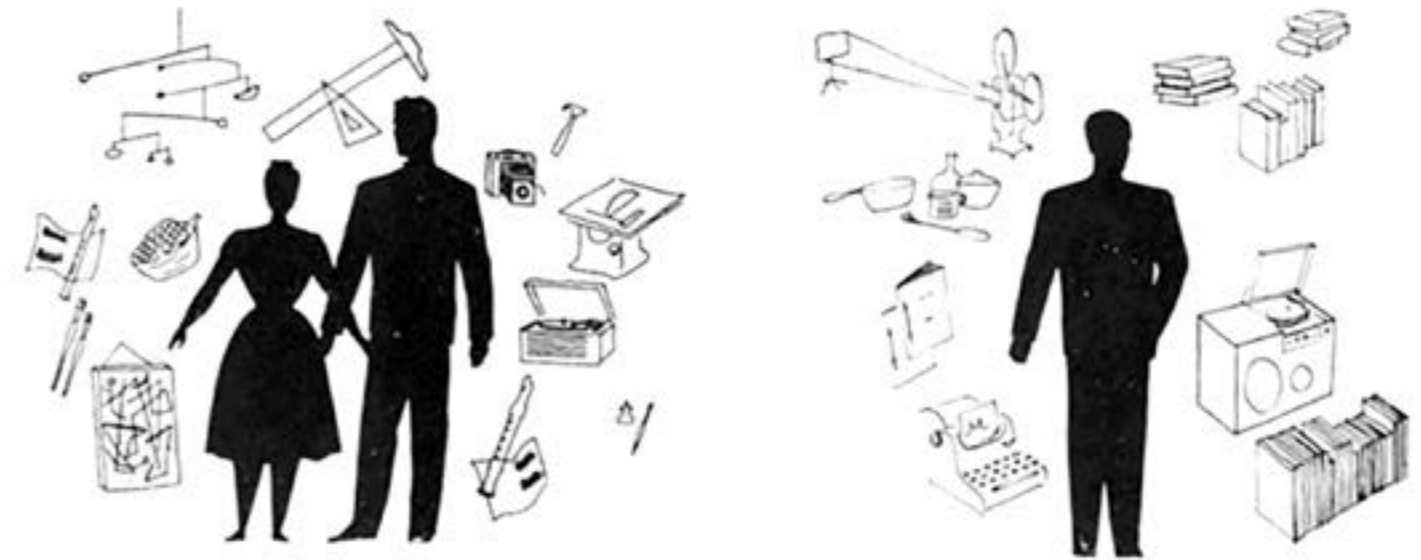
In addition to functional needs, we ask our homes to satisfy some fundamental emotional needs: privacy, the ability to disconnect, reflect and choose how we interact with others; comfort, the feeling of being able to relax and be yourself where we live; ownership, enjoying a sense of control over the space we inhabit; belonging or identity, feeling part of a group that accepts us, in a place that reflects who we are; security, feeling home as a sanctuary from the uncertainty of the outside world (Mori, 2020, p.7). Many of these needs have been accentuated by the pandemic, and social anxiety and concern appeared on the faces of children and adults, leaning out of the windows of their houses.

In general, we understand domestic architecture as a natural space to inhabit. But, as Juhani Pallasmaa affirms, “in addition to living in space, we also inhabit time, and architecture mediates our relationship with the passage of time, thus giving a human measure to infinite time” (Pallasmaa, 2016, p. 114). Although the actual concept

of time comes from the most advanced knowledge in physics and astronomy, its true nature remains a mystery. Time governs not only the activities of man but also his being, since everything he experiences in his life occurs in the span of this abstraction. In some ways, architecture can help us comprehend this vast expanse of time. The Finnish architect highlights the thinking of Karsten Harries, professor of philosophy at Yale University, for writing one of the most influential essays that reflects on time and architecture, “The construction and terror of time” (1982). He maintains that the house, the refuge, “promises protection against the terror of time. Feeling protected is freeing yourself from feelings of vulnerability and mortality” (Harries, 1982, p. 60). Along the same lines, Steven Holl argues that

**“Architecture also serves as an index of time. Seconds, minutes, hours, decades, eras, millennia; are all focused through the lenses of architecture. Architecture is one of the least ephemeral and most permanent expressions of culture” (Holl, 1994, p.28).**

**Figure 4:** “What is a House”. Illustration by Charles Eames of the activities that should be incorporated into the design of a house (Arts & Architecture, July, 1944) / Drawings by Ray and Charles Eames and John Entenza surrounded by artifacts that defined their respective lifestyles. (Arts & Architecture, December, 1945)



In his book *Color, Light and Time*, he explains how certain cultures have a uniform concept of time, while the presence of the present in which we live forces us to simultaneously accept several definitions of time (Holl, 2012, p. 115).

### Time considerations in the domestic space

As Eduardo Vicente points out, it is “surprising that something that appears at first as evanescent and paradoxical as time, splashes and deeply soaks all the strata of human thought and endeavor” (Vicente, 2006, p. 3). Different disciplines, with various budgets, focus their attention on a great variety of time strata. In relation to architecture, time can have different meanings and thus the way in which we link it to spaces. We usually talk about physical time, astronomical, mathematical and quantitative time. But there is also ontological, psychic and lived time. Emotional time is eminently subjective, variable, unstable and qualitative, and we can define mental time as an abstract and intellectual time. Let us examine, through examples in architecture, art and industrial design, different assertions of time in domestic space, that can suggest various types of new and interesting dwellings.

When Giedion wrote *Space, Time and Architecture* (1941) he demanded a universal vision of the world and stressed the importance of giving continuity to history, of “keeping our lives in a larger temporal dimension” (Giedion, 2009, p. 45). In his book, he already exposed a new notion of architectural space that arose from the modern conception, where the exterior and interior merge, forcing the viewer to move to encompass the different facets of a building and thus introducing the temporal dimension that had already been announced by cubism. Physical time, quantitative time, is related to movement and allows us to differentiate between static and dynamic space. One of the most notorious houses that can serve as an example of dynamic space is the Villa Saboya and its

famous architectural promenade. (Bloomer, Moore, 1982, p. 80). Le Corbusier was a true master intertwining different movements and thus, the building becomes a dynamic setting that encourages them.

As the Norwegian architect Per Olaf states, a place communicates an event, a local time that exists or is available within a particular time aspect. The collages that inspired Mies van der Rohe in the design of the Farnsworth House (1946-1951) explicitly acknowledge different layers of time. In the same way, the house does not emphasize the simplicity of space, but rather, through a refined spatial sequence, one experiences several places at the same time. These spaces have a clear abstraction from each other, but together they create an interstitial space that also requires their specific individual time. In a sense, the house is made of time intervals that separate and connect space simultaneously (Olaf, 2007, p. 4).

Another domestic landscape of undoubted dynamism and abstraction is the one created by Sou Fujimoto in *La Casa Na* (2010), a house structured from different stratified levels that, like furniture, are connected by diaphanous stairs or wooden steps, generating a true contemporary *raumplan*, a flexible space that responds effectively to individual and group uses. (Figure 5)

In addition to the dynamic space generated by our movement through the house, we could consider the dynamic space that is configured by the flexibility of the house itself or of some of its parts, underlining a quantitative temporal concept. This physical time can be measured in different ways: according to the activities we develop throughout the day, from the course of day to night, considering the movement of the sun or the passing of the seasons.

There are numerous experimental dwellings which demand movement in order to carry out daily activities

and that, in some ways, measure the passage of time; solutions that employ the use of “furniture as a dwelling” and “habitable containers”, derived from the varied, flexible and mobile use of furniture that characterized the way of life of the Ancient and Middle Ages, and which have been rediscovered over and over again time throughout history (Fernández, 2014, p. 5). An attractive example of this is the apartment designed by Dante Donegani & Giovanni Lauda called “*Azione a scomporsa*” (Milan, 1997), a house in which the walls enclose removable boxes of standard dimensions that contain different equipment for domestic activities and that, as if it were a chest of drawers, can be extracted from each other to the space within the day. Another more current example, *All I Own House*, or *La Casa de Yolanda* (Madrid, 2014), is a project developed by PKMN Architectures, which materializes the interior of a house through the personal objects of the person that inhabits it. It is organized in three spaces: an exterior one, to which the house turns through large holes; an intermediate one, a served space, where the house is accessed; and another dynamic and multifunctional one that opens up to the previous one, visually and functionally expanding each of the uses. The latter, the server space, is constructed by three suspended, mobile and transformable wooden containers, which give the house the appearance of an archive or library and can be quickly reorganized, showing in their movements the passage of everyday time. (Figure 6)

We can also consider the physical time taking into account the spatial change of the house depending on whether it is day or night. The upper floor of the Schröder House (1924) is always inspiring, in this sense. Le Corbusier’s project for a *Double House for the Weissenhof in Stuttgart* (1927) proposed a linear space that was completely open during the day and could be compartmentalized into sleeping cells accessible from a lateral corridor at night. In a similar way, this temporal duality has been used by Aranguren & González Gallegos in some of their houses in Madrid, where



Figure 5: Sou Fujimoto, NA House, Tokyo, Japan, 2010.

a diaphanous daytime space facilitates the development of diverse and improvised activities (Figure 7). The same concept can be reflected in the equipment of the house. Joe Colombo, for example, designed for his own apartment in Milan, in 1969, two mobile machines, Rotoliving and Cabriolet-Bed, which respectively incorporated all the equipment necessary for day and night use, and could move through controlled areas within the home.

The movement of the sun throughout the day has also served, since ancient times, as a measure of time. Architects can be inspired by the concept of “a sunflower” and use the movement of the sun to create a house that looks for it throughout the day, allowing the whole house move, as suggested by Alison Smithson with her apartment block “Cookie’s Nook” (1977), or simply moving some of its parts, like the German “Tourne Sol” (2001) designed by Kahlöfer-Korschildgen.

Homes can also consider physical time by paying attention to the seasons. On one hand, we can refer to climate changes, not only linked to temperature but also to perception. The Fonthill Pavilion (1959-1982) by Alison and Peter Smithson, for example, was configured as a gateway to a vast garden. The changing character was reflected in a diary written by the authors, where they observed the passage of time and seasons (Smithson, 1986, p. 27). When Peter Smithson redrawn the beautiful section of the house in 1975, he underlined the presence of the tree, whose broken branches draw the immaterial presence of the wind. This tree, like the horse chestnut that would star in Peter Smithson’s project for the Yellow House (1976), speaks poetically of temporality (Fernández, Jiménez, 2020, p. 84). On the other hand, climate changes also affect the way we protect our bodies. Our clothes also change in colors, shapes, accessories... So why not make our house change with the seasons or important events? Peter Smithson was obsessed with the concept of “abundance”:



Figure 6. PKMN Architectures, All I own, Madrid, Spain, 2014.

the large number of things that we accumulate in our home throughout our lives. He used this idea to design The House of Two Cranes (1977), which he enjoyed dressing up for each event, and whose conception therefore referred to time.

Finally, we must consider the house in terms of how long we stay in it. Most of the houses have usually been thought to last over time. The natural changes in a family over the years are a formidable challenge for architects to adapt to flexible schemes, as demonstrated by some projects designed in the 1950s, such as Lonel Schein's Plastic House (1956), the Expandable House by James Stirling (1957) or Kikutate's House of Heaven (1958) (Figure 8). The opposite house, in this sense, is an ephemeral house that, in an extreme way, can even be carried in a pocket, as suggested by Martín Ruiz de Arzúa in his Casa Básica (1998).

In addition to this physical time, we can also consider ontological time. It is a deep and dense time, which lies at the very roots of inhabiting. "The act of inhabiting reveals the ontological origins of architecture, and hence affects the primal dimensions of life in time and space." (Pallasmaa, 2016, p.7). When Heidegger asks himself about the meaning of being, as the primary object of philosophy, he understands that this ontological question cannot be resolved without recognizing that "around this existential subject all that which is familiar gravitates; the tools and the house as the materialization of a life that develops through an existential, not chronological time - past, present and future experienced from the own subjectivity-." (Ábalos, 2000, p. 44)

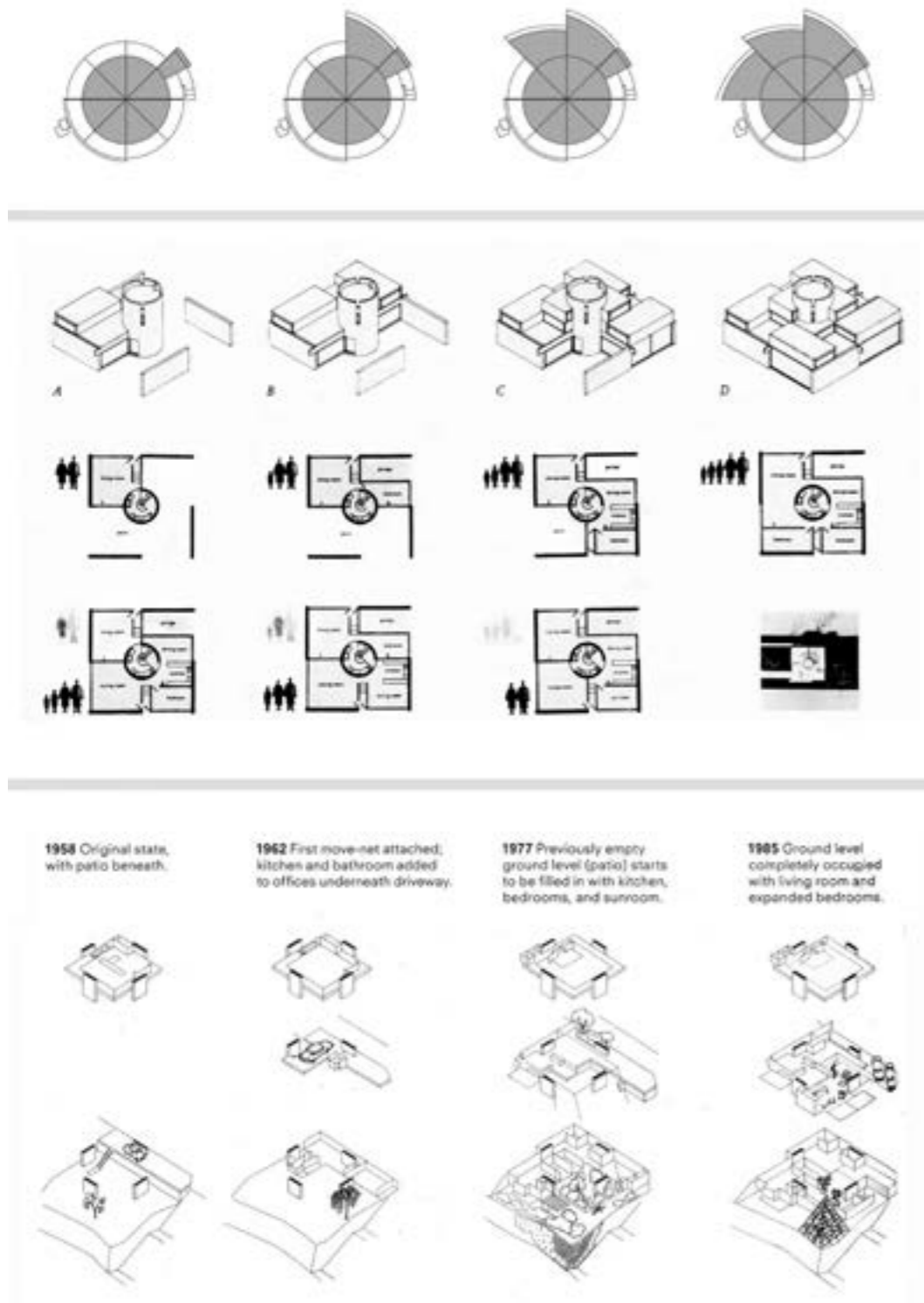
Thus, ontological time would be related to the evocative power that some traces can leave in our memory. It is the narrative force of some evocative objects, the leave a mark by the body itself. "The center of a house, like that of the body, is in charge of accumulating memories that, more than data, have the character of authentic feelings. The rituals that take place over time leave their mark

on the walls and interior forms and fill the rooms with objects that allow us to access past experiences" (Bloomer, Moore, 1982, p. 62). When we look at Juan Muñoz's work, *Desaparición I* and *Desaparición II* (1985), we see how the body vanishes and the residue is the uninhabited tissue or, rather, inhabited by the person who was sitting there, because of its memory (Figure 9). We can also observe this type of signs in different homes, for example, in the House of the Future designed by Alison and Peter Smithson in 1956, conceived practically as a cave, where the spaces at different heights, dimensions and shapes, connect the compartments around a central courtyard. Literally inspired by the Les Baux Caves in French Provence, they practically transfer their niches to the dressing room of their plastic house (Figure 10). The House is conceived as the trace of an absent body: the door, the mirror, the bathtub ... It is not a conventional cave, but an spontaneous expression of everything that happens inside it, a house full of memory (Fernández, 2012, p. 113). And so, "in its thousand alveoli, space preserves compressed time." (Bachelard, 2000, p. 38).



**Figure 7:** Maria José Aranguren & J. González Gallegos. Social housing in Carbanchel, 2005.





**Figure 8.** Housing adaptability to changes in the family. Growth charts from Lonel Schein's House of Plastic (1956), James Stirling's Expandable House (1957), and Kikutate's House of Heaven (1958).

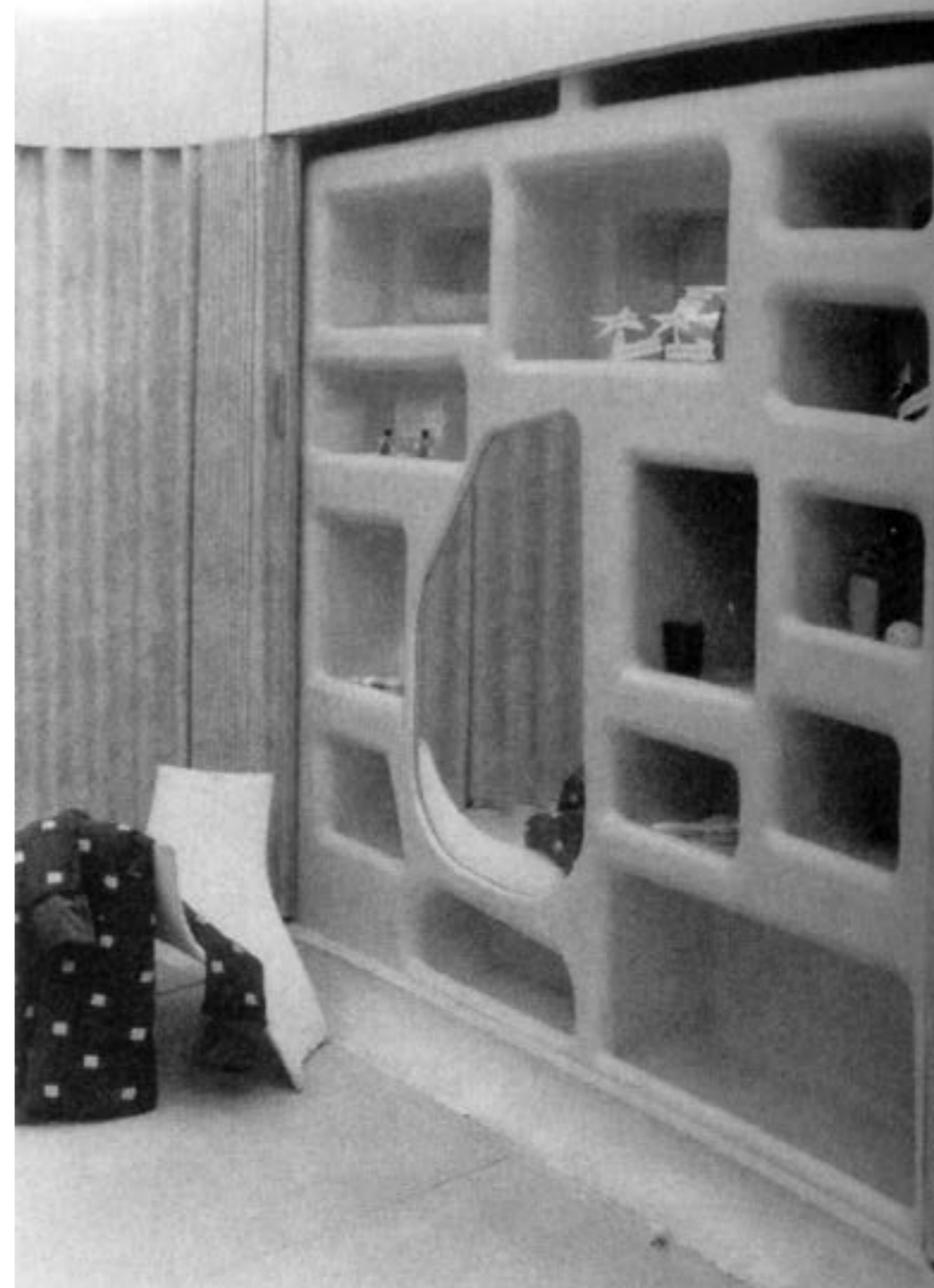
We also find ontological time in the evocative capacity of the ruins. As Juhani Pallasmaa affirms, “ancient cities and buildings are welcoming and stimulating, since they place us in the continuum of time; These are kind museums of time that record, store and show the traces of a moment different from our nervous, hurried, flat sense of contemporary time; they project a ‘slow’, ‘thick’ and ‘tactile’ time” (Pallasmaa, 2016, p. 9). The domestic spaces that arise from a restoration and maintain a visual or functional dialogue with the preexistence, acquire an interesting temporal dimension that condenses different layers of time. This is the case of many of Souto de Moura’s works, where he employs different strategies to build on what is already built, always starting from “the reutilization of the existent in function with its potential capacity of action, whether that is over the functional recovery of its body, the visual capacity of the ruin, or the constructive recovery of the “found” elements” (Merí, Olivares, 2018, p.8). Thus, the ruin becomes relevant in the spatial definition of the home, in the construction of its limits and in obtaining the conception of that “slow, thick and tactile” time, of which the Finnish architect speaks.

We can also defend the existence of an emotional time, subjective and qualitative. It is a personal, individual time, linked to phenomenological time, where the sensory experiences of the present coexist with the memories of the past. In this respect, Iñaki Ábalos affirms that we could describe phenomenological time as a suspended time, “put in parentheses”, something that Merleau-Ponty, in his *Phenomenology of Perception* (1945) defines as a set of points, of multiple instants, a time without direction. Time is not linear, but obeys a “network of intentions” (Ábalos, 2000, p. 96).

Steven Holl, influenced by the philosopher Henri Bergson and his idea of “duration”, in which “lived time” is real time (*durée réel*) and space, an impure combination of homogeneous time, will affirm that time today is characterized by acceleration and disintegration. (Holl,



Figure 9. Juan Muñoz, *Disappearance I, Disappearance II*, 1985.



1994, p. 28). “Our modern concept of time is based on a linear, perhaps disjunctive model. The problem of the temporal fragmentation of modern life and the destructive effects of the increasing levels of media saturation, which cause stress and anxiety, could be partially counteracted by the distension of time in the perception of architectural space” (Puente, Holl, 2015, p. 26). Thus, emotional time can be used in the design of a house that transmits sensations to the inhabitants, which accelerates the perception of time or, on the contrary, slows it down as Elisabeth Diller and Ricardo Scofidio do in their Slow House, a house of weekend that is built on Long Island on the idea of deceleration and escape, being configured as a curved shell that defies the classical perspective to slowly direct the inhabitant towards the long-awaited view of the horizon (1989). (Figure 11)

This type of housing is not concerned so much with providing its inhabitants with a feeling of stability, but with giving prominence to the revelation of different stimuli and physical phenomena to enhance interaction with their subjectivity. As Iñaki Ábalos points out, the Casa del Sol (1972) by Jørn Utzon in Mallorca or the Casa de la Lluvia (1978-1982) by Juan Navarro in Cantabria are eloquent examples, even with the limitations imposed by reality, of how these unfolded schemes imply sensitive skins linked to those relevant phenomena in each case, the sun and the rain, to give a particular interpretation of the landscape (Ábalos, 2000, p. 99). The Casa de Can Lis in Porto Petro seeks the meeting of the sun with the sea, so large gaps open to the Mediterranean, transforming into habitats that catch the light and the sea, and welcome the inhabitants in an implied relationship with the environment. It is materialized in marés stone, essential in the traditional architecture of the island, which changes color according to the incidence of the sun. For its part, the rain transcends and affects the distribution of the Rain House, which will be “combed” by it on the gabled roof, giving prominence

**Figure 10.** Photograph taken by Peter Smithson in the Les Baux Caves, in Provence, in 1953, with Alison Smithson on the right. “Niches” in the dressing room of the House of the Future (Alison and Peter Smithson, 1956).

to its gutters and downpipes. Rain is shown in the house's drawings and paintings, inheriting from Japanese prints the schematic representation of rain through powerful diagonal lines. The two houses show how architecture can be a vehicle for understanding and experimenting with time: "The experiential, the relative and the poetic can be perceived in architecture as an index of time." (Holl, 2012, p. 103) Both combine the traditional construction of their places with modern spatial concepts, the particular with the universal, in short, the local and the global, causing the relaxation of time in its perception and inhabiting. "Global time and local time are like parallel universes that form the present simultaneously. A challenge for today's architecture is to embrace both." (Holl, 2012, p. 103) (Figure 12)

Finally, there are many ways of looking at mental time in space. When we design, there is a temporal dimension that we consider: moving, looking, living. Some architects like Zaha Hadid, Morphosis, Libeskind, Enric Miralles ... contain time in their plans.

In architecture, it is possible to condense different spaces at the same time and vice versa. Nowadays the conception of the space-time of the house is expanded with regular occupants, the screens, where virtual time coexists with physical time, and the tangible space that surrounds us is resized to the intangible and unlimited. (Figure 13) The Digital House designed by the architects Hariri & Hariri, was already exploring in 1977 the enormous possibilities that this digital world can have in a house, conceiving the surfaces of the house as intelligent glass skins that perform various functions to help or improve the lives of its occupants. You would have immediate access to culture and entertainment from anywhere in the world, and you could instantly connect with family, friends or co-workers.

### The house of our time

Throughout the previous text, it has been shown how the consideration of time, in its different meanings, can enrich the space of our homes. It has also addressed briefly how diseases have acted as engines of change in dwellings throughout history. It is a good time, therefore, to learn from what has happened and reflect. It is perhaps time, too, to try to turn adversity into opportunity, to propose a "Athens Charter for the 21st century", as the press used to say during the days of the pandemic, and to establish baseline measurements (López, 2020). These are issues that should not be left to improvisation: what already exists should be maintained, offering enriching adaptation options, but it will be convenient to rethink the new.

As Charles Eames stated, we should be interested in "the house as a fundamental instrument for living in our time". He set his sights on industrialization, in response to the urgent need to create new homes at high speed, after World War II (Eames, 2007, p.8). The House is today also a fundamental instrument for living in our time. It must attend to the ontological time, provide us with shelter and security, house our memory and allow our dreams; It must be flexible to accommodate various actions and above all enable our intimacy and happy coexistence with those we live in; it must keep us attentive to subtle changes in our environment; in short, it must contain different layers and manifestations of time.

We need to change our notion of comfort and quality. It is not necessary for our homes to be larger, but more flexible, so that they can adapt to different situations, reflecting physical time in their configuration. The house must give

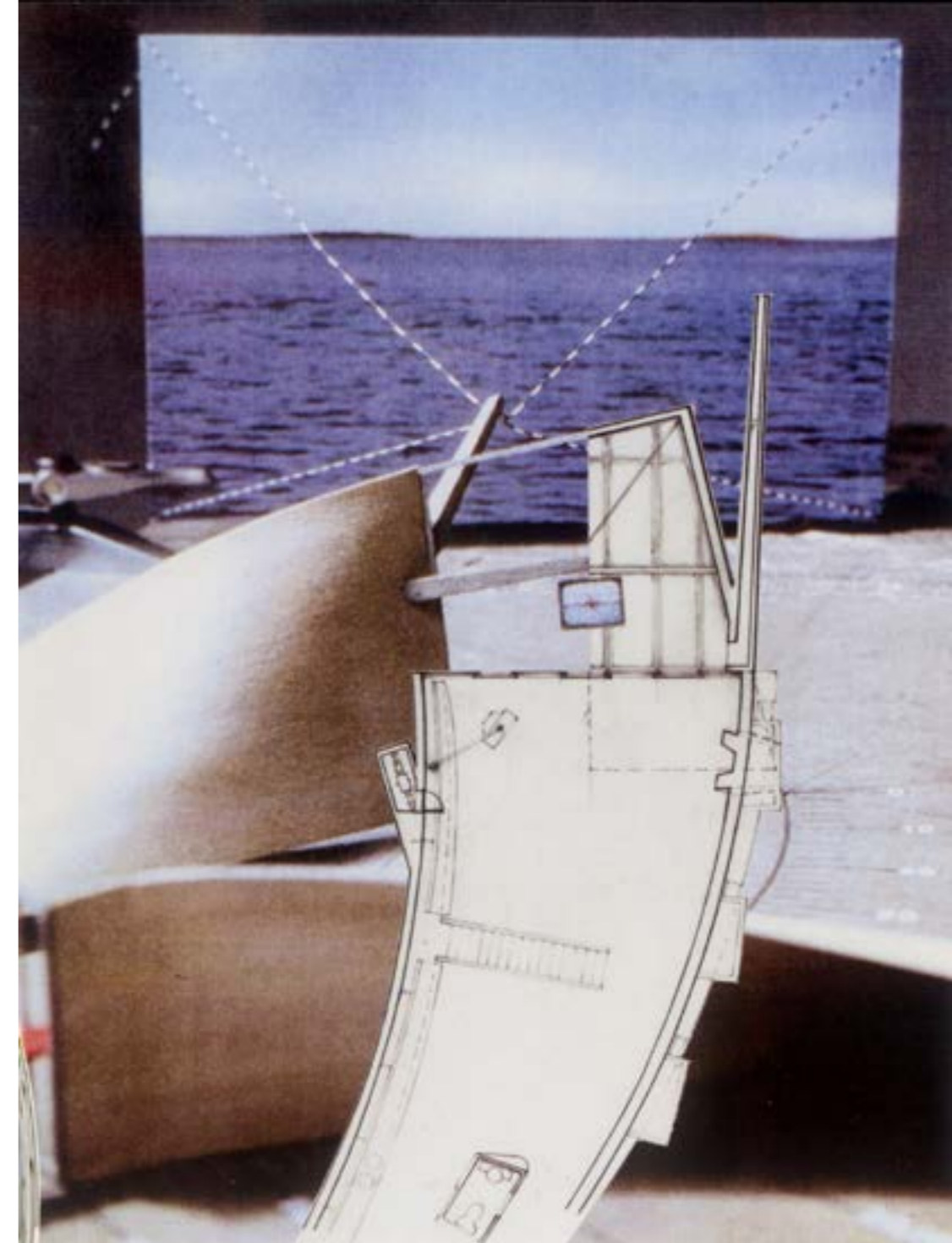


Figure 11. Diller + Scofidio (1989). Slow House.



**Figure 12.** Jorn Utzon. Casa del Sol, Mallorca, 1972. Juan Navarro Baldeweg. House of the rain, Liérganes. Cantabria, 1978-1982. / Juan Navarro Baldeweg. Wind and Rain II, 1986

prominence to its occupants and act as a “shock absorber”, enabling the lifestyle they choose, their hobbies and tastes, their daily life and their changes. (Eames, Saarinen, 1945, p. 44).

We must establish welcoming and sensitive limits in our homes, which facilitate the extension of interior space to the outside: inhabited windows, generous terraces, intermediate spaces, places that allow the inhabitant to connect with urban life and that promote sensory experiences, making us participant of an emotional time. The Immeubles-Villas of Le Corbusier, designed in 1922, offered an adaptation of his Citrohan house overlapped in height, configuring a compact block that had various community services. Each house had a generous terrace, to which all the spaces overlook. Practically a century later, we can highlight actions such as the one that French studio Lacaton & Vassal carried out in 2017, transforming a group of collective dwellings in Bordeaux, with the incorporation of wide open spaces that serve as a transition between the interior space of the house and the exterior, or that

of the Harquitectes studio in Gavà, Barcelona (2020), a social housing designed linearly with an intermediate space as a limit, a piece of rich ambiguity that is access and distributor, but also study, playground, garden and library. The intermediate spaces of these proposals confer flexibility to the house at the same time that they allow sensitive views of the physical environment, providing exemplary solutions to be considered today. (Figure 14)

Undoubtedly, information and communication technologies are already part of our daily environment, and covid-19 has maximized them. The presence of multiple devices takes more and more prominence in the domestic landscape. They are configured as large windows that connect us to places other than our home, and to distant times from the one we are living. The spaces they occupy can therefore be structural in the design of our environments and allow for a mental time. But we must observe them with a critical gaze, since the virtual window makes public our space of maximum intimacy, our home.

Along with the global, the value of the community, of the local, of self-sufficiency begins to recover. Resorting to different levels of shared spaces, where the threshold, the landing, the block, the street become relevant, generating spaces for cohabitation and social interaction, as well as terraces and controlled places of recreation, will be essential. For this, it is convenient to emphasize the importance of the “association scales” that the members of Team X defended in their meetings, adapting the drawings of Patrick Geddes for The Valley Section (Risselada, Van der Heuvel, 2005, p. 52)

The situation experienced during the pandemic may suggest new forms of living space, different from the ones we were used to. We have all experienced how our perception of time has currently changed, and how the house has adapted, out of necessity. Space is the raw material to create an architectural experience, and if we add time as an extra dimension, space becomes dynamic. Concepts such as change, growth, evolution, adaptability, memory and interaction must come into play

in our projects. Therefore, it is convenient to reflect and use as reference some of the revised architectures that, from their conception, allow the happy coexistence of different functions and use time as a design tool in the domestic space.



**Figure 13.** Joan Jonas. Light Time Tales. Fondazione HangarBicocca. Milan, 2014.

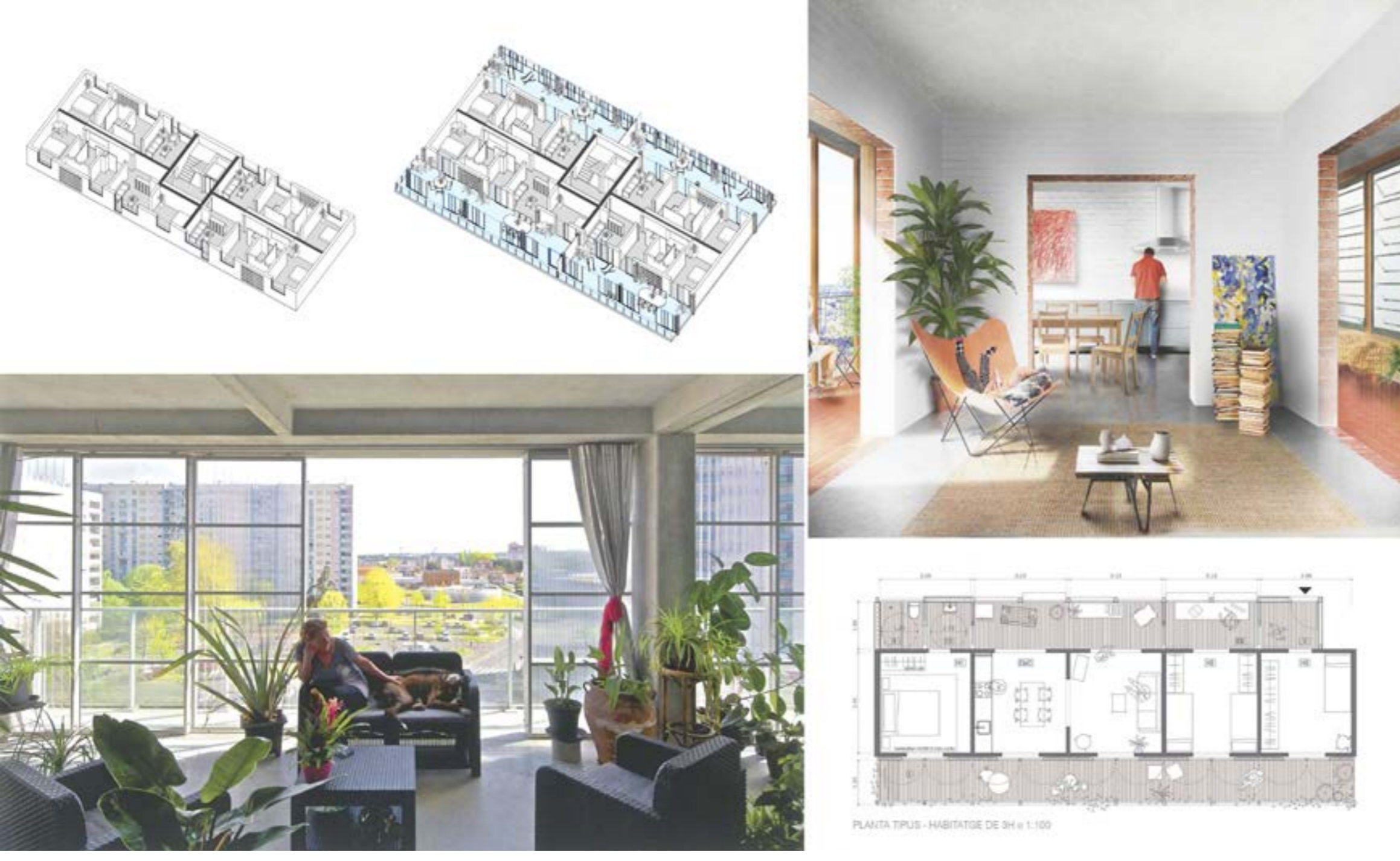


Figure 14. Lacaton & Vassal. Transformation of collective housing in Bordeaux, 2017./ Harquitectes: Social housing in Gavà, Barcelona, 2020.

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## Image caption

**Figure 1:** Cover of the National Magazine of Architecture (# 126, June 1952) with an image of the Lake County TB Sanitarium in Waukegan, Illinois, overlapped on an X-ray of the lungs. Illustration included by Beatriz Colomina in her book *Arquitectura de Rayos X* (2019).

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**Figure 2:** Michael Webb, Cushicle 1966. (Milan Triennial, 1968). Archigram / Sun Dayong, Be a Batman, 2020. Penda China.

[https://www.elconfidencial.com/tecnologia/2020-03-03/traje-escudo-protege-mata-coronavirus-china\\_2479255/](https://www.elconfidencial.com/tecnologia/2020-03-03/traje-escudo-protege-mata-coronavirus-china_2479255/) (accedido el 30/07/2021)

**Figure 3:** A Little Design (2019). 17.6 m2 apartment, Taipei, Taiwan. Coexistence of various functions in a small space.

<https://architizer.com/firms/a-little-design/> (accessed 07/16/2021)

**Figure 4:** "What is a House". Illustration by Charles Eames of the activities that should be incorporated into the design of a house (*Arts & Architecture*, July, 1944) / Drawings by Ray and Charles Eames and John Entenza surrounded by artifacts that defined their respective lifestyles. (*Arts & Architecture*, December, 1945)

Charles and Ray Eames. *Arts & Architecture*, July, 1944; *Arts & Architecture*, December, 1945.

**Figure 5:** Sou Fujimoto, NA House, Tokyo, Japan, 2010

Photo: Iwan Baan. "Casa NA / Sou Fujimoto" May 02, 2012. *Architecture Platform*. Accessed 03/03/2021. <<https://>

[www.plataformaarquitectura.cl/cl/02-155411/casa-na-sou-fujimoto](http://www.plataformaarquitectura.cl/cl/02-155411/casa-na-sou-fujimoto) > ISSN 0719-8914

**Figure 6.** PKMN Architectures, All I own, Madrid, Spain, 2014.

Photo: Javier de Paz García. <https://arqa.com/arquitectura/la-casa-de-yolanda.html>

**Figure 7.** Maria José Aranguren & J. González Gallegos. Social housing in Carabanchel, 2005.

[http://www.arangurengallegos.com/ag/portfolio\\_page/housing-in-carabanchel/](http://www.arangurengallegos.com/ag/portfolio_page/housing-in-carabanchel/)

**Figure 8.** Housing adaptability to changes in the family. Growth charts from Lonel Schein's House of Plastic (1956), James Stirling's Expandable House (1957), and Kikutate's House of Heaven (1958).

Author's drawing / Kikutake, K. (1997). *Kiyonori Kikutake: from tradition to utopia*. Milan: L'Arca. / Stirling, J. (Arnell, P.; B., Ted (eds.) (1985). *James Stirling. Obras y Proyectos*. Barcelona: Gustavo Gili.

**Figure 9.** Juan Muñoz, Disappearance I, Disappearance II, 1985.

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**Figure 10.** Photograph taken by Peter Smithson in the Les Baux Caves, in Provence, in 1953, with Alison Smithson on the right. "Niches" in the dressing room of the House of the Future (Alison and Peter Smithson, 1956).

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**Figure 11.** Diller + Scofidio (1989). Slow House.

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**Figure 12.** Jorn Utzon. Casa del Sol, Mallorca, 1972. Juan Navarro Baldeweg. House of the rain, Liérganes, Cantabria, 1978-1982. / Juan Navarro Baldeweg, Wind and Rain II, 1986

Photo (1): Sergio Baragaño.

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Photo: (2 and 3). Juan Navarro Baldeweg.

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**Figure 13.** Joan Jonas. Light Time Tales. Fondazione HangarBicocca. Milan, 2014

Photo: Agostino Osio. <https://artishockrevista.com/2014/11/03/> (accessed on 07/13/2021)

**Figure 14.** Lacaton & Vassal. Transformation of collective housing in Bordeaux, 2017. / *Harquitectes: Social housing in Gavà, Barcelona, 2020*

Photo (1): Philippe Rouault. Extracted from: *Arquitectura Viva - n° 202, "In Praise of Savings"*, Spain, 2018, p. 16-21.

Photo (2): <http://www.harquitectes.com/projectes/1737-gava/> (accessed 07/30/2021).